<table>
<thead>
<tr>
<th>Title</th>
<th>The perceived experiences of primary healthcare professionals in Ireland: interprofessional teamwork in practice.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author(s)</td>
<td>Burke, Maura</td>
</tr>
<tr>
<td>Publication Date</td>
<td>2016-05-04</td>
</tr>
<tr>
<td>Item record</td>
<td><a href="http://hdl.handle.net/10379/5742">http://hdl.handle.net/10379/5742</a></td>
</tr>
</tbody>
</table>

Some rights reserved. For more information, please see the item record link above.
The Perceived Experiences of Primary Healthcare Professionals in Ireland: Interprofessional Teamwork in Practice.

Maura Burke,
MA, ENB 249, RGN

Supervisor: Dr. Margaret Hodgins

Co-Supervisor: Dr. Lisa Pursell

Discipline of Health Promotion

National University of Ireland, Galway

May, 2016
Authors’ Declaration

I certify that, except where acknowledged all work has been undertaken by myself and that I have not obtained a degree in this University or elsewhere on the basis of this work.

_________________________
Maura Burke
## Contents

Table of Tables ....................................................................................................... x
Table of Figures ....................................................................................................xii
Acknowledgements ............................................................................................. xiii
Abbreviations ...................................................................................................... xiv
Glossary ............................................................................................................... xvi
Abstract ..............................................................................................................xvii

Chapter One: Introduction ...................................................................................... 1

Chapter Two: Literature Review ............................................................................ 7
  2.1 Introduction............................................................................................... 7
  2.2 Literature Search....................................................................................... 7
  2.3 Teamwork Determinants: A Historical Perspective ................................. 8
    2.3.1 Defining Health ................................................................................. 9
    2.3.2 Defining Primary Healthcare ........................................................... 11
    2.3.3 International Influence ................................................................. 12
    2.3.4 Comprehensive v. Selective Primary Healthcare ......................... 15
    2.3.5 Primary Care Evolution ................................................................. 16
    2.3.6 The Evolution of the Irish Primary Healthcare Model ................. 18
      2.3.6.1 Policy ....................................................................................... 18
      2.3.6.2 Primary Healthcare Professions ............................................. 20
      2.3.6.3 Organisation............................................................................ 21
  2.4 Team Determinants: A Contemporary Perspective ................................. 23
    2.4.1 The Introduction of Primary Healthcare Teams in Ireland .......... 23
    2.4.2 Collaborative Practice for Health ................................................... 24
    2.4.3 Complex Health Needs ................................................................. 24
    2.4.4 Professional & Interprofessional Logic ........................................... 25
  2.5 Conceptualisation of ‘Team’ .................................................................. 26
    2.5.1 Theoretical Perspectives & Models ................................................ 26
    2.5.2 Team Typologies ............................................................................. 31
  2.6 Specialist Teams ..................................................................................... 36
  2.7 Understanding Interprofessional Teamwork .......................................... 37
  2.8 Interprofessional Teamwork Domains ................................................... 39
2.8.1 Relational .................................................................................................................. 39
  2.8.1.1 Professional Socialisation ................................................................................. 39
  2.8.1.2 Power & Hierarchy ......................................................................................... 40
  2.8.1.3 Team Roles ...................................................................................................... 41
  2.8.1.4 Team Composition & Diversity ....................................................................... 44
  2.8.1.5 Team Processes .............................................................................................. 45
    2.8.1.5.1 Benefits ..................................................................................................... 45
    2.8.1.5.2 Team Meetings ......................................................................................... 47
    2.8.1.5.3 Goals & Objectives .................................................................................. 48
    2.8.1.5.4 Communication ......................................................................................... 50
    2.8.1.5.5 Leadership ................................................................................................. 51
    2.8.1.5.6 Team Stability ........................................................................................... 52
    2.8.1.5.7 Team Emotions ......................................................................................... 53
  2.8.2 Processual ............................................................................................................... 54
    2.8.2.1 Time & Trust .................................................................................................. 54
    2.8.2.2 Task & Setting ............................................................................................... 55
  2.8.3 Organisational ........................................................................................................ 56
    2.8.3.1 Organisational Structures & Support .......................................................... 57
    2.8.3.2 Organisational Context ................................................................................ 57
    2.8.3.3 Financial Structures & Teamwork .................................................................. 59
    2.8.3.4 Co-location .................................................................................................... 60
    2.8.3.5 Education & Training ................................................................................... 61
    2.8.3.6 Communication Infrastructure ...................................................................... 62
    2.8.3.7 Professional Representation ......................................................................... 63
    2.8.3.8 Fear of Litigation ......................................................................................... 64
  2.8.4 Contextual ............................................................................................................... 64
    2.8.4.1 Gender .......................................................................................................... 64
    2.8.4.2 Political Will .................................................................................................. 65
    2.8.4.3 Resource Provision ....................................................................................... 66
  2.9 Summary .................................................................................................................... 67

Chapter Three: Methodology .......................................................................................... 73
  3.1 Introduction .............................................................................................................. 73
  3.2 Overview of the Study Design ................................................................................ 73
3.3 Methodological Approach ........................................................................................................... 75
  3.3.1 Quantitative Methods ........................................................................................................... 75
  3.3.2 Qualitative Methods ............................................................................................................. 75
  3.3.3 Mixed Methods Research ..................................................................................................... 76
  3.3.4 Rationale for Mixed Methods Design ...................................................................................... 76
3.4 Methodological Considerations in Mixed Methods Research ......................................................... 79
  3.4.1 Timing .................................................................................................................................. 79
  3.4.2 Weighting ............................................................................................................................. 79
  3.4.3 Mixing .................................................................................................................................. 80
  3.4.4 Theorising ............................................................................................................................ 81
3.5 Rationale for Research Location .................................................................................................... 81
3.6 Sampling Procedures ....................................................................................................................... 81
  3.6.1 Study Sample- Phase One & Two ......................................................................................... 82
3.7 Phase One ..................................................................................................................................... 82
  3.7.1 Sampling Procedure ............................................................................................................. 82
  3.7.2 Sample Selection ................................................................................................................... 83
  3.7.3 Survey Instrument ............................................................................................................... 85
  3.7.4 Data Collection .................................................................................................................... 85
  3.7.5 Questionnaire Development ................................................................................................. 86
  3.7.6 Scoping Process .................................................................................................................... 87
  3.7.7 Contacting Key Informants ................................................................................................. 88
  3.7.8 Questionnaire Structure ....................................................................................................... 88
    3.7.8.1 Section 1: Interprofessional Teamwork Organisation (Q1-25) ........................................... 91
    3.7.8.2 Section 2: Collaborative Behaviour (Q26) .................................................................... 92
    3.7.8.3 Section 3: Demographics (Q27-33) ............................................................................. 92
  3.7.9 Questionnaire Pilot ................................................................................................................. 92
  3.7.10 Procedure .......................................................................................................................... 92
  3.7.11 Analysis Plan ....................................................................................................................... 93
  3.7.12 Sample Frame & Sample Size ............................................................................................. 94
  3.7.13 Effect Size .......................................................................................................................... 95
  3.7.14 Dealing with Missing Data ................................................................................................. 96
  3.7.15 Looking for Patterns .......................................................................................................... 96
  3.7.16 Other Measures Considered in Phase One Study ............................................................... 97
3.7.16.1 Akaike Information Criterion (AIC) ........................................ 97
3.7.16.2 Beta Values .............................................................................. 97
3.8 Phase Two ............................................................................................... 98
3.8.1 Sampling Procedure ........................................................................ 98
3.8.2 Sample Selection & Recruitment .................................................... 99
3.8.3 Study Instrument ........................................................................... 100
3.8.3.1 Interview Schedule Design .................................................... 101
3.8.4 Data Analysis ................................................................................ 101
3.8.5 Rationale for Template Analysis .................................................. 103
3.8.6 Rigour in Qualitative Research ..................................................... 103
3.8.7 Validity & Reliability Measures ..................................................... 104
3.8.7.1 Credibility .............................................................................. 104
3.8.7.2 Transferability ........................................................................ 106
3.8.7.3 Dependability & Confirmability ............................................ 107
3.8.8 Interview Pilot ............................................................................... 107
3.8.9 Procedure ....................................................................................... 108
3.8.10 Participant Information ................................................................. 108
3.8.11 Equipment ..................................................................................... 108
3.8.12 Data Analysis Technique ............................................................... 108
3.8.13 Developing the Template .............................................................. 109
3.8.14 Revising the Template ................................................................... 113
3.9 Ethical Considerations: Phase One & Two .......................................... 114
Chapter Four: Phase One Results ............................................................... 116
4.1 Introduction........................................................................................... 116
4.2 Response Rate..................................................................................... 116
4.3 Questionnaire Scale Validation ............................................................ 116
4.4 Demography of Sample ....................................................................... 119
4.5 Colocation............................................................................................. 120
4.6 Team Membership............................................................................... 120
4.6.1 Team Membership by Workplace Context ................................... 121
4.6.2 Team Membership by Integrated Service Area (ISA)................... 121
4.6.3 Team Membership by Profession .................................................. 121
4.6.4 Team Membership & Perceived Collaborative Behaviour Scores 121
4.6.5 Multiple Team Membership Status & Perceived Collaborative Behaviour .......................................................... 121
4.6.6 Gender, Team Membership & Perceived Collaborative Behaviour ........................................................................ 122
4.7 Profession & Perceived Collaborative Behaviour ........................................... 122
4.8 Organisational Supports........................................................................ 125
  4.8.1 Clerical Support, Team Leadership & Formalised Team Documentation .................................................................. 125
  4.8.2 Information Sharing Structures: Decision Dissemination, Patient Record Sharing .................................................. 127
  4.8.3 Team Resources within ISAs .................................................. 128
  4.8.4 Education ....................................................................................... 128
  4.8.5 Primary Healthcare Specific Education & Perceived Collaboration 129
  4.8.6 Interprofessional Teamwork Training.......................................................... 129
  4.8.7 Interprofessional Education (IPE) .............................................................................................................................. 131
  4.8.8 Innovations .......................................................................................... 132
  4.8.9 Clinical Team Meetings .......................................................................... 132
  4.8.10 Barriers to Attending Team Meetings .................................................. 132
  4.8.11 Comparing Organisational Supports across ISAs ................................ 133
4.9 Other Potential Interprofessional Teamwork Factors............................... 135
  4.9.1 Perceived Hierarchical Status .......................................................... 135
  4.9.2 Motivation, Benefits & Belief in Teamwork .......................................... 136
  4.9.3 Benefits, Beliefs & Collaborative Behaviour ........................................ 137
  4.9.4 Benefits of being part of an Interprofessional Team & Collaborative Behaviour .................................................. 137
  4.9.5 Benefits of being part of an Interprofessional Team & Collaborative Behaviour by Gender ........................................ 138
  4.9.6 Belief in Interprofessional Teamwork & Collaborative Behaviour ............................................................................... 138
  4.9.7 Exploring the Relationships between Benefits, Beliefs and Collaborative Behaviour .................................................. 138
  4.9.8 Benefit, Belief & Collaborative Behaviour: Professional Differences .............................................................................. 140
4.10 Regression Analysis .............................................................................. 141
  4.10.1 Standard Multiple Regression .......................................................... 142
6.9.1 Deficient Infrastructure ................................................................. 223
6.9.2 The Education & Training Lacuna ................................................ 224
6.9.3 Prerequisites for Teamwork .......................................................... 226

Chapter Seven: Phase Two Discussion ................................................ 228
7.1 Introduction........................................................................................... 228
7.2 Conflict .................................................................................................. 229
  7.2.1 Professional & Interprofessional Logic ........................................... 229
  7.2.2 Ideological Disparity ..................................................................... 230
7.3 Consensus ............................................................................................. 232
  7.3.1 Complex Cases .............................................................................. 232
  7.3.2 Benefits .......................................................................................... 234
  7.3.3 A Process ....................................................................................... 237
7.4 Them & Us ........................................................................................... 240
  7.4.1 Practitioners’ v. Organisation ........................................................ 240
  7.4.2 Clinical Autonomy & Power ......................................................... 242
  7.4.3 Accountability & Responsibility ................................................... 244
7.5 Implementation Paradox ....................................................................... 249
  7.5.1 Financing a Unidisciplinary Focus ................................................ 249
  7.5.2 Co-location: Solution or Setback? ................................................. 252
  7.5.3 Geographical Anomalies ............................................................... 254
  7.5.4 The Imposition of Formal Team Meetings .................................... 255
  7.5.5 Communication Infrastructure ...................................................... 258
  7.5.6 Outcomes ....................................................................................... 259
7.6 Resourced to Fail .................................................................................. 261
  7.6.1 Deficient Infrastructure ................................................................. 262
  7.6.2 The Training & Education Lacuna ................................................ 262
  7.6.3 Prerequisites for Teamwork .......................................................... 265
7.7 Summary & Conclusion ....................................................................... 266

Chapter Eight: General Discussion ......................................................... 268
8.1 Introduction........................................................................................... 268
8.2 Connecting the Data: Phase 1 & 2 ....................................................... 269
8.3 Theoretical ............................................................................................ 270
8.4 Conceptual ............................................................................................ 278
8.4.1 Antagony Affect
8.4.2 Potential Negative Health Impact
8.5 Empirical
8.5.1 Socialisation, Power & Hierarchy
8.5.2 Team Governance Structures
8.5.3 Team Composition
8.5.4 Benefits & Beliefs
8.5.5 Team Meetings
8.5.6 Goals & Objectives
8.5.7 Leadership
8.5.8 Time
8.5.9 Gender
8.5.10 Communication
8.5.11 Co-location
8.5.12 Employment Status
8.5.13 Education & Training
8.5.14 Finance Structures
8.6 Policy
8.7 Generalisability
8.8 Study Strengths & Limitations
Chapter Nine: Conclusion
9.1 Introduction
9.2 Recommendations for Future Practice
9.2.1 Implications for Policy
9.2.2 Implications for Practice
9.2.3 Implications for Research
9.3 Conclusion
References
Appendices
Table of Tables

Table 3-1: Decision Map for Quantitative Analysis Testing ........................................ 94
Table 3-2: Calculating Effect Size for Non-Parametric Tests ................................. 95
Table 3-3: Calculating Effect Size for Chi-square Test for Independence ........... 96
Table 3-4: Missing Values by Profession................................................................. 97
Table 3-5: Professional Representation, Phase Two .......................................... 99
Table 3-6: Number of Sources Coded against the Initial Template .................... 111
Table 3-7: A Priori Theme & Initial Template.................................................. 112
Table 3-8: Revised Theme Template................................................................. 114
Table 4-1: Summary of Principle Component Analysis Results of IPTW Questionnaire ................................................................. 118
Table 4-2: Internal Consistency of Sub-Scales ....................................................... 119
Table 4-3: Gender Balance by Professional Organisation and by Survey Respondent ........................................................................................................ 119
Table 4-4: Staff Composition of Primary Healthcare Teams ................................ 120
Table 4-5: Perceived Team Membership, Gender Balance of Membership & Collaborative Behaviour by Profession ................................................................. 122
Table 4-6: Profession & Perceived Collaborative Behaviour ................................. 124
Table 4-7: Organisational Supports & Collaborative Behaviour Scores ............ 126
Table 4-8: Perceived Clerical Support by Profession ............................................ 127
Table 4-9: Information Sharing Structures .......................................................... 127
Table 4-10: Perceived Resource Availability for Establishing Team Function by ISA & Profession .................................................................................................. 128
Table 4-11: Primary Healthcare Education relative to Education Experience Abroad ........................................................................................................ 129
Table 4-12: Interprofessional Teamwork Training Received ............................... 130
Table 4-13: Levels of IPE Session Awareness & Motivation to Work with other Team Members by Profession .................................................................................. 131
Table 4-14: Perceived Barriers to Team Meetings & by Profession .................... 133
Table 4-15: Statistical Differences in Organisational Supports across ISAs ........ 134
Table 4-16: Spearman’s rho correlation between Measures of Hierarchical differences between Discipline and overall Collaborative Behaviour, and between GPs and other Team Members ................................................................. 135
Table 4-17: Spearman’s rho correlation between Measures of Motivation and Teamwork, Benefits of & Belief in Teamwork ......................................................... 137
Table 4-18: Benefits of, Belief in and Collaborative Behaviour Scores by Profession ........................................................................................................ 137
Table 4-19: Correlations & Partial Correlations for Benefits, Belief & Collaborative Behaviour ................................................................................................. 140
Table 4-20: Spearman’s rho correlation coefficient between Measures related to Collaborative Behaviour by Profession ........................................................................ 141
Table 4-21: Regression Model Predictors of Collaborative Behaviour ............... 142
Table 4-22: Correlation Coefficients for Potential Independent Variables with Collaborative Behaviour

Table 4-23: Hierarchical Regression Model of Predictors of Collaborative Behaviour

Table 4-24: Hierarchical Regression of Predictors by Profession (GPs)

Table 4-25: Hierarchical Regression of Predictors by Profession (Nursing)

Table 4-26: Hierarchical Regression of Predictors by Profession (All Others: PHYSIO, OT, SLT)

Table 6-1: Participant Profile

Table 6-2: Final Template
Table of Figures

Figure 2-1: Framework for Understanding IPTW .................................................. 31
Figure 2-2: Teamwork Typology ......................................................................... 35
Figure 2-3: Adapted Framework for Understanding IPTW ................................. 38
Figure 3-1: Mixed Methods Study Design ............................................................ 75
Figure 3-2: PMC, a strategy for maximising response rates ............................... 84
Figure 3-3: Quantitative Analytical Framework of Teamwork in Primary Health-care Teams in Ireland (Phase 1) .............................................................. 89
Figure 4-1: Standard Multiple Regression Model ................................................. 142
Figure 4-2: Hierarchical Regression Model .......................................................... 143
Acknowledgements

Firstly, I would like to thank my supervisor Dr. Margaret Hodgins for all her support and guidance throughout the course of this work.

I would also like to thanks my co-supervisor Dr. Lisa Pursell for her advice, especially answering all my questions in relation to quantitative analysis.

Thanks to the members of my graduate research committee Dr. Jane Sixsmith, Dr. Diarmuid O’ Donovan and Professor Peter Cantillon for their assistance and support at various stages of the PhD.

I would like to express my sincere gratitude to all the Primary Healthcare Professionals who took part in this study and to the Primary Care Development Officers for their time, support and responding to all my queries.

I would also like to convey my gratitude for the NUI scholarship I received over the last four years.

Thanks to Claude Sicotte who kindly gave his permission for use/adaption of the Intensity of Interprofessional Collaboration Scale.

To all my friends for their understanding and listening ears, especially to Maeve, I am really grateful.

Finally to my family: most of all to my husband Denis, for coming on this long journey with me and believing even when I didn’t. I’m not sure which of us is more relieved it is finally complete! A really big thank you must go Niall and Anna for helping me keep it all in perspective and for always trying to be quiet when I studied at home. You can turn up the telly now………
Abbreviations

AOTI: Association of Occupational Therapists of Ireland
CHO: Community Healthcare Organisation
GP: General Practitioner
HSE: Health Service Executive
IASLT: Irish Association of Speech & Language Therapists
ICGP: Irish College of General Practitioners
INMO: Irish Nursing & Midwifery Organisation
IPNA: Irish Practice Nurse Association
IPE: Interprofessional Education
ISA: Integrated Service Area
ISCP: Irish Society of Chartered Physiotherapists
IPTW: Interprofessional Teamwork
IT: Information Technology
NUI: National University of Ireland
NMHP: Non-Medical Health Professionals
OT: Occupational Therapist
PCDO: Primary Care Development Officer
PCCC: Primary Community and Continuing Care
PCT: Primary Care Team
PN: Practice Nurse
PHN: Public Health Nurse
PHYSIO: Physiotherapist

SLT: Speech & Language Therapist
Glossary

Collaboration: is an active and ongoing partnership, often between people from diverse backgrounds, who work together to problem solve and provide services.

Discipline: there may be several disciplines within one profession e.g. GP, surgeon, oncologist.

Interdisciplinary Teamwork: relates to the collaborative efforts undertaken by individuals from different disciplines.

Interprofessional Collaboration: is a type of interprofessional work which involves different health and social care professions who regularly come together to solve problems and provide services.

Interprofessional Coordination: is a type of work, similar to interprofessional collaboration as it involves different health and social care professionals. It differs as it is a ‘looser’ form of working arrangement whereby interprofessional communication and discussion may be less frequent.

Interprofessional Education: occurs when members (or students) of two or more health and/or social care professions engage in interactive learning activities to improve collaboration and/or the delivery of care.

Interprofessional Interventions: involve two or more health and social care professions who learn and/or work together to improve their approach to collaboration.

Interprofessional Networks: are loosely organised groups of individuals from different health and social care professions, who meet and work together on a periodic basis.

Interprofessional Teamwork: is a type of work which involves different health and/or social care professions who share a team identity and work closely together in an integrated and interdependent manner to solve problems and deliver services.

Intraprofessional: is a term which describes any activity which is undertaken by individuals within the same profession (also known as uniprofessional).

Profession: professions have different roles and functions e.g. medicine, nursing, physio, occupational therapy, speech and language therapy.

Professionalisation: is a sociological approach which has been developed to help understand the processes related to the historic development of different health and social care professions.
Abstract

International trends indicate that countries promote and encourage the use of interprofessional teams as the preferred approach to delivering healthcare services to address the health and social care needs of their citizens. Healthcare policy reflects a universal acceptance of the efficacy of interprofessional teamwork. Healthcare organisations implement support mechanisms to stimulate and encourage professional interactions. Teamwork is associated with a range of positive outcomes and is deemed to be beneficial for patients, professionals and service providers. It has gained credibility in terms of the quality of care provided, levels of effectiveness and organisational efficiencies. Despite these recommendations interprofessional teamwork in healthcare has remained elusive in practice. There is criticism of its arbitrary application across healthcare settings and a lack of understanding related to the complexities and challenges involved therein. In 2001, the Irish Government published its Primary Care Strategy which placed interprofessional teamwork central to the delivery of health and social care services in Ireland. Currently there are 423 teams in place. Primary healthcare professionals were assigned to teams, membership and full participation was assumed. However there is significant reporting related to the lack of progress in terms of embedding interprofessional teamwork in practice. This study examined the levels of interprofessional teamwork achieved. It also examined the factors that may have facilitated or inhibited teamwork progress. A partially mixed methods sequential study design was employed, conducted in two phases: a quantitative survey examined the relationships between and predictors of collaborative behaviour (n=493), and a qualitative interview study examined the experiences of primary healthcare professionals of teamwork and the perceived facilitators and barriers that exist (n=26). Results from phase one indicated moderately positive scoring for collaborative behaviour. The perceived benefits of teamwork was the strongest predictor of collaborative behaviour, however the benefits score was the lowest, suggesting professionals do not experience adequate beneficial effects of teamwork in practice. Profession was of significant influence and there was a dearth of organisational support and resources in place. The results from the interviews conducted in phase two revealed four major themes; Conflict & Consensus, Them & Us, Implementation Paradox and Resourced to Fail. The interview data
highlighted a significant ideological disparity between the medical and allied health professions which challenges engagement. In terms of the organisation, a severe lack of funding, appropriate infrastructure and a clear team governance framework has created barriers for teamwork. However most damaging is the lack of organisational awareness and understanding, mandatory application of a rigid team model and lack of consultation as perceived by the professions. This situation has resulted in considerable levels of negative emotions and a breakdown of trust. The findings are discussed with reference to the extant literature and a number of recommendations for future progress are outlined.
Chapter One: Introduction

Healthcare systems globally are considered to be large organisations (West & Markiewicz, 2004). Teamwork has been identified as an important component within modern healthcare organisations (Caricati et al., 2015, Perron et al., 2014) with international trends indicating that countries are moving towards the development of interprofessional teams to deliver care and to enhance the relationships between professionals locally and systemically throughout the healthcare system (West & Lyubovnikova, 2013; O’Neill & Cowman, 2008). Internationally health care policy has embraced the view that healthcare should be provided by interprofessional healthcare teams, with the primary healthcare setting of particular focus (Dept. of Health & Children, 2013; Dept. of Health & Ageing, 2010; Ministry of Health, 2001; Canadian Institute of Health Information, 2001, Dept. of Health & Children, 2001(b)). This may be due to a growing acknowledgement of the increased prevalence of chronic-related illness which require non-acute high quality care; where greater numbers of patients have multiple co-existing conditions, more complex needs and require both medical and psychosocial care components (Paquette-Warren et al. 2014; Xyrichis & Lowton, 2008; Johnson et al., 2003; Mur-Veeman et al., 2001; Starfield, 1998). The Irish primary healthcare setting is seen as a setting where the majority of health and social care needs may be accommodated, with the Primary Care Strategy (DoHC, 2001(b)) suggesting that 90-95% of health and social care needs could be provided for. The strategy outlined that primary healthcare teams would be created nationally, with health professionals assigned to such teams to provide for the needs of populations. It is suggests that the success of primary healthcare-led health systems is underpinned by a clear expectation of closer interprofessional working and collaborative practice (Brault et al., 2014; Pullon et al. (2009).

Yet despite the growth of support for teamwork it appears to remain elusive in practice (West et al., 2012; ICGP, 2011; Shaw et al., 2005). It is more often characterised by professional conflict rather than cooperation (Lancaster et al., 2015; Price et al., 2014; Khalili et al., 2014, Jones 2006, Irvine et al., 2002) and a frustrating experience for professionals when ambitions cannot be fulfilled
(Thylefors et al., 2005). While facilitators and barriers for teamwork tend to reflect the presence or absence of the key elements thought to promote and sustain teamwork in practice, some unintended consequences of teamwork have also been highlighted in the literature (Corbin & Mittlemark, 2008, Finn et al., 2010). Primary healthcare teams appear to struggle to function more frequently than other healthcare teams (Al Sayah et al., 2014; West & Poulton, 1997). It is suggested that the historical background and development of primary healthcare systems is important to examine in order to gain better understanding of primary healthcare conceptually and its evolution (Crampton et al., 2005, Cueto, 2004). Reeves et al., (2010) suggests that there is a need for a sociological informed perspective in relation to interprofessional working and also underlines the importance of team-tasks and understanding healthcare settings in gaining a better appreciation of interprofessional working in practice. By exploring the setting, the professions involved and team supports, the potential impact in relation to levels of team function both positive and negative may be discerned.

In Ireland it is currently estimated that 423 interprofessional primary healthcare teams have been created and are in place nationally (HSE 2012 (c), IMT, 2014). However little is known about how the health professionals have experienced the introduction and implementation of a teamwork model, how the professions involved have adapted to working within team structures or why they function as they do. Two reports clearly allude to the difficulties related to embedding teamwork in the Irish primary healthcare setting (ICGP, 2011; Joyce & Casey, 2004), while Tussing and Wren (2006) are unfazed by the suggestion that the Irish primary care strategy is dead. Furthermore anecdotal evidence suggests that Irish primary healthcare teams are indeed struggling to function. However there is a lack of research in terms of establishing and examining the level of function achieved thus far or the factors general and potentially unique which have influenced interprofessional teamwork (IPTW) in practice. This study sought to address this gap and provides a contextual backdrop both historic and contemporary of the factors that may affect teamwork to enrich understanding in this area.
Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. (WHO, 1946), created within the environments within which we learn, work, play and love (WHO, 1986). It could be suggested however that conceptually contrasting positions in relation to how health is defined may impact on how healthcare provision is conceived, implemented and delivered (Ryan et al. 2006). Whether health professionals need to work in a more integrated way or not to address the broader health and social care needs of populations may be questioned.

Similarly primary care or primary healthcare has experienced comparable obstacles in terms of locating a definitive meaning (Keleher, 2001) Underpinned by the Declaration of Alma Ata (WHO, 1978) primary healthcare was approved as universally accessible essential health care, the key to attaining an acceptable level of health for all. However the Declaration was criticised for being too broad, idealistic, lacking goals or clarity on financing and having an unrealistic timetable and within a year of its publication an interim solution was proposed. What emerged were two models of primary healthcare, selective primary care which sought to deal with disease-orientated problems and comprehensive primary healthcare which supported the idea that health was determined not only by disease but wider socioeconomic contexts, no longer the responsibility of the individual but of governments and society as a whole (Cueto, 2004; Walsh & Warren, 1979). It remains significant how health and primary healthcare are interpreted because it influences health policy and professional practice development and how healthcare services are delivered. While primary healthcare defines a level of care, a strategy for organising care and a philosophy that permeates healthcare (Vuori, 1985) it is also a workplace setting. It reflects the constituents of the Ottawa Charter (WHO, 1986) in terms of promoting the health of service users and as a setting to promote the health of the service provider.

A multiple number of terms are interchangeably used to define teamwork (Perrault & Careau, 2012; Reeves et al. 2010; Weaver, 2008; Choi & Pak, 2006) such as multidisciplinary, interdisciplinary, teamwork and interprofessional practice. However teamwork can be described simply as something that exists anytime two or more people are working together with a shared purpose (Clements et al. 2007). The last century has seen a growth in recognition of the growing multiplicity of
complex health concerns that has contributed to a greater diversity of professional roles and growth of demand for healthcare (Hoskins, 2011). In order to meet increasingly complex healthcare demands IPTW in the primary healthcare setting is seen as a working approach to deal with growing care requirements and to promote efficiencies within the healthcare system (Harris et al., 2010; Johnson et al., 2003). IPTW is defined as a type of teamwork which involves different health and/or social professionals who share a team identity and work closely together in an integrated fashion and interdependent manner to solve problems and deliver services (Reeves et al., 2010). Much of the literature suggests IPTW provides more comprehensive and effective services for patients (West & Lyubovnikova, 2013; Khan et al., 2008; Campbell et al., 2001; Gõni et al., 2001), is advantageous for health professionals (Clements et al., 2007; Borrill et al., 2001) and more cost effective for healthcare organisations (Bodenheimer & Berry-Millet, 2009; Lowe & O’ Hara, 2000). However the literature also suggests that there is a lack of high quality evidence to clearly link care delivered using an IPTW approach to improved patient outcomes (Reeves et al., 2010; Dowling et al., 2004; Sicotte et al., 2002). Furthermore while a wealth of literature outlines key defining characteristics of teamwork, there is a lack of empirical evidence to verify how these influence team effectiveness.

Teamwork is as rarely challenged in principle as it is achieved in practice (Barrow et al. 2015; Grumbach & Bodenheimer, 2004). Hudson (2002) suggests there is little grounds for optimism, referring to three dominant features; professional identity, professional status and professional discretion and accountability which he suggests comprise a case for a pessimistic rather than optimistic model of interprofessional working. Teamwork has been associated with an ‘end result’ in terms of patient outcomes however teamwork can be an outcome in and of itself, and this is described by Sicotte et al. (2002) as an ‘intermediate level result’ and emphases the need to also understand professional collaboration as an outcome. Eccles and Mittman (2006) state that consideration of the implementation process provides understanding of results. This study sought to explore intermediate level results, to ascertain the current levels of IPTW in primary healthcare teams in Ireland today and also to explore team structures, processes and experiences from the perspective of the professionals in the setting and ascertain their perceived influence in relation to teamworking in practice. Currently, in Ireland primary
healthcare teams are deemed to be functioning where clinical team meetings are being held (Comptroller & Auditor General, 2010). However Grumbach and Bodenheimer (2004) ask if group of people who happen to be thrown together in a surgical suite or primary care office are truly a team? It is suggested that considerable effort is required to enable professionals to function as a team and require organisational supports for the advancement and sustainment of team initiatives (Jansen, 2008).

- This study was underpinned by two research questions:
  - What are the current levels of IPTW function within primary healthcare teams in Ireland?
  - What are the facilitators and barriers for IPTW for primary healthcare professionals in Ireland?

The aim and objectives were:

Aim

- To explore the perceptions and experiences of IPTW of primary healthcare professionals working in primary healthcare teams in Ireland.

Objectives:

- To explore their understanding of teamwork.
- To explore their perceptions of the current levels of teamwork and teamworking generally.
- To explore different professional perspectives of IPTW.
- To explore the facilitators and barriers to IPTW.
- To make recommendations for future progress.

Over the next nine chapters these research questions were answered and the aim and objectives of the study met. The structure of the thesis is outlined below:

Chapter two explores the possible historical and contemporary determinants of IPTW in primary healthcare. By adapting the Framework for Understanding Interprofessional Teamwork (Reeves et al., 2010) the factors which can affect
teamwork are reviewed. Models of team effectiveness and teamwork typologies are also considered.

Chapter three discusses the methodology for the study. It provides detail on the study design, sample, measures, the data collection procedure, how the data were analysed and ethical issues.

Chapter four and five are concerned with the quantitative phase of the study; outlining the results and discussion respectively. A cross-sectional survey was designed to collect data within three integrated service areas (ISA) within the Health Service Executive (HSE), which focused on the inputs, process and output related to interprofessional teamworking.

Chapters six and seven are concerned with the qualitative phase of the study; outlining the results and discussion respectively. Semi-structured interviews were conducted that explored primary healthcare professionals experience of teamworking generally and more specifically within the Irish setting.

Chapter eight provides a general discussion of the overall findings from both phases of the study.

Chapter nine concludes with implications for research, policy and practice are provided.
Chapter Two: Literature Review

2.1 Introduction
This chapter will present the theoretical underpinning for the study, background knowledge both historic and contemporary in relation to health and primary healthcare and how that may influence practitioners understanding of and approach to primary healthcare provision. It will appropriately situate the rationale for this study. The meaning of team and teamwork will be explored, specifically IPTW, its role within healthcare and primary healthcare teams and the potential facilitators and barriers in practice.

2.2 Literature Search
A comprehensive literature search was conducted using electronic and manual resources. All sources that were relevant to the research objectives were read, assessed and included in the final review. The literature search and review was an iterative process and new material was added as appropriate. Electronic databases CINAHL, PubMed, PsycINFO, Cochrane and Scopus-V.4 were used to conduct searches. The search was limited to articles published in English between the years 1990-2015. However a limited number of references outside of these search dates that were considered to be of relevance are included.

The search was not limited to empirical research, relevant conference proceedings, Department of Health and Children and HSE policies, reports, service plans, web resources were also reviewed. All articles and material retrieved were examined and included if appropriate. A manual search of the literature was also conducted, which included reference searches identified through the electronic search. It also involved searching print resources such as books and journals.

In order to identify relevant studies the following key search terms were used:

- Healthcare Teams
- Teamwork
- Teamworking
- Teamwork Function

These were combined with the terms:
2.3 Teamwork Determinants: A Historical Perspective

The literature reveals many different attributes relating to teamwork generally, teamwork in healthcare and more specifically in primary healthcare which are considered to be of influence. Teamwork has being explored in a number of ways within the literature, systemic, organisation and interaction determinants (San-Martín-Rodríguez et al., 2005); macro, meso and micro levels (Bourgeault &
Mulvale, 2006; D’Amour & Oandasan, 2005); core concepts and theoretical frameworks (West & Lyubovnikova, 2013; D’Amour et al., 2005); team effectiveness models (Lemieux-Charles & McGuire, 2006; Delva et al., 2008) facilitators and barriers (Choi & Pak, 2007) and domains (Reeves et al., 2010). Reeves et al. (2010) state that the literature on teamwork has predominantly focused on team structures rather than process factors which is comparable with other reviews (Johnson et al., 2003; Sicotte et al., 2002; Poulton & West, 1999). Furthermore they suggest there is a lack of consideration given to the clinical setting, nature of work and the type of care being delivered. These are critical factors to consider in relation to the primary healthcare area as health professionals deal with a much greater variety of health issues over time, across population groups and various geographical locations.

Eccles and Mittman (2006) state that consideration of the implementation process provides understanding in term of the results, which in this study are the self-reported experiences of IPTW. It is also suggested that the historical background and development of primary healthcare is important to consider in terms of how current team function (Crampton et al., 2005; Cueto, 2004).

2.3.1 Defining Health

There are many definitions of health, unearthing some shared characteristics while others are quite distinctive and divergent in meaning. Ryan et al. (2006) reflect on the extraordinary depth of the foundations for these differing views, highlighting two disparate Gods of the twelfth century. The God Hygeia who believed that the role of the physician must include the laws of nature to ensure both a healthy mind and body, while Asclepius believed the role of the physician was solely to treat disease. It could be argued that these opposing ancient views may still resonate within the differing approaches to healthcare provision today.

The constitution of the World Health Organisation declared that health was ‘A state of complete physical, mental and social well-being, not merely the absence of disease or infirmity’ (WHO, 1946). However criticism of this definition suggests that no-one can be in a state of complete health continuously, which may have influenced the writing of Mencken in this period, ‘What is this thing called health? Simply a state in which the individual happens transiently to be perfectly adapted
to his environment. Obviously, such states cannot be common, for the environment is in constant flux’ (Mencken, 1949 (pg. 374)). What is significant is the reference to the environment, as this suggests an awareness of the potential impact of the broader environment and influencing factors therein, which may determine one’s health. This reflects a more holistic concept of health, often referred to as a biopsychosocial model of health.

The Ottawa Charter (WHO, 1986) still made reference to the physical, mental and social well-being but created a more fluid definition:

“Health is a positive concept emphasising social and personal resources, as well as physical capabilities.......by being able to take decisions and have control over one’s life circumstances, and by ensuring society creates the conditions that allow the attainment of health by all its members”

(WHO, 1986)

This is a valuable construct as it broadens the discussion on health, moving the responsibility for health from the individual alone (victim-blaming) to that of society as a whole. The Ottawa Charter (WHO, 1986) acknowledges that health is a complex and multifaceted phenomenon which encompasses the biological, psychological and social elements which influence health in a broader context. It is hardly surprising then, that when examining how health services are delivered these broader determinants must be considered. The Health Field Concept (Lalonde, 1974) demonstrates that health or ill-health was the result of interaction between four key influences: genetic factors, the environment, lifestyle and medical services. Current evidence suggests that genetic contributions to variations in health are quite small (Tones & Tilford, 2001). Tarlov (1996) suggests it rests between 1-5%. Contributions to variations in health from medical services are calculated to be approximately 17% (Mackenbach et al. 1990; Bunker et al. 1994) as cited by Tones and Tilford (2001). It is clear therefore, with such a large percentage unaccounted for by genetics or medicine that attention to the remaining two key influences; behavioural and environmental factors, is essential.

When considering a model of the determinants of health, while individual factors are important, it is the interaction within and between the factors that is central to
understanding how they may determine health. Dahlgren and Whitehead (1992) refer to the ‘layers of influences’ which determine health. It is accepted that focusing on any one factor would be insufficient when assessing what determines health and therefore the solutions sought should also be multi-faceted. The primary healthcare model for health is congruent with this view for addressing health in a holistic and sustainable manner.

2.3.2 Defining Primary Healthcare

“Primary healthcare should form the nucleus of the health system”

(Who, 1978)

Starfield (1994) stated that primary care is widely perceived as the backbone of a rational health service system. Primary healthcare is not a new concept yet remains poorly defined (Lewis, 1999). Parker et al. (1976) found they needed ninety two definitions when trying to assess how different groups viewed primary healthcare. Gish (1982) reflecting on the first International Conference on Primary Health Care in Alma Ata, highlights the two extremes to disease control activities. The ‘verticalists’ favour hierarchically organised disease control programmes, while ‘integrationists’ believe in horizontal health care delivery systems based on disease control and health promoting activities. Defining primary healthcare remains a debated topic (Day et al., 2013; Cueto, 2004) with Keleher (2001) suggesting that the structures and practices of the primary care sector are not necessarily compatible with notions of comprehensive primary healthcare. It has been suggested that primary care is illustrated by health services delivered by many practice nurses and doctors working in general practice (Adrian, 2009; Australian Nursing Federation, 2011) and as such could be considered a subset of primary healthcare (Cueto, 2004; Awofeso, 2004). Interpretive difficulties remain with two opposing schools of thought on what defines primary healthcare. The Irish Primary Care Strategy (DoHC, 2001(b)) clearly refers to the definition of primary healthcare as defined in Alma Ata, acknowledging that while general practice is a key element, primary healthcare is broader than general practice alone. Fundamental to this is the need for health professionals’ knowledge and skills to be orientated towards the broader determinants of health (Douglas et al., 2009). This should have
implications for how primary health care systems are planned, policy implemented and healthcare delivered.

As suggested one way to enhance understanding of primary healthcare is the study of its history; to explore the philosophy that underpins primary healthcare and its influence over primary healthcare development into its current form. This knowledge will augment understanding in relation to the primary healthcare system within the Irish context. Crampton et al. (2005) refer to Path Dependency Theory and use it as a lens through which they view their research into the primary healthcare system in New Zealand asserting that ‘history matters’, positing that past decisions and historical conditions exert an influence over current decision making processes. Cueto (2004) concurs, suggesting in his review of the origins and evolution of primary healthcare that one way of enhancing understanding of health systems is the study of its history.

2.3.3 International Influence

In 1920 the U.K government commissioned a review of how the health services might be organised. Lord Dawson produced what was considered at the time a forward thinking report. It described three different levels of health service: primary health centres, secondary health centres and teaching hospitals (MoH, 1920). There is a notable gap in the international literature relating to primary healthcare between the 1920s and 1970s. The devastation caused by two world wars and other conflicts may have had a role to play in terms of global health priorities and recovering economies. Rifkin and Walt (1986) comment on the post-war era effort to focus on technological development and application, until the 1970’s where increased life expectancy, escalating costs and limited coverage of technical, curative interventions brought about a shift in thinking to examine the cost effectiveness of such technologies and to instead analyse the factors which influence broader, rapid and dramatic health improvements. However in the UK the focus on providing primary healthcare can be discerned. The introduction of the National Health Service in 1948, saw general practitioners established as the principle providers of primary care (Sibbald, 2000) and a greater focus on providing care in the community setting for patients with mental health issues in the 1950’s and 1960’s; with the first reference to primary care and primary healthcare teams appearing in
the early 1970’s (Lewis, 1999). It is only in the 1970s that primary healthcare moved centre stage (Rifkin & Walt, 1986; Magnussen et al., 2004).

In 1973, a significant research document was published by the World Health Organisation in response to what was seen as the rapidly increasing health crisis entitled ‘Organisational Study on Methods of Promoting Basic Health Services’. Within the text it stated:

“There appears to be widespread dissatisfaction of populations about their health services for varying reasons. Such dissatisfaction occurs in the developed world as well as the developing world. The causes can be summarised as a failure to meet the expectations of populations; an inability of the health services to deliver a level of national coverage adequate to meet the stated demands……rapidly rising costs without a visible and meaningful improvement to services; and a feeling of helplessness on the part of the consumer, who feels (rightly or wrongly) that the health services and the personnel within them are progressing along an uncontrollable path of their own which may be satisfying to the health professional but which is not what is most wanted by the consumer”.

(WHO, 1973)

Rifkin & Walt (1986) propose that this document brought focus to bear upon the primary healthcare concept as it suggested that health services were at the root of the crisis. It identified that reorganisation of how health services are delivered as being central to reform; but that the crisis would not be resolved by changes in the health delivery system alone arguing that health service delivery must be seen as part of social and economic development within nations. Health could no longer be considered within the confines of the health sector alone but as part of broader environmental and socioeconomic issues. These principles provided the foundations for the Alma Ata Declaration on Primary Healthcare in 1978 (Rifkin & Walt, 1986).

The Alma Ata Declaration (WHO, 1978) was a landmark document which sought to link socio-economic issues with health outcomes and expressed the need for urgent action to protect and promote health. It led to important developments in how health was conceptualised, moving from a disease to biopsychosocial model
for health. It was the precursor for the Ottawa Charter (WHO, 1986) which emphasised the important role of health promotion and the belief that the prerequisites and potential for health could not be realised by the health sector alone (Scriven, 2012). Central to achieving health for all was the primary healthcare setting. The Declaration of Alma Ata (WHO, 1978) inextricably linked primary healthcare and health promotion conceptually, sharing principles relating to equity, multidisciplinarity and intersectoral actions to create and protect health which is determined not only by a disease process but a wider socioeconomic context. Health is therefore no longer the responsibility of an individual alone, but of governments and society as a whole.

Primary healthcare was declared to be the key to attaining an acceptable level of health for all. Primary healthcare is defined in the Alma Ata Declaration as follows:

“Primary health care is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It forms an integral part of both the country’s health system of which it is the central function and the main focus of the overall social and economic development of the community. It is the first level of contact of individuals, the family and community with the national health system bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing care process”.

(WHO, 1978)

Essential health care provision (WHO, 1978) was to be defined by the needs of the population. Therefore it is understandable that services provided may differ between developed and developing nations. Yet more powerful fundamental differences emerged as opinion regarding its merit was divided, leading to criticism of the Declaration for being too broad, idealistic, lacking goals or clarity on financing and having an unrealistic timetable. This led to an alternative interpretation of primary healthcare to unfold within a year with the publication of
a paper titled ‘Selective primary healthcare: an interim strategy for disease control in developing countries’ (Walsh & Warren, 1979).

2.3.4 Comprehensive v. Selective Primary Healthcare

The paper by Walsh & Warren (1979) introduced the idea of ‘selective primary care’ which was presented as an ‘interim’ solution to the crisis. Emphasis was placed on attainable goals and cost-effective planning. Selective primary care meant a package of low cost technical interventions to tackle the main disease problems (e.g. immunisation programmes, chronic disease management). Primary healthcare was beginning to be referred to as ‘comprehensive primary care’ and defined as the original or holistic idea of primary healthcare. Some considered selective primary care to be complementary to, while others thought it contradicted the Declaration of Alma Ata. However the interim strategy of Walsh and Warren (1979) became established and this interpretive freedom undermined its strength, specifically the comprehensive primary healthcare model. Support for a holistic approach to primary healthcare diminished (Cueto, 2004). The models of primary healthcare that emerged reflect the division in relation to how health is defined. Selective primary care is closely aligned to health as defined by disease processes (verticalist) while comprehensive primary healthcare reflects the broader biopsychosocial definition of health (integrationalist).

Tones & Tilford (2001) state that countries which have established frontline care outside of the hospital sector would be better described as primary medical care. Resistance may have also have been driven by a perceived threat to the hegemony of medicine over health. Cueto (2004) suggests doctors considered primary healthcare as anti-intellectual, promoting pragmatic non-scientific solutions and demanding too many self-sacrifices. On a professional level these divisions remain with Blumenthal and Abrams (2013) noting that primary healthcare professionals work side by side but inhabit different worlds conceptually. Lewis (1999) cautions that difficulties in primary healthcare are often mistakenly referred to as territorial disputes where deep rooted philosophical disparities actually exist. From the 1970’s when the primary healthcare concept was brought to the fore to the present day; it is still of great significance how health and primary healthcare are interpreted because it will influence the policy makers, policy process and professional practice and crucially how healthcare services are developed and delivered to populations.
2.3.5 Primary Care Evolution

Starfield (1998) defines primary care as ‘first contact, continuous, comprehensive and co-ordinated care provided to populations undifferentiated by gender, disease or organ system’. First contact involves assessment of both accessibility of the provider or facility and the extent to which the population actually uses the services when a need for them is first perceived. Continuity is assessed by the degree to which both provider and people in the population agree on their mutual association and also the extent to which individuals relate to the provider over time for all but referred care. Comprehensiveness requires that the primary care provider offer a range of services broad enough to meet all common needs in the population, and assessment includes the extent to which the provider recognises these needs as they occur. Coordination requires an information system that contains all health-related information; and the assessment includes the extent and speed with which the information is recognised and brought to bear on patient care.

Starfield (1998) also cautions not to confuse the functions of primary care with the tasks required to fulfil those functions. That many of these tasks that are part of primary care (e.g. prevention, emergency care, patient advocacy, health education, rehabilitative care) are tasks that are also part of other levels of care and may even be assumed by other levels of care (e.g. public health activities) instead of being provided in the primary care setting. So while services may contribute to the achievement of first contact, continuity, comprehensiveness and co-ordination they remain separate entities. Yet implementation of primary healthcare requires well established health systems to re-orientate to a broader primary healthcare model. Vuori (1984) declares that nations must view primary healthcare as a strategy to integrate all aspects of health services and requires a health care system be organised to stress social justice, and equity, self-responsibility, international solidarity and an acceptance of a broad concept of health.

Primary healthcare calls for significant change in how health systems are structured and operate. It is commensurate with the constituents of the Ottawa Charter (WHO, 1986) which underpins Health Promotion and promotes a broader conceptualisation of health. One key area outlined in the Charter is the need to reorient the health services from a disease-focused, hospital-based model to a population health, community-based model. Rather than providing clinical and curative services,
health services are called to embrace an expanded mandate supporting the needs of individuals and communities for a healthier life, and to open channels between the health sector and broader social, political, economic and physical environmental components. Reorienting health services also requires stronger attention to health research as well as changes in professional education and training. This must lead to a change of attitude and organization of health services which refocuses on the total needs of the individual as a whole person. However change of this magnitude is not easy to achieve and may contribute to understanding the convenience of such divergent opinions and therefore interpretative flexibility.

The essential needs of populations outlined in Alma Ata Declaration will vary greatly between developing and developed nations. This creates the potential for developed countries with established primary healthcare provision to see components of the Declaration as irrelevant and potentially creates situations where underlying fundamental principles are therefore not adequately addressed (Tones & Tilford, 2001). Furthermore, for those charged with implementing primary healthcare policy into practice, employing new ways of working may be very difficult as established organisational and professional cultures and practices are challenged. The selective model of primary care may have been seen as an easier option as comprehensive primary healthcare requires Governments to address the underlying social, economic and political issues which determine health. It may also maintain the ‘status quo’ in relation to established professional practices (Cueto, 2004, Barrington, 2000).

Barnard (1987) cites Pellegrino (1978) and Smith & Churchill (1986) in his exploration of the concept of a primary healthcare team. They argue that primary healthcare is inherently a ‘moral notion’. Smith & Churchill (1986) state that accountability suggests that as a philosophy of medical practice (rather that a bureaucratic or technical modality for delivering services), primary healthcare makes the patient not the doctor, the arbiter of the requirements for and the quality of care. By invoking criteria of acceptability in primary healthcare lodges the authority of the doctor not in the office, knowledge or social position but in the ability of the doctor to meet patients’ needs. Noble (1976) reflects that comprehensiveness and continuity are also value driven dimensions of primary healthcare suggesting that comprehensiveness and continuity broadens medicines’
mandate to include the social and psychological aspects of health and well-being and require attention to the long-term support and maintenance of chronic illness.

Despite the potentially divisive discourse on the meaning of primary healthcare, the different models that have evolved and the interpretive licence which professionals or governmental agencies may draw upon, it remains a powerful concept. Underpinning every primary healthcare model is a level of care, a strategy for organising care and a philosophy that permeates that care (Vuori, 1985). Primary healthcare helps prevent illness and death, regardless of whether the care is characterised by the supply of primary care doctors, a relationship with a source of primary care or the receipt of important features of primary care. Primary healthcare is associated with a more equal distribution of health in populations (Starfield et al., 2005) and is considered capable of dealing with 90-95% of all health and social care needs (DoHC, 2001 (b)). In 2008 the World Health Organisation published ‘Now More Than Ever’ highlighting the continued importance of a need for a comprehensive primary health care approach to health (WHO, 2008). Rawaf et al. (2008) suggest that the difference between 1978 and 2008 is that there is now more evidence about the effectiveness and efficiency of primary healthcare and that the integration of services and development of partnerships are key to achieving good equitable cost effective primary healthcare by 2028, yet change remains slow.

2.3.6 The Evolution of the Irish Primary Healthcare Model

Crampton et al. (2005) argues that most countries have a pattern of staffing in the primary healthcare system that result from social, political and economic influences operating over the decades. Barrington’s historical account of the Irish health system clearly highlights such influences within this context (Barrington, 2000).

2.3.6.1 Policy

It could be suggested that the Poor Relief (Ireland) Act, 1851, which outlined governmental responsibility to provide community dispensaries and appoint medical officers was an early form of primary care provision. Attempts were made to make changes to the dispensary system by the British government and again post-independence as part of Government policy of the newly formed Irish Republic. Yet as Beveridge-inspired plans emanated from Ireland’s Department of
Local Government and later, the Department of Health, reform towards the development of a universal health service they were met with absolute resistance in the form of a strong allegiance forged between the medical profession and the Catholic hierarchy (Murray, 2006, Barrington, 2000).

The efforts of government to make radical changes to the health system at that time were influenced by the recent formation of a National Health Service in the U.K. The vision was to create a health system that provided free comprehensive health service for the whole population. However, the proposed Health Bill was vehemently contested throughout the 1940’s and the introduction of the Health Act of 1953 did nothing to extend the scope of the dispensary service and general practice organisation remained unchanged. The provision of access to all services on the basis of need alone instead gave way to a different reality; a service defined by a complex eligibility criteria, largely based on income and which varied from service to service (Barrington 2000). The medical profession remained central to the provision of both these services. Underling the lack of change Curry (2006) notes that free general practitioner service for poor persons was provided from the 1851 Act in local dispensaries, with this system continuing until 1972 when the choice of doctor scheme was introduced under the General Medical Scheme (GMS) and Health Act of 1970, ending the stigma and discrimination associated with the dispensary system.

International calls for the radical reorientation of health systems deriving from Alma Ata (WHO, 1978) can be discerned within the Irish context. The Working Party on the General Medical Services in 1984 and Tussing report produced in 1985 both reflected international thinking and the call to reorient services towards primary healthcare, however what resulted was the coalescence of the primary healthcare concept with the medical institution of general practice in a way that marginalised the contribution of community care programmes (Murray, 2006). In 1986 the Government published a consultative statement ‘Health: the wider dimension’, the main purpose of which was to ascertain the Irish position on the World Health Organisations call for ‘Health for All by the Year 2000’. It acknowledged the need for considerable reorientation of the health service and the need for multisectoral planning and health promotion. However the ambitious policy concept was not well resourced (O’ Hara, 1998; Murray, 2006).
More policy followed in the 1990’s (DoH, 1994) which acknowledged the important role health promotion could play in achieving health gains. Yet there was no commitment to provide the resources needed and when set risk factor reduction targets were missed in the late 1990s the Government response was subdued (Murray, 2006; O’Hara, 1998). In 2001 the Government launched a National Health Strategy (DoHC, 2001 (a)) and one of its principle aims was the provision of a fully integrated primary healthcare service. Yet two of its four goals ‘better health for everyone’ (National Goal No.1) did not commit to the concept that health was a fundamental human right, and ‘Fair Access’ (National Goal No. 2) fell short in terms of equity and equal access to healthcare for all (Mc Cluskey, 2006).

However within this strategy for the first time the Irish primary healthcare system was emphasised, outlining the need to expand primary healthcare services to become the main setting for the delivery of health and personal social services and sought the introduction of primary care teams and interprofessional teamworking as the mode of delivering healthcare. There was an acknowledgement of the need for communication and work-sharing across the professions (DoHC, 2001 (b)). In 2013, the Government published the Framework for Health and Wellbeing 2013-2015 (DoHC, 2013) which again highlights the need for co-operation and collaboration within the context of a skilled interprofessional workforce as being essential for the delivery of services.

2.3.6.2 Primary Healthcare Professions

In the early 1900’s Irish poor law differed from its English antecedent as it placed much greater emphasis on medical relief with medical officers appointed to supervise the operation of workhouses and dispensaries. Private patients were seen at the doctor’s house. As previously outlined subsequent policy developments did nothing to extend the scope of the dispensary service or general practice organisational structures. The medical profession remained central to the provision of both these services. The one exception was the introduction of community nurses in the early 1900s to provide care for the sick poor in their homes (Barrington, 2000). Their salaries were initially raised by local voluntary committees and now all community nurses are employees of the public health service. MacMillan & Reeves (2014) state that the goal of implementing effective interprofessional teamworking continues to be elusive and that enhancing understanding of the socio-
historical roots of the health and social care professions is of use. They suggest that the initial health and social care relations established form the basis of contemporary relationships which go largely unquestioned and unexamined and add to the challenge of flattening hierarchies and achieving patient rather than profession-centred care. The foundations of other health professions such as physiotherapy can be traced back to nursing where nurses received physical education and practised physiotherapy. They were known as reconstruction aides and were instrumental during World War One in terms of delivering rehabilitation (Reynolds, 2014; Miguel, 2008). Speech and language therapy was first documented as ‘speech disorders’ by a physician in 1882, and while there was a medical/ biological focus, the importance of social contexts began to emerge in this field in the late 1930’s (Duncan, 2014). The role of practice nursing in the UK can be traced back to the 1960’s (Williams, 2000), however this nursing group are employees of general practices. In 1989 the Department of Health in Ireland announced a new subsidy to be paid to general practice to assist with the cost of employing a practice nurse (IPNA, 2015a). This brief history of the community-based medical and non-medical professions reflects the division within contemporary primary healthcare, non-medical professions rooted in nursing and public service while medicine remains separate with both public and private functions, employing practice nurses to care for the practice-specific population.

2.3.6.3 Organisation

Early healthcare in Ireland was associated with a dispensary system established to provide free medical care to the poor around the country. Local administrative units gradually became more centralised and were reduced from ninety in the 1920’s to eight under the Health Act of 1970 (Curry, 2006). In 2003 the Government announced a radical organisational reform of the health services abolishing the health boards and creating one new body the Health Service Executive (HSE) to be independent of the Department of Health. While this had not been part of the National Health Strategy announced in 2001, the then Minister of Health Micheál Martin promoted the need for structural and management practice reorganisation to achieve the objectives of the strategy (Mc Cluskey, 2006).

All public health services are run by the Health Service Executive (HSE, 2015 (a)). Presently within the HSE primary care is represented within one directorate,
Primary, Community and Continuing Care (PCCC). The Expert Group who reported on resource allocation and financing in the Irish health sector (DoHC, 2010) state that it is appropriate that the primary healthcare sector, like the hospital sector operates to a medical model. They do however acknowledge that the medical model of care is not the most effective approach in delivering certain elements of care in the community and continuing care sector and that overlap does occur between the services which require ‘broad awareness of integration at each decision-making level’ (pg. 76). Yet they suggest that it may not be fitting for PCCC to function as a single entity because of the very different ways the two sectors operate. It could be suggested therefore that Ireland currently has a disease-focused, selective primary care model with all other community-based services encompassed in what is known in the Irish health system as ‘community and continuing care’. This is consistent with the marginalisation of community care programmes in the 1980’s as noted by Murray (2006).

Tussing and Wren (2006) point to the very different visions of primary healthcare in their comparative review of the Primary Care Strategy (DoHC, 2001) and A Vision of General Practice (IMO & ICGP, 2001). The Primary Care Strategy envisioned the team to include the general practitioner and many other allied health professions. While A Vision for General Practice acknowledged that many other health professions were now based in the community, it defined its core team as a general practitioner, practice nurse and public health nurse, and cautioned against confusing primary care with community care, and to consider that all community base professionals constituted a primary care team was unrealistic in terms of effective teamworking.

The rhetoric of Alma Ata (WHO, 1986) was adopted in full but while it appears the evolution of primary care towards a fully integrated model of primary healthcare in Ireland has embraced much of the radical shift in how health is defined conceptually, the commitment to implementing real change in practice is less evident. This reflects the different influences in relation to how health policy developed and laid the foundations for the Irish primary healthcare system as it functions presently. Tussing and Wren (2006) suggest that while there is a need for private practitioners and public sector personnel (nurses etc.) to work in partnership they conclude it to be extraordinarily difficult to achieve. It appears the difficulties
remain, in 2012 the HSE (HSE, 2012) reiterate the need to promote the reform of primary care, stating a number of specific actions that would be implemented:

- A review of traditional primary care reporting relationships.
- The better alignment of GP services and service provided by the HSE according to population need.

The divide between the two components of the primary healthcare service (general practice and HSE-led community care) appear unchanged.

As patients’ health needs change they may move along the continuum of care between services. This is the overlap referred to by the expert group (DoHC, 2010). Integration of services is aimed at addressing this overlap between services. Integration at every level within these two sectors that operate in different ways could be a difficult but necessary undertaking if the service is to provide a first contact, continuous, comprehensive and co-ordinated primary healthcare service. Can these differences be overcome to provide an integrated, seamless service for those in need? Is it feasible to integrate front-line services while the supporting organisational frameworks to fund, resource and support these services remain separate?

2.4 Team Determinants: A Contemporary Perspective

2.4.1 The Introduction of Primary Healthcare Teams in Ireland

The policy to support and implement such changes are described in the Primary Care Strategy (DoHC, 2001 (b)). It clearly outlines its intention in relation to integration of the front line level of service, by bringing primary care and community and continuing care professionals together in the form of Primary Care Teams (PCT) and advocates team-working at central to its approach to primary care provision in the future:

“The Health Strategy proposes the introduction of an interdisciplinary team-based approach to primary care provision”

(DoHC, 2001)

PCT’s are made up of General Practitioners, Nurses, Occupational Therapists, Physiotherapists and Home Helps (HSE, 2012(a)), they would now be expected to
function as an interprofessional team. This may be very challenging for health professionals who traditionally work in silos with potentially differing visions of what primary healthcare is and the possibility that these views could be firmly rooted in philosophical differences through training, culture and established work practices. Lewis (1999) refers to these divisions in her review of the conceptual differences between primary and community care, suggesting it has become fashionable to deplore boundaries and to strive for a ‘seamless’ service, which tends to draw a veil over such divisions, but states that historical analysis shows that boundaries often have both an intellectual and practical rationale and that it might be more appropriate to strive for well-stitched up seams.

2.4.2 Collaborative Practice for Health

Sicotte et al. (2002) suggest that it is important to understand interprofessional collaboration within teams before trying to link it to improved health. Myriad publications by the World Health Organisation emphasis a holistic view of health, the Jakarta Declaration (WHO, 1997) calls for strong partnership approaches to promote health and provides a clear endorsement of the value of comprehensive approaches and the involvement of communities and families as part of that process (Green & Tones, 2010). The Bangkok Charter (WHO, 2005) calls for the strengthening of the capacity of civil society and decision makers to act collectively to exert control over the factors that determine health. Internationally, it is clear that the World Health Organisation has consistently promoted collaboration, participation and partnerships at all levels through their health promotion Charters and Declarations (Scriven, 2012).

2.4.3 Complex Health Needs

Biological and social systems are inherently complex, few if any human illnesses could be said to have a single cause or cure (Goldberg, 1996). The increase in prevalence of chronic illnesses in Western societies, with the subsequent need for non-acute high quality patient healthcare has brought the issue of collaboration between health professionals to the fore (Barrow et al., 2015; Ehrlich et al., 2011; Xyrichis & Lowton, 2008, Mur-Veeman et al., 2001). It is suggested that a uniprofessional focus in healthcare is insufficient to deal effectively with these complex care needs. Johnson et al. (2003) refer to chronic illness as not only the
most recurring and debilitating in nature but are conditions which require a strong social/psychological as well as medical component of care. Care must therefore occur across agency, organisational and professional boundaries, necessitating coordination and collaboration among groups.

Starfield (2008) cites Rosser (1996) who states that much of primary care consists of dealing with problems that are never attributed to a specific diagnosis. Therefore better patient measures, such as physical and emotional signs and symptoms will be necessary, not just ‘laboratory values’ (Starfield, 2008). This is congruent with the term ‘somatisation’, which refers to attribution of complaints, signs and symptoms exclusively to organic causes, so that patients only expect somatic medical interventions. Early recognition and psychosocial expertise are essential for coping with somatisation. The primary healthcare team offers its members the sort of dialogue between medicine and the humanities that is vital for the development of medicine. Such interprofessional approaches are important tools in the containment of medicalisation (van Weel, 1994).

Primary healthcare must strive to reflect this by examining the type of care provided for the physical and psychosocial issues related to changes in levels of health and wellbeing, and how best to deliver that care by the practitioners in the setting. The introduction of IPTW in primary healthcare policy reflects a movement towards addressing these broader issues. However, critical to this is how practitioners’ view what primary healthcare is, what they perceive their and others roles are and what the added value of investing in teamwork could mean in terms of outcomes, for both patient and practitioner.

2.4.4 Professional & Interprofessional Logic

Primary healthcare is undergoing significant organisational change which includes the development of interprofessional health care teams (Paquette-Brown et al., 2014; Price et al., 2014; Delva, 2008; Murray et al., 2008; DoHC, 2001). As a service it is now provided by a diverse system of professionals encompassing the traditional medical model but one which seeks to broaden the health focus more towards a biopsychosocial model to deal with the growing complexity of health issues and address whole needs of communities (Barrow et al., 2015; Pullon et al., 2009; Shaw et al., 2005; D’Amour et al., 2005). Healthcare professions have
historically functioned in well-established positions and processes grounded in separate ideologies, distinct professional identities and traditional power structures (Fox & Reeves, 2015; Cameron et al., 2013; Kvarnström, 2008; Elston & Holloway, 2001; Cott, 1997) and these differences underpin what is referred to as professional and interprofessional logic (Sicotte et al., 2002).

Healthcare is no longer seen exclusively as a medical remit, yet professional control within healthcare systems remain a major obstacle. Barrow et al. (2015) suggest that achieving effective interprofessional working requires members of professions who normally would act independently and flexibly derived from their specialist knowledge, to work in bureaucratic settings thus constraining such freedom. They conclude that this way of working is more amenable to nurses than doctors. Delva et al. (2008) found differing professional views on team membership, suggesting that where professionals are not perceived or do not perceive themselves to be team members, it impacts on their participation. Health professionals are expected to adjust, adapt and manage new healthcare team processes and to share care activities. Such change has created environments where traditional or professional logic is confronted by interprofessional logic and the resulting changes to professional jurisdiction is then challenged by health professions (Schadewaldt et al., 2013; Rodriguez & Pozzebon, 2010; Kvarnström, 2008; Sicotte et al., 2002; McCallin, 2001). This can strengthen efforts to preserve rather than diminish professional boundaries (Finn et al., 2010; Cott, 1997) acting as a barrier to interprofessional work practices. D’Amour et al. (1999) suggests that professionalisation promotes a perspective that is in direct opposition to the rationale for collaborative practice (cited by San Martín-Rodríguez et al. (2005)).

2.5 Conceptualisation of ‘Team’

2.5.1 Theoretical Perspectives & Models

A theoretical context is invaluable in specifying the precise meaning of a concept (Paley, 1996). Xyrichis & Ream (2008) suggest that the concept of teamwork has been insufficiently addressed in healthcare theories. D’Amour et al., (2005) suggest that as health problems are becoming increasingly complex they create a greater level of interdependency between the health professionals that are dealing with such complex issues. However they state that there is a dearth of understanding in
relation to the complexity of the resulting interprofessional relationships and suggests that identifying theoretical frameworks in relation to teamwork can aid understanding in this area. This may be particularly helpful when considering teamwork in primary healthcare. In relation to primary healthcare there are multiple definitions, diverse professional backgrounds and organisational structures involved which suggest a level of complexity that needs careful consideration in order to be able to understand the levels of teamwork achieved therein. By exploring theories which outline the potential factors which effect teamworking it will facilitate the process of elucidating the factors that contribute positively or negatively to perceived team effectiveness.

Within the organisational literature West & Lyubovnikova (2013) assert that the most widely accepted framework for conceptualising teams is the input-process-output model of team effectiveness developed by Cohen and Bailey (1997). This framework proposes that team inputs (e.g. team composition, task, resources, organisational supports) and processes (e.g. goals, objectives, role clarity) have an influence on team outputs (e.g. quality of care, team member well-being, job satisfaction). Research on work groups and self-managed teams has been used to identify salient factors associated with work group performances (Sicotte et al., 2002). Workgroup Effectiveness Theory proposes three stages for team and organisation success: inputs, processes and outputs. Hackmans’ model (Hackman 1990, 1987) of team effectiveness has been used extensively across settings (Xyrichis & Ream, 2008). It predicts that group processes lead to effectiveness and is based on the earlier work of Mc Grath (1964). The analytical framework of interprofessional collaboration in Sicotte et al. (2002) reflects an organisational theory framework, with particular consideration given to the professional beliefs and the potential conflicts between professional and interprofessional logic as process factors. Professional jurisdictions are seen as a major issue for collaborative practice. This is supported by a large body of literature in relation to healthcare professionals and IPTW (Maslin-Prothero & Bennion, 2010; Murray et al. 2008; Clements et al., 2007; Freund & Drach-Zahavy, 2007; Thylefors et al., 2005; McCallin, 2001; Mur-Veeman et al., 2001; Elston & Holloway, 2001; Poulton & West 1999; Schofield & Amodeo, 1999; Lewis, 1999). Sicotte’s model (Sicotte et al., 2002) was used to survey all one hundred and fifty community health care
centres in Quebec, Canada. The three stages of inputs, processes and outputs remains the basic premise of many theorists’ explorations (Xyrichis & Ream, 2008; Weaver, 2008; Sicotte et al. 2002; Borrill et al., 2001; West et al., 1998).

Contingency models reveal a similar framework of ‘context-process-results’ derived from the traditional socio-psychological models (Denison et al., 1996). Gladstein introduces ‘Task’ as a moderator to the input-process-outcome model, suggesting that the very nature of the task will vary team effectiveness (Gladstein, 1984). This is influenced by Contingency Theory where contingency effect refers to task uncertainty, the more uncertain the task, the less the work activities can be scheduled in advance and there may be more reliance on ad hoc working arrangements (Galbraith, 1973, Donaldson, 2001). This may be particularly relevant in the primary healthcare setting, with a variety of complex health issues dealt with daily by health professionals which cannot always be predicted in many cases and therefore may decrease the amount of time available to focus on team working. Research by Sicotte et al. (2002) reflected a contingency theory perspective in their analytical framework incorporating the mediating variable of ‘task’ as a potential moderator of team effectiveness. Team tasks are also a central component of the typology of teamwork offered by Reeves et al., (2010) in creating a more nuanced understanding of the differing forms of teamwork and the working contexts in which they are functioning.

Reeves et al. (2010) use social science theories to aid better understanding of interprofessional teamworking and to illuminate differing teamwork elements and perspectives. They use a range of theories to explore teamwork such as psychodynamic theory which highlights how underlying unconscious processes may affect the ways individuals work together, social psychological theories which explore how different individuals may identify with certain professions and the tensions which may create, activity theory in terms of how interprofessional actions are affected by the tasks that team members undertake and sociological theory which can help progress understanding interprofessional teamwork from three distinct vantage points- the individual, occupational closure processes and the broader social processes which underpin interprofessional teamwork. The use of such theories helps to elucidate the different elements within their conceptual framework for understanding interprofessional working.
Reeves et al. (2010) present a framework for understanding IPTW. It contains four domains that are interrelated and impact on IPTW. It reflects an input-process-output framework. The four domains are relational, organisational, contextual and processual and are underpinned by social science theories which illuminate these four elements within their conceptual framework. The factors included in each domain provide a very comprehensive outline of the issues which challenge contemporary healthcare and particularly the primary healthcare setting in terms of team demography and patient needs. How urgent, complex or predictable the need is also considered, reflecting other frameworks consideration of Contingency Theory. Furthermore, economic factors may be of particular relevance in terms of professional experiences, funding patterns and within the Irish context a recent economic crisis which has resulted in sustained cutbacks to funding to the healthcare system. It may have a significant impact for IPTW. They posit that this framework offers a sociologically informed view of ITPW which has been largely absent from the teamwork literature.

Other team-related frameworks and models have been developed such as the Model of Team Effectiveness developed by West et al. (1998) model which is reflective of an input-process-output model. The inputs related to task, group composition, cultural and organisational contexts. The process variables for effectiveness centred on leadership, communication and decision-making, with output variables defined as performance, innovation and wellbeing. This model was used by Borrill et al. (2001) to study over four hundred healthcare teams, of which one hundred were primary healthcare teams to identify factors constructive for teamwork and to assess the impact on the quality of healthcare. The study revealed that where shared objectives, regular interactions and reflections, a focus on quality, support for innovation, professional diversity, communication, integration and clear leadership were present teams were more effective. They also investigated the relationship between teamwork and wellbeing, with those working in teams reporting less stress.

The Bergen Model of Collaborative Functioning was developed by Corbin & Mittlemark (2008). Its structure is similar to the West et al. (1998) model and builds on earlier research of collaborative working. A case study was undertaken of members of the Global Programme for Health Promotion Effectiveness (GPHPE)
and their experiences of collaborative working were used to inform model development. It is interesting to note that the teams of professionals were ‘virtual’ or ‘non co-located’ teams. This model adds to the theoretical discourse through the addition of a construct called ‘antagony’, introduced as a unique type of output representing unwanted and disturbing outcomes of collaboration such as time or resource wasting. The model also highlights the finding that positive and negative cycles of interaction exist simultaneously; this is congruent with Sicotte’s model (Sicotte et al., 2002) which found conflicting factors which both enhanced and limited collaboration co-exist within the process phase.

Team development models seek to differentiate the process of team creation. The best known and most widely used model of team development suggests five stages: forming, storming, norming, performing and adjourning (Tuckman, 1965). Drinka & Clarke (2000) refer to these stages as forming, norming, confronting, performing and leaving and is based on conflict and problem resolution models (D’Amour et al. 2005).

The theoretical perspectives and models considered typically engage an input-process-output structure and while this study does not seek to evaluate any one intervention but rather explore primary healthcare teams’ general experiences of the creation and introduction of primary healthcare teams and teamworking, the use of an input-process-output framework will aid examination of the factors which underpin these experiences. The framework presented by Reeves et al. (2010) was considered the best fit and is an integral part of the theoretical underpinning of this study and is used to explore the various attributes which are understood to impact on IPTW:
2.5.2 Team Typologies

From an ontological and epistemological perspective, interprofessional working has been explored taking in various worldviews and frameworks (Perreault & Careau, 2012) thus conceptualisation remains problematic due to the resulting multiple terms and definitions that continue to be used interchangeably (Petri, 2010; Scofield & Amodeo 1999). A concept analysis by Xyrichis & Ream (2008) proposes that teamwork in healthcare is a dynamic process involving two or more professionals with complementary backgrounds and skills, sharing common health goals and exercising concerted physical and mental effort in assessing, planning or evaluating patient care. Myriad terms within the literature describe teamwork such as:
multidisciplinary, interdisciplinary, transdisciplinary, interprofessional, cross-
professional and collaborative (Perreault & Careau, 2012; Reeves et al., 2010;
Olupeliyawa et al., 2009; Weaver, 2008; O’Neill & Cowman, 2008; Clements et
al., 2007; Choi & Pak, 2006; D’Amour et al., 2005; Thylefors et al., 2005; Mc
Callin, 2001; Schofield & Amodeo, 1999).

Hall & Weaver (2001) suggest that these terms reflect a continuum which depends
on the degree of interaction among team members and the degree of responsibility
for patient care. The definitions provided here reflect a body of literature in this
area (Olupeliyawa et al., 2009; Weaver, 2008; Thylesors et al., 2005; Mc
Callin 2001).

• Multidisciplinary: refers to a collaborative process where members of
different disciplines assess or treat a patient independently and only
share information with each other. The team is focused on the task not
the collective working process and the contributions are made either
parallel or sequentially to each other with a minimum of
communication. Each contribution can be performed without the input
of others. The information is then shared with other professionals. These
independent contributions have to be co-ordinated. In health care the
doctor has traditionally taken this role.

• Interdisciplinary: relates to the collaborative efforts undertaken by
individuals from different disciplines.

• Transdisciplinary: these teams use an integrative work process and
disciplinary boundaries are partly dissolved. The blurring or
overlapping of professional boundaries relates to performance of team
roles.

However Reeves et al. (2010) defines multidisciplinary teamwork as an approach
like interprofessional teamwork but different, with the team members from
different academic disciplines rather than different professions.
Within the Irish context the National Health and Primary Care Strategy documents (DoHC, 2001 (a) (b)) reflect the multiplicity of definitions used to describe teamwork. In the documents examined with regard to the introduction of teamwork into the primary healthcare setting several different definitions were found:

- Integrated team-based approach.
- Interdisciplinary team.
- Close teamwork.
- Integrated and coordinated.
- Primary care teamwork.
- Primary care network.

This highlights the confusion that practitioners might experience as they are expected to work in teams but may struggle to ascertain what that actually means in practice. Because the terms are often used interchangeably it may result in ambiguity and inappropriate application in practice (Choi & Pak, 2007; Whitfield & Reid, 2004). These differences may impact on the delivery of patient care because when open to interpretation they tend to reflect historical socialisation patterns (Cowman & O’Neill, 2008; Hall, 2005; Hudson, 2002; Mc Callin, 2001, Drinka & Clarke, 2000). D’Amour et al. (2005) report that existing conceptual frameworks are inconsistent with either structural or process aspects of interprofessional teamworking prioritised. Reeves et al. (2011) state that this lack of clear conceptualisation impedes progress in terms of the development of a robust evidence base. Perreault & Careau (2012) acknowledge that while interprofessional working is complex and multiple worldviews and frameworks are necessary, a common terminology would be of use within the scientific community. However they recognise this may be viewed as contradictory and any attempt to construct what could be interpreted as ‘a single reality’ may be difficult to achieve.

Katzenbach & Smith (1993) have made distinctions between different types of team and different levels of team performance. Within this typology a working group is one which has shared information and co-ordination of practices, but little shared responsibility, instead each member of the group focuses on their own area of responsibility. A real team is seen as a number of people who have a common purpose, collective goals and shared accountability. This distinction is emphasised
by Wheelan (2010) when describing the difference between a work group and a team, suggesting a work group is composed of members striving to create shared goals and to develop an effective and efficient organisational structure in which to accomplish these goals. A team is when shared goals have been established and effective methods to accomplish these goals are in place.

Hollenbeck et al. (2012) offer a typology for describing teams based on three dimensions. Firstly skill differentiation which relates to teams which share the same skills (nursing/unidisciplinary) to teams which comprise of members from differing functional and clinical backgrounds (interdisciplinary). The second dimension is authority which relates to the extent that all team members are involved in team decision making processes. The third dimension is temporal stability which highlights that some team compositions may be stable over time, while others may other form to deal temporarily to deal with specific issues and disband when these issues are resolved.

However Reeves et al. (2010) suggest that such typologies are not a continuum rather a linear model, ascribing to an ideal form of teamwork, where teams would strive to progress from a low to higher level of team function moving from a working group to a ‘real’ team. They suggest that such assumptions overlook the pragmatics of real world teamwork and outline their typology for understanding the differing forms of interprofessional working which is underpinned by a contingency approach which they argue provides a more nuanced understanding of the working context, the appropriateness of the interactions and therefore enabling professionals to respond according to local needs. It is more appropriate when considering what configuration of teamwork would best address identified goals when planning to implement teamwork within a particular setting. The typology presented by Reeves et al. (2010) will be used to examine teamworking as experienced by the participants in this study as it acknowledges the broader contextual and contingency factors and posits that teamwork is but one form of interprofessional working, thus creating the opportunity to identify other potential forms team interactions which may be present but currently unrecognised or unacknowledged. The typology and definitions are outlined overleaf:
Figure 2-2: Teamwork Typology

- IPTW is a type of work which involves different health and social care professionals who share a team identity and work closely together in an integrated and interdependent manner to solve problems and deliver service.
- Interprofessional collaboration is defined as a type of interprofessional work which involves different health and social care professionals who regularly come together to solve problems or provide services.
- Interprofessional coordination is similar to interprofessional collaboration involving different health and social care professions. It differs in that it is considered a looser form of working arrangement whereby interprofessional communication and discussion may be less frequent.
- Interprofessional networking is defined as loosely organised groups of individuals from different health and social care professions, who meet and work together on periodic bases.
2.6 Specialist Teams

Specialist, separate, vertical programmes allows central technical supervision to ‘reach out’ through self-contained vertical programmes. The advantage of this approach is that it is thought to assure delivery yet the disadvantage is that it could lead to service duplication, inefficiency and service fragmentation. The World Health Organisation promotes integration of services as a solution to these problems (Briggs & Garner, 2006).

Bryar (2008) suggests that as researchers become more concerned with the delivery of particular aspects of care, such as diabetes, musculoskeletal problems and renal disease they are increasingly turning their gaze towards primary healthcare. It could be argued that focusing on specific determinants of health or disease in isolation may be easier than broadening that focus to include other potential long term determinants related to such health issues such as poor socioeconomic circumstances and finding sustainable solutions. The positive aspect may be that there is clarity of roles and goals in these teams, a narrow focus may provide some of the characteristics required for effective team functioning. A study by Mur-Veemen et al. (2001) explored five shared care projects and highlighted that in all of the five projects, content, method and procedures were described in a protocol of agreements and guidelines for treatment and task divisions were written by the caregivers involved. Hansson et al. (2008) in their exploration of teamwork in Sweden state that teamwork is rarely found but refer to the exception when teamwork principles are practised in relation to specific groups of patients. These types of team reflect a selective model of primary care which is not the model of care outlined in the Irish Primary Care Strategy (DoHC, 2001 (b)). Yet the Irish National Clinical Programme for Primary Care outlines the care of patients categorised by disease processes and states the key objectives for primary care:

“… to prevent heart attack, stroke, amputation, blindness, kidney failure, asthma, heart failure, COPD, falls and fractures”.

HSE, 2012(b).

Øvretveit (1997) suggests that the concept of ‘care programmes’ combines thinking about needs with thinking about services. It is a compromise conceptually, part-
way between a provider-concept such as ‘district nursing service’ or ‘vaccination services’ and a ‘pure needs’ concept such as ‘difficulty walking upstairs’. Such programmes may be an opportunity to create an environment within which different health professionals could find common ground and support collaborative teamwork.

2.7 Understanding Interprofessional Teamwork

The Framework for Understanding Interprofessional Teamwork (Reeves et al., 2010) is adapted for this study to reflect both the historical and contemporary determinants within the Irish primary healthcare context. The framework outlines the factors considered most relevant within the context of this study. Reeves et al. (2010) suggests that while their framework of understanding provides a thorough insight into the factors related to teamwork, it is rooted in their shared interests and other factors may be of relevance. Central to this study is the Irish primary care strategy (DoHC, 2001(b)) which outlined the introduction of teamwork into the primary healthcare setting and highlighted specific factors which would be implemented to promote teamwork. Emphasis was placed on the introduction of team meetings, developing team goals and objectives, provision of communication infrastructure, team training and over time the provision of primary healthcare centres to facilitate the colocation of teams. Teamwork was championed as providing benefits for both patients and professionals. While the factors within the framework as presented by Reeves et al. (2010) are all of relevance, these Irish context-specific issues must also be considered as they form part of teamwork narrative underpinning the professional experiences of the introduction and implementation of teamwork in the Irish primary healthcare setting which this study seeks to explore. Lemieux-Charles and McGuire (2006) suggest that researchers need to develop models that are tailored to the types of teams, populations, care delivery setting and work processes being studied.

Having considered both the historic and contemporary perspectives relating to primary healthcare and teamwork, the framework for understanding IPTW as adapted from Reeves et al. (2010) will be used to explore the various dimensions related to teamworking and is outlined in Figure 2-3 overleaf:
Figure 2-3: Adapted Framework for Understanding IPTW
2.8 Interprofessional Teamwork Domains

2.8.1 Relational

Relational factors are those that directly affect the relationships shared by professionals (Reeves et al., 2010).

2.8.1.1 Professional Socialisation

The topic of professional cultures and traditions within organisations is not a neoteric issue. Weber (1947) noted that organisational forms arise out of a historical social context and drive the behaviour of the actors. Other theorists suggest while organisations appear to result from normative social needs, modern organisations are also made up of people with many competing professional and cultural interests, the consequence of which is a system of competing goals, values and activities in which these competing interests play out their claims for dominance in defining goals and direction for the organisation (Perrow, 1965; Scott, 1987). In healthcare there is a strong traditional affinity towards autonomy which fosters individualism and specialisation and such deeply embedded professional cultures run counter to the spirit of collaboration (Caricati et al., 2015; Khalili et al., 2013; San Martín-Rodríguez et al., 2005). Social Identity Theory originally developed by Tajfel and Turner (1986) to understand intergroup discrimination, posits that a person will identify more closely with members of their own group (e.g. family, profession or organisation).

This process is referred to as professional socialisation where individuals begin to strongly associate and identify with their professional group and may result in a situation where interprofessional teamworking is viewed as a low priority (Reeves et al., 2010). It is proposed that professional socialisation begins in the very early stages of professional education and training. Furthermore individuals may enter their chosen profession with an already predetermined view of professional roles and hierarchies. In healthcare this factor appears to be of particular relevance in the medical profession (Reeves et al., 2010; D’Amour & Oandasan, 2005; Hall, 2005; San Martín-Rodríguez et al., 2005; Sicotte et al., 2002; Yarsborough et al., 2000; Reeves & Pryce, 1998).

One of the most influential elements associated team function is thought to be professional or organisational culture which is defined as the values and beliefs that
are shared by members (Tremblay et al., 2010; Jansen, 2008; Kvarnström & Cedersund, 2006; D’Amour et al., 2005, Elston & Holloway, 2001). It is often the unwritten, feeling part of the organisation or profession (Mur-Veeman et al., 2001). Underlying cultures and values act as barriers to the changing of attitudes towards greater collaboration (Rämgård et al., 2015; Parsell and Bligh, 1999). San Martín-Rodríguez et al. (2005) suggest that professional socialisation sees health professionals immersed in philosophies, values and theoretical perspectives inherent to their professions, that professional systems encourage territorial behaviours and that this is in direct opposition to the rationale of collaboration. Professional training socialises their members to develop a shared view of their world. They form a unique way of thinking and acting within their own profession (Drinka & Clarke, 2000) formed through educational and training processes which have limited contact with other professions (Finn et al., 2010; Boudioni et al., 2007, Jones 2006). In practice, they then become members of interprofessional teams with preconceived views of their own and other health profession roles (Price et al., 2014; Khalili et al., 2014; Curran et al., 2001; Irvine et al., 2001; Hall & Weaver, 2001). This can result in interprofessional tensions and lead to poor team productivity (Hall, 2005; Lichtenstein et al., 2004; Riley et al, 2003; Cook et al., 2001). San-Martín-Rodríguez et al., (2005) refer to a logic of collaboration verses a logic of competition which reflects findings of research conducted by Sicotte et al. (2002) where the tension between ‘traditional professional or disciplinary logic’ and ‘interdisciplinary logic’ was evident. It is suggested that the impact of professional socialisation can lead to attitudes and values that profoundly undermine teamwork (Reeves et al., 2010; Richardson & Asthana, 2006).

2.8.1.2 Power & Hierarchy

Opie (1997) states that while a team’s combined expertise should contribute to integrated care planning and better use of resources it is complicated by disciplines’ unequal access to power as a consequence of professional socialisation. Healthcare teams tend to reflect, replicate and preserve the traditional divisions of labour, status systems and systems of authority (Irvine et al, 2002; Cott, 1997). Medical dominance within healthcare and eminent position within the hierarchy of healthcare professions is well documented. This hierarchical culture is seen as one of the most challenging barriers for teamwork (Fox & Reeves, 2014; Kearns &
Purcell, 2011; Hannson et al., 2008; Bleakley et al., 2006; Shaw et al., 2005) but may be reinforced by other health professionals who adopt defensive or subordinate positions (Leiba, 1994). Bourgeault and Mulvale (2006) suggest that the structural embeddedness of medical dominance impinges on policy changes regarding collaborative healthcare teams.

In Ireland, general practitioners (GPs) have an independent contractor status while all other health professionals are salaried employees of the health services. In terms of power Freidson (1984) suggests that employment implies losing the capacity to control the terms of the work, what work is done, how it is done and what its aims are. Mur-Veeman et al. (2001) state that unlike other healthcare professions, fiscal, practice and organisational autonomy are very significant issues for medical practitioners. This may mitigate teamworking (Brinkman & Wilson-Salt, 2007; Elston & Holloway, 2001; Way et al., 2000; West & Poulton, 1997). Yet other findings suggest that good overall business practice, not just the contractual arrangements is key to successful teamwork. However within general practice the growth in numbers in practice nurses and their contractual status as direct employees in general practice may have a negative impact for teamworking initiatives (Pullon et al., 2009; Shaw et al., 2005; Elston & Holloway, 2001). Addressing traditional power or hierarchical structures remains a challenge for teamwork. Dingwall & McIntosh (1978) suggested that interprofessional practice without according equal status, power or prestige to different health professionals may be futile. Until these perceived discrepancies are addressed it is unlikely the professions will discard professional identity in favour of a team identity (McKay & Narasimhan, 2012). Mc Callin (2001) states that self-interest can motivate individuals to ‘sabotage’ IPTW. Rodriguez and Pozzebon (2010) suggest that doctors are very powerful actors that can easily resist changing modes of practice if they do not see a clear and immediate advantage in doing so.

### 2.8.1.3 Team Roles

Primary health care reform in the 21st century presents greater complexities because of better recognition that populations have different needs and necessitates a different mix of services (Starfield, 1998). Essential for this approach is a diversity of skilled health professionals to address these needs within the setting. A clear understanding by each team member of his/her role and that of others is
critical to maximise their potential contribution to the team and patients. Barr (1996) suggests thorough discussions relating to team roles is essential. Role clarity appears to be problematic in the primary healthcare setting (Brault et al., 2014; Perron et al., 2014), where work is less structured and task orientated than the acute care sector (Al Sayah et al. 2014). A study by O’Neill & Cowman (2008) of IPTW as experienced by community-based nurses in Ireland, identified that not only is role clarity in the early stages of team formation important but clarity is needed around new and evolving roles such as the practice nurse role. West & Markiewicz (2004) regard debate positively within teams; that the diversity and differences can be a source of creativity and innovation but when conflict is malevolent it can destroy relations and lower team effectiveness. Lack of understanding in relation to roles and the tasks involved are regarded as facilitating such conflict (Payne, 2000) and may impact on the quality of care delivered (Lingard et al., 2004). Understanding and appreciating roles is seen to be a core competency required for patient-centred collaborative practice (Khalili et al., 2013). Clarity around new, established and evolving roles between professionals is needed for interprofessional teamwork, to avoid potential professional dissonance, duplication of task, time wasting, turf wars or most significantly potential omissions in patient care (Fox & Reeves 2015; Suter et. al. 2009; Corbin & Mittlemark, 2008; Kripalani et al. 2007; Clements et al., 2007, Long et al., 2003). Hill (1998) suggests that health professionals come into health care teams with a poor understanding of the other professional roles, which causes anxiety, conflict and ineffectiveness as a team. Burnout among team members has been identified as a significant risk as a result of ‘role blurring’, avoiding such consequences requires good leadership and conflict resolution skills where it occurs (Hall, 2005; Brown et al., 2000 (a)). Clear role understanding, boundaries and demarcating individuals’ contributions helps to overcome ‘role blurring’ (Sims et al., 2015 (b); Suter et al., 2009).

Medical personnel have been identified as a profession who struggle with the interprofessional work concept in practice and may view it as a threat (Maslin-Prothero & Bennion, 2010; Hannson et al., 2008; Selle et al. 2008; Joyce & Casey, 2004; Larivaara & Taanila, 2004; Mur-Veeman et al., 2001). It is suggested that non-medical disciplines are keen to enhance their contribution in the delivery of
healthcare (Reeves et al., 2010; Richards et al., 2001; Mc Pherson et al., 2001; Mc Callin et al., 2001; Temkin-Greener et al. 1983) with frustration relating to the lack of progress in this area reported (Clement et al., 2007; Hall, 2005; Wiles & Robison, 1994). These professionals have begun to question medical dominance over health (Irvine et al., 2002; Cook et al., 2001), more specifically in the areas of chronic disease management (Chan et al., 2011; Johnson et al., 2003). However many studies reveal polarised views on this topic with medical personnel viewing other healthcare roles as supporting ancillary rather than autonomous positions within healthcare (Schadewaldt et al., 2013; Donelan et al., 2013; Kilpatrick et al., 2012; Hoskins 2011; Rodriguez & Pozzebon, 2010). These professions may see new interprofessional team structures and care-sharing models as an opportunity to pursue equality within such team structures while the medical profession may feel their dominant position is being threatened. Khalili et al. (2013) refers to the need for a ‘dual identity’, developed through a socialisation process that cultivates both a sense of professional identity while fostering a respectful and understanding disposition towards other professional roles within the interprofessional community.

The perceived traditional role nurses held within the health services has received attention (Lancaster et al., 2015; Barrow et al., 2015; Riley et al. 2003; Cook et al. 2001). In 2008, an exploration of nurses’ experiences of their professional roles in Ireland highlighted what they perceive to be a lack of understanding for their evolving role at community level and the difficulty of getting away from what nurses negatively viewed as a more traditional, submissive nursing role (O’ Neill & Cowman, 2008). In their examination of the pilot primary care teams in Ireland Burke & O’Neill (2010) highlight the lack of a clear vision and strategy provided for community nursing following the publication of the Irish Primary Care Strategy (DoHC, 2001(b)). They cite the Institute of Community Health Nursing (ICHN) who acknowledge that the failure to develop such a strategy has resulted in the haphazard expansion of the Irish nursing service without any clear plan for strategic integration or professional development (ICHN, 2007). Therefore if interprofessional working is to underpin professional practice efforts must be made to provide clarity in terms of professional roles and team functions.
Way et al. (2000) in their review of collaborative practice in primary healthcare sought to provide a description of collaborative practices that builds appropriately upon the strengths that each professional partner brings to the practice. They acknowledge the need for health professionals to understand the distinct and overlapping strengths that disciplines bring to the setting. However, they define professional function as ‘knowledge and skills plus legislated authority’ and present a table clearly outlining the shared and separate functions of the doctors and nurses. This model may be helpful to address issues around power by reviewing the roles of the many health professions that work within teams in the primary healthcare setting in Ireland and to provide clarity relating to professional and team roles and reporting arrangements (e.g. accountability and responsibility) within the Irish legislative frameworks. Concerns in this area are well documented (Schadowaldt et al., 2013; Clements et al., 2007; Irvine et al., 2002; Leipzig et al., 2002; Richards et al., 2001) yet there is a dearth of literature outlining any clear resolute mechanisms that have been able to deal with this issue. The challenge may be dealing with what Davies (2000) refers to as obstinate traditions in the healthcare professions.

2.8.1.4 Team Composition & Diversity

Lemieux-Charles and McGuire (2006) suggest that as yet the optimum team size and level of professional diversity is as yet unknown. A review by Cohen and Bailey (1997) found that in terms of effectiveness team size provided mixed results but that too few or too many impact negatively on performance. Poulton and West (1999) found that in larger teams professional participation rates were lower. Starfield (1998) suggests that six team members is the optimal size within teams with more than twelve members considered too large. West (2012) states that team size should range between eight and twelve members. Williams and Laungani (1999) suggest that teams with more than ten members encounter more difficulties than smaller teams. Larger teams are seen to offer potential in terms of greater professional diversity, knowledge and expertise (Grumbach & Bodenheimer, 2004). A survey of general practitioners (GP) in Ireland found that 64.6% of those who responded perceived their primary healthcare team to have a poor level of function and articulated the view that the GP and Practice Nurse (PN) should be the core members of the primary care team (ICGP, 2011). This is commensurate with
a joint report from the Irish Medical Organisation and the Irish College of General Practitioners called ‘A Vision of General Practice’ (IMO/ICGP, 2001) which advocated for smaller teams consisting of doctors and nurses. It suggests that the concept that all community-based health professionals constituting a primary healthcare team is unrealistic in terms of effective team working, thus team diversity may be considered desirable but not perceived as practical by GPs within the Irish context.

2.8.1.5 Team Processes

2.8.1.5.1 Benefits
Interprofessional teamwork is considered to realise benefits for patients, professions and organisations. For patients improved clinical outcomes (Weaver et al., 2014; Khan et al. 2008; Grumbach & Bodenheimer, 2004; Campbell et al., 2001) and better quality of care in terms of patient experience (Khan et al., 2008; Bower et al., 2003, Borrill et al., 2001; Stevenson et al., 2001; Gõni et al., 1999) have been reported. Findings in an earlier study reported comparison of outcomes between two groups of patients with rheumatoid arthritis, one receiving interprofessional care, the other standard care. While there were no great differences in disease activity between the two groups, overall health was reported to have improved significantly over one year in the interprofessional group (Ahlmen et al., 1988). The World Health Organisation states health is not defined by the disease process per say but the lived experience (WHO, 1986). This is of importance as concerns over quantifying the benefits (outputs) of collaborative practice and cost-effectiveness are raised (Corbin & Mittlemark, 2008; Dowling et al., 2004). Bodenheimer and Berry-Millet (2009) found IPTW enhanced the quality of care and resulted in a reduction in associated costs for patients with complex needs, this is significant within the context of the primary healthcare setting where the majority of those with complex needs are cared for (e.g. chronic disease management, elderly and disability care provision). Lowe & O’Hara’s (2000) evaluation of the introduction of teamwork into a health trust in the UK reported improved service provision and the health authority reported that cost per contact for community services was significantly lower. The benefits may not always be easily measured and more imaginative methodologies to capture the
relationship between collaborative service provision and the impact on ‘lived experiences’ of the service users may be required.

Health benefits for staff are reported in terms of health and wellbeing (West & Lyubovnikova, 2013; Clements et al., 2007; Borrill et al., 2001) and greater job satisfaction (Xyrichis & Ream, 2007; Rafferty et al., 2001). The Canadian Health Research Foundation (CHRF, 2006) suggests that collaborative team practice is an instrument for creating healthy working environments, which relates to the settings approach and promoting health within the workplace. However Conratti et al. (2012) state that resistance to change occurs because those involved don’t see the change as being beneficial, don’t view the benefits as being greater than the sacrifices, or aren’t involved in the creation of the change. While professionals will always outline that the quality of patient care is the principle and most important factor to consider in terms of employing teamwork in practice, professional self-interest must be acknowledged and is a motivation for implementing collaborative practice models (Harris et al., 2010, Boudioni et al., 2007; Mur-Veeman et al., 2007).

Incentives are a reality in primary healthcare and while there may be uncertainty surrounding the most important influences on provider behaviour, it is clear providers do respond to financial incentives (DoHC, 2010). However it is also suggested that fee-for-service impedes movement towards collaborative models of care (Reeves et al., 2010; Clement et al., 2007). A study by Harris et al. (2010) suggests that GP’s perceive there to be little incentives to change the ‘culture’ from working independently as a primary care service provider to being part of a team structure in chronic disease management. It is suggested that this may resonate with other health professionals within the setting. Pullon et al. (2009) highlight a particular funding structure which sees doctor-patient contact attract higher remuneration than nurse-patient contact and identify it as a barrier to effective teamwork. West & Poulton (1997) suggest that incentives have proven rather more successful where they are used to reward groups for group performance, however moving from the more traditional model of professional compensation may be very difficult to achieve (Taplin et al, 2013; Jansen, 2008; San-Martín-Rodríguez et al., 2005). Xyrichis & Lowton (2008) highlight the low proportion of studies addressing issues of organisational responsibility such as rewarding team members
for their effort and establishment of a regular appraisal system. Jansen (2008) highlights the significant opposition raised to proposed changes in funding structures in the primary healthcare setting in Canada. In the UK the Department of Health (DoH, 2005) appear to acknowledge the importance of incentives suggesting a lack of systemic incentives for staff can lead to perverse outcomes and cause frustration and conflicts for patients and staff. Participation is a key enabler of teamwork (Greenfield et al., 2013; Borrill et al., 2001), Boudioni et al. (2007) found that where staff were salaried, they were more willing to participate in team level interventions. While D’Amour et al. (2005) states that professionals will not collaborate if the effort is only based on the notion that it will be good for clients, research by Bunniss and Kelly (2008) found that teams share their knowledge because they believe it has value, not because they are driven by external incentives or are monitored. What is clear is that collaboration needs to be understood not only as a professional endeavour but a complex human process.

2.8.1.5.2 Team Meetings

As part of the implementation of teamwork in Ireland (DoHC, 2001 (b)) regular team meetings were introduced. The HSE scheduled primary healthcare team meetings with all core members and GP participation was expected. The level of emphasis placed on such meetings is outlined by the Comptroller and Auditor General’s report (C & AG, 2010) which states that teams are considered to be functioning when they are holding team meetings. Regular team meetings are identified as a key determinant for effective teamwork (Cameron et al., 2013; Reeves et al., 2010; Sargeant et al., 2008; West & Poulton, 1997), while Jansen et al. (2010) suggest that face-to-face encounters consistently emerge as the most efficient way to transfer knowledge. However the contribution of team processes such as meetings in terms of team effectiveness is questioned by Lemieux-Charles and McGuire (2006). In Nisbet et al. (2015) perceived benefits were reported for patients, professionals and the teams involved, yet where medical professionals were present it was perceived that a ‘medical model’ dominated the discussions and limited learning. Brown et al. (2010) suggests that team meetings helped to strengthen working relationships while Borrill et al. (2001) found that regular team meetings are associated with effective teamwork and with greater levels of innovation. Burke and O’Neill (2010) found that for community-based nurses the
collegial support and increased visibility of the team helped reduce the levels of professional isolation experienced.

Dowling et al. (2004) points out that collaboration requires multiple meetings and is likely to render decision-making a more complex and time consuming task. Furthermore meetings are also expensive in terms of time and opportunity costs and even if benefits can be attributed to collaborative practice the benefits may be outweighed by extra costs. Lewin and Reeves (2011) found that team meetings were more about visibility than collaborative activities. A review of primary healthcare teams in Ireland noted the considerable time commitment team meetings required, time the professionals stated they did not have (Joyce & Casey, 2004). This reflects the concerns raised by GPs in Ireland in relation to attending primary healthcare team meetings. They highlight the costs in terms of having to travel to meetings with no expenses provided to do so while other team members are paid or receive time in lieu. Furthermore they perceive meetings to be held ‘during busy working hours’ as a significant disincentive (ICGP, 2011). Hansson et al. (2008) identified the theme ‘time-consuming’ verses ‘time-saving’ in their study of GPs in primary healthcare teams in Sweden in relation to teamworking. This is reflective of the ‘antagony’ construct posited by Corbin and Mittlemark (2008), which relates to the possible negative perceptions or effects that some team processes may create.

2.8.1.5.3 Goals & Objectives

Teams are fundamentally defined by their shared goals and objectives (West & Lyubovnikova, 2013). Clear goals and objectives are considered to be fundamental for teamwork. In order to drive and sustain an integrated teamwork policy initiative such as the Irish Primary Care Strategy (DoHC, 2001 (b)), the need for shared understanding of the purpose and commitment to the vision of the initiative across the organisation is required (Hickey, 2008; Hubbard & Themessl-Huber, 2005; Holtom, 2001). Hubbard & Themessl-Huber (2005) suggest the biggest challenge is a ‘fundamental change in thinking’ at policy, management and service delivery level. This suggests a need for the collective agreement and development of this shared vision. Farrell et al. (2001) theorise that in the forming stage of team, individuals may see the changes as being arbitrarily imposed and the critical factor for movement from this undeveloped state to the more advanced performing stage is the negotiation of a team culture that members internalise. Others support this
view and suggest there is a balance to be struck between ‘mechanical’ (top-down) and ‘organic’ (bottom-up) development for effective team function (Freund & Drach-Zahavy, 2007; MacFarlane et al., 2004).

Teamwork requires a common vision, a shared philosophical stance. West (1990) suggests that a vision is an idea of a valued outcome which represents a higher goal or motivating force at work, it is that which should precede sub-group interests motivating the group to work together. In their exploration of the impact of reforms in the UK on interprofessional working in primary healthcare teams the importance of encouraging others to share a vision and see beyond their own practices was identified as an enabler for IPTW (Elston & Holloway, 2001, Maslin-Prothero & Bennion, 2010). The ownership of shared objectives is what differentiates a team from a group (West & Poulton, 1999). The need for clear goals and objectives is consistently shown to positively influence teamwork effectiveness (Xyrichis & Lowton, 2008; Grumbach & Bodenheimer, 2004; Borrill et al., 2001; West & Poulton, 1997). Primary healthcare teams where goals were poorly developed are less successful in delivering innovative programmes (Shaw et al., 2005). Analysis by D’Amour et al. (2005) suggests that there must be a team goal, what they refer to as a ‘collective action’ that addresses the complexity of patients’ needs. Clements et al. (2007) suggest that where there are few links between collaborative practice and individual goals signals a failure in implementing teamwork. Joyce and Casey (2004) found in their review of primary healthcare teams in Ireland, where a team vision was not well articulated there were difficulties translating teamwork into action.

The literature suggests that such goals and objectives need to be congruent at organisational and team levels. Programmes with clear goals, aims and objectives may enhance collaboration (Hansson et al. 2008; Bryar 2008, Shaw et al. 2005; DoHC, 2004, Joyce & Casey, 2004; Mur-Veeman et al., 2001; Lowe & O’Hara, 2000; West & Poulton, 1999; Øvretveit, 1997). ‘Formalisation’ is based on its capacity to offer an articulated and operative interprofessional framework (e.g. protocol for delivery of care, assessment of the quality of care). It can also give structure to the partnership environment (Corbin & Mittlemark, 2008). However many professionals do not easily accept mechanisms that constrain their autonomy and must be carefully introduced (Sicotte et al., 2002).
2.8.1.5.4 Communication

Communication is a collaborative skill defined by sharing of important information, exchange of ideas and discussion. A study by Perrron et al. (2014) found that effective communication was a perceived priority for health professionals in the primary healthcare setting. Jansen et al. (2010) suggest that face-to-face encounters are the most efficient way to transfer knowledge, achieve high quality and acknowledge mutual dependency. However the communication skills that are taught to students are usually focused on interactions with patients and families not on communication across professions, thus practitioners begin their interprofessional working careers faced with unfamiliar vocabulary, different approaches to problem solving and a lack of common understanding which can impede teamwork (Hall, 2005). The language used traditionally across disciplines may vary. Research suggests that this may be a barrier to collaborative working. Language is a critical component of effective communication and for team development (Weaver, 2008; Mur-Veeman et al., 2001). The use of jargon and acronyms specific to one discipline without the opportunity for definition and understanding by the team creates an obstacle to team synergy. Learning each other’s language and developing a common language may help to overcome such challenges (Choi & Pak, 2007; Irvine et al., 2002; Mur-Veeman et al., 2001). Workshops held for GPs to explore their experience of being part of a primary healthcare team in Ireland highlighted that they felt the language used at meetings was unfamiliar to them (Joyce & Casey, 2004).

Teamwork relies on the sharing of information and knowledge, therefore communication is considered a central element of teamwork (Suter et al., 2009; Weaver 2008; Sargeant, 2008). Furthermore research suggests that poor communication lowers the quality of patient care (Kripalini et al., 2007; Bleakley et al., 2006). Grumbach and Bodenheimer (2004) outline key communication structures as paper and electronic information flow, brief verbal interactions and meetings, while San-Martín-Rodríguez et al. (2005) refer to the mechanisms for communication such as the provision of standardised documentation. Molyneux (2001) refers to the improved working relationships where communication was facilitated by sharing joint case notes, while Øvretveit (1997) states that in integrated teams there should be only one case-file for each client. Another aspect
to communication in teams is referred to as ‘tactical communication’ where team members consciously control the amount or type of information they share with others, to achieve outcomes that are to their own advantage or what they perceive to be advantageous for their patients. It is thought to offer a means to avoid disagreement and to negotiate team hierarchies or conflicting treatment models (Hewitt et al., 2015; Reeves, 2015)

2.8.1.5.5 Leadership

Leadership is considered an important element for teamwork on two levels, nationally in terms of providing appropriate governance structure to enable teams to function and locally in terms of team leaders to move the work of the team forward (Reeves, 2015; Sims et al. 2015 (a); Taplin et al., 2013; Reeves et al., 2010; San-Martín-Rodríguez et al., 2005; Drinka & Clarke, 2000). Hall & Weaver (2001) suggest that leaders must be able to identify the different stages of team development and initiate appropriate leadership approaches. Cashman et al. (2004) identified project leaders as being able to provide support and encouragement to the team as members outlined areas of care they could address as a team, thereby improving processes and ultimately patient care. Borrill et al. (2001) concur with the above suggesting that for effective teamwork clear leadership in the team is required and team development support should also be provided by someone outside of the team, such as a project leader.

At team level Reeves et al. (2010) outline that leadership within interprofessional teams can be problematic due to separate professional responsibilities and line management structures, making the identification of a single leader difficult. They suggest this is further complicated as patients’ needs change, as such situations may require a new lead in terms of progressing care appropriately. It may also be problematical where leadership roles are traditionally assumed by or conferred to medical personnel (Reeves 2015, Donelan et al., 2013; Hannson et al., 2008; Bourgeault & Mulvale, 2006; Temkin-Greener, 1983). Opie (1997) suggests that the traditional role of leader as ‘expert’ is no longer apposite, rather the critical role is to develop a shared vision, challenge mental maps and to develop and sustain critical thinking, while Leggat (2007) states that leaders that can foster organisational commitment and psychological safety are more likely to improve team outcomes. This suggests that such leadership requires considerable experience
and ability. Drennan et al. (2005) propose that the absence of strong leadership might reflect a lack of experience in the management of collaborative working groups.

Drinka and Clarke (2000) discuss the complexity of leadership and highlight that leadership is valued more by those who chose management rather than healthcare as a profession. They outline two forms of leadership, a structural model which assigns deliberate roles and functions, or a humanist model where leadership is unstructured, shared and informal. It is suggested that the latter is much more consistent with interprofessional leadership contexts (Thylefors et al., 2005; Drinka & Clarke, 2000). Øvretveit (1997) suggests that a team chairperson is most appropriate for primary healthcare team structures. D’Amour & Oandasan (2005) state that leadership and support at organisational level in terms of governance and formalisation structures are key to providing clarity of purpose and expectations within teams. The Primary Care Strategy (DoHC, 2001(b)) provides leadership in terms of outlining a strategy for service delivery in the primary healthcare setting, yet concerns relating to a lack of clear governance structures for the primary healthcare teams providing such services has been highlighted recently (HSE, 2012 (c); C & AG, 2010). Interprofessional teams were created by the HSE. Within these teams leadership was addressed with each team asked to appoint a team chairperson. This role was expected to rotate within the team (O’Connor, 2012). More recently the National Service Plan for 2015 (HSE, 2014) refers to an objective to implement agreed primary healthcare governance structures however does not provide any level of detail on the topic. In terms of more localised leadership it does outline a new ‘lead’ role for GPs which will be implemented. The service plan did not outline how this role would be operationalised or evaluated.

2.8.1.5.6 Team Stability

While the literature outlines that team stability impacts on interprofessional relationships and team effectiveness, a level of instability may be an unavoidable feature in healthcare teams (Bleakley 2013; Reeves et al., 2010; Drinka & Clarke, 2000). One aspect relating to stability is staff turnover as practitioners leave for various professional and personal reasons. Another aspect to team stability is the paradoxical position that teams need to be adaptable and flexible if they are to reflect local needs and the team composition may need to change in order to best
deal with that need. Bleakley (2013) suggests that teams may need to resist the comfortable frame of reference of a defined team to embrace fluid team processes. He suggests that teams strive to stabilise (will-to-stability) where instead in what he refers to as a ‘liquid’ era of healthcare, teams may need to be able to tolerate greater ambiguity and complexity (will-to-adaptability). Furthermore he cites Engeström (2008) who emphasises the importance of the cultural and historic dimensions in communities of practice referring to the classic divisions in healthcare between the notion of ‘cure’ and ‘care’. In these complex communities interactions may be better suited to ‘knotworking’ rather than teamworking. Knotworking is characterised by the movement of tying, untying and retying together seemingly separate threads of activity.

2.8.1.5.7 Team Emotions

Reeves et al. (2010) suggest that the attachment individuals have to their team can be of influence. There are several viewpoints to consider. Freud and Drach-Zahavy (2007) found that loyalty is primarily to profession not the organisation which is closely related to professionalisation as previously discussed. Furthermore they found differing professional motivations in terms of commitment which presents a challenge in unifying such team members. Numerous papers discuss nursing’s general affinity with an interprofessional teamwork model philosophically (Woods & Magyary, 2010), in terms of being a key team player (MumVee et al., 2001) and being credible communicators (Grumbach & Bodenheimer, 2004). Community based nurses in Ireland associated IPTW with collaborative processes which valued and respected the input of all team members, and they enjoy both the collegial support a ‘visible’ team brought and a reduction in social isolation which nurses in very rural settings experience (O’Neill and Cowman, 2008; Burke and O’Neill, 2010). Aspirational emotions have being highlighted where interprofessional teamwork structures may be seen as an opportunity to progress the quality of the care delivered and professional fulfilment (Xyrichis & Ream, 2007).

However negation emotions are also examined, it is suggested that nurses are reluctant to engage in collaborative teamwork as they feel undervalued or having little influence (Miller et al., 2008; Atwal & Caldwell, 2006, Jones, 2006; Long et al., 2003). Xyrichis & Ream (2007) suggest doctors’ have more negative emotions relating to teamwork, viewing it as a work form in which nurses are subordinate.
Other studies have highlighted the medical professions’ ambivalence towards teamwork (Hannson et al., 2008) some considering it a way to delegate (Lewis, 1999) others expressing feeling that their role is being threaten or undermined (Hoskins, 2011; Redsell et al., 2006; Cook et al., 2001; ) while some deemed interprofessional teamwork to be laborious (Mur-Veeman et al., 2001). How individuals view teamwork is closely related to their emotions and can be negative or positive depending on one’s experiences and will impact on willingness to participate in teamwork and the development of a commitment to their respective teams.

2.8.2 Processual

Processual factors relate to issues which affect how the work is carried out across different workplace situations (Reeves et al., 2010).

2.8.2.1 Time & Trust

Time is associated with teamwork in a number of ways. It appears teams must be given time to develop a shared vision or purpose, teamwork can be perceived to take too much time and health professionals voice concerns over not having time to participate in teamwork processes. Rodríguez & Pozzebon (2010) in a longitudinal case study conducted over two and half years illustrate how building new care teams is a very fragile and challenging process and state that where health professionals are expected to work together they need time to communicate, interact and overcome conflicts. Lowe and O’Hara (2000) outline the transition from uniprofessional to interprofessional service provision within a primary care directorate in the UK. They highlight the gradual change and reconfiguration of its existing services concluding that five years after their initial introduction the interprofessional teams, the teams have delivered many of the promised benefits. However teamwork is also negatively associated with taking too much time. Grumbach and Bodenheimer (2004) suggest that medical practitioners have particular difficulty finding the time to participate in team development. There are also practical time-related issues highlighted by Oandasan et al. (2009) who found that some staff perceived there to be a lack of time to engage in team processes due to patient scheduling and also where professionals are off-site there were difficulties in finding time to travel to meetings. This is comparable to findings in
Ireland where time is negatively associated with teamwork as it is currently configured (ICGP, 2011, Joyce & Casey, 2004). Boudioni et al. (2007) found that professionals need protected time to facilitate their participation in team activities. Organisations need to recognise that bringing these professions together is time consuming work (Mur-Veeman et al., 2001).

Trust and respect between team members is seen as an important factor for teamwork (Bélanger & Rodríguez, 2008; Clements et al., 2007; San-Martín-Rodríguez et al., 2005) and is also related to the concept of time in that to build positive interprofessional working relationships within teams takes more time than activities carried out within disciplines (Weaver, 2008) where relationships may already be well established. Trust is also considered essential to moving practice forward. Creating the conditions where professionals are confident enough to face the unfamiliar and listen openly to others is necessary (Davies, 2000). This is also referred to as participatory safety, where professionals feel assured information can be shared confidentially (Williams & Laungani, 1999; Poulton & West, 1993).

Suter et al. (2009) highlight mutual trust as one of the factors involved in effective team building. A literature review by San Martín-Rodríguez et al. (2005) reviewed the determinants of interprofessional working and suggest that studies clearly demonstrate that professionals consider trust indispensable if they are to establish collaborative relationships. Mur-Veeman et al. (2001) gives a detailed account of the role trust/distrust can play in the implementation of shared care programmes in The Netherlands. Drinka and Clarke (2000) refer to trust as a power currency and state it is an attribute which is valued by and motivates people, suggesting that health professionals have a strong affinity with power currencies (e.g. trust, respect, morality, knowledge, helpfulness and integrity). Furthermore trust and respect between management and practitioners is needed where there is uncertainty related to the changes being introduced and where practitioners may feel threatened by such processes (Jansen, 2008). Williams and Laungani (1999) suggest where such trust is absent, the use of teams is imprudent.

### 2.8.2.2 Task & Setting

There are various determinants associated with teamwork (Maslin-Prothero & Bennion, 2010; Choi & Pak, 2007). The task (patient need) involved also influences
the level of teamwork engaged in by the professionals (Lemieux-Charles & McGuire, 2006; D’Amour & Oandasan, 2005; Sicotte et al., 2002). Activity Theory (Engeström 2008) is used to explore interprofessional working in contemporary healthcare settings which are considered to be unstable, tasks more complex and professionals need to be more flexible in adapting to such demanding team environments (Bleakley, 2013). Reeves et al. (2010) outline this as a key issue for consideration contributing their teamwork typology where professionals engage in the level of interprofessional work that is contingent on and reflective of local or patient needs. They refer to task-type, in terms of levels of predictability, urgency and complexity and that interprofessional working should reflect the task or need. They link task-type to settings, using examples of trauma teams who deal with tasks that are frequently unpredictable, are urgent in nature and complex verses the primary healthcare setting where tasks though equally important are generally more predictable, less urgent or complex. They conclude that teams in this situation are organised in a less structured fashion. In a study by Al Salah et al. (2014), nurses perceived this less-structured working environment to contribute to a vagueness relating to role clarity. Øvretveit (1997) suggests that primary healthcare teams are network type teams, elucidating that many participants in this type of setting are managed by profession and line managers in different departments or organisations. This is of relevance in this study as there is a need to understand the levels of teamwork achieved taking into account these issues as they influence the type of interprofessional working relationships that have developed and the type of teamwork appropriate to the specific settings. It should also aid moderating expectations with what is appropriate and currently practicable. Finally task interdependence refers to team members’ interactions and the extent to which they depend on each other to achieve their objectives. Ortega et al. (2012), states that the perceived level of interdependence raises team members’ awareness of the need for close cooperation in performing group tasks and to achieve common goals.

### 2.8.3 Organisational

Organisational factors affect the organisational environment within which the interprofessional team operates (Reeves et al., 2010).
2.8.3.1 Organisational Structures & Support
San Martín-Rodriguez et al. (2005) outline that a constructive organisational setting is seen as a critical component for successful interprofessional teams. Cashman et al. (2004) notes that while health care organisations are urging the workforce to practice as part of interprofessional teams the institutions must analyse their organisational structures and facilities to assure that they are ready and capable of supporting team initiative. Where studies examined primary healthcare team function relative to other teams within and outside of the health service, the primary healthcare teams scored significantly lower on team function variables (West & Poulton, 1997). This may be influenced by differing contractual arrangements and separate lines of control which appear to dominate primary healthcare services (ICGP, 2011; Burke & O’ Neill, 2010; Laungani & Williams, 1999; Poulton & West 1999; West & Poulton, 1997).

The type of professionals involved (health professionals) and the health complexities which are inherent in primary healthcare make the measurement of team function more complex (Johnson et al., 2003; Starfield, 1998). The literature highlights the dichotomous relationship which exists between professional and organisational commitment and the high level of autonomy enjoyed by health professionals verses other professionals within organisations (Maslin-Prothero & Bennion, 2010; Murray et al. 2008; Clements et al, 2007; Freund & Drach-Zahavy, 2007; Thylefors et al. 2005; McCallin, 2001; Mur-Veeman et al. 2001; Elston & Holloway, 2001; Poulton & West 1999; Schofield & Amodeo, 1999; Lewis, 1999). This may have implications for managers trying to promote teamwork with autonomous practitioners assigned to primary healthcare teams (Hill, 2003; Øvretveit, 1997).

2.8.3.2 Organisational Context
Teamwork cannot be considered in isolation, all teams function within an internal and external context (San-Martín-Rodriguez et al., 2005; Greenhalgh et al. 2004 (a); Greenhalgh et al. 2004 (b)). The importance of enabling organisational structures and supports feature frequently in the research recommendations as a pre-requisite to facilitating teamwork within the health service. Denison et al. (1996) refer to the organisational context as the overarching structures and systems
external to a team that facilitate or inhibit its work. Furthermore they suggest that many have addressed the topic of team-based organisational design but relatively few the organisational contexts of teams. Although teamwork is not a new concept it could be suggested that the introduction of IPTW into the primary healthcare health sector in Ireland is a new and innovative departure from the traditional hierarchical working methods of the past. Greenhalgh et al. (2004 (a) in their systematic literature review of the spread and sustainability of innovation in health services note that it is the interaction among the innovation (IPTW), the intended adopters (primary healthcare professionals) and a particular context (organisational structure and management) that determines the adoption rate. Their conceptual model is presented to be a memory aide for considering the different complex situation and their many interactions and not as a prescriptive formula. This is helpful as it does not support the idea of a single adoption decision, but rather a more prolonged and negotiated process between individuals and groups (Fitzgerald et al. 2002).

The relationships between interprofessional team members working as part of a model for primary healthcare provision across healthcare disciplines and the establishment of teamworking as an innovative method for service provision is of importance. How teamwork is perceived by different primary healthcare team members and the extent of support at the organisational level is critical as this may influence the level of teamwork achievable. It will have implications for the future of IPTW within the primary healthcare setting. Exploring the discourse in relation to ‘teamwork’ and ‘primary health care’ and the merger of the two concepts provides an insight of the potential complexities of bringing various health professionals together to work in interprofessional primary healthcare teams. Health promotion recognises the importance of delivering healthcare in the communities in which people live and the need for the integration of services to address the biopsychosocial health needs of populations. It also recognises the workplace setting as one in which to promote health and create supportive working environments for the personnel therein. This requires not only a reorientation of the health services away from the acute hospital-based system but must be reflected in how health professionals involved interact with each other, and are supported to do so within the setting.
It is suggested that team effectiveness should be seen as having three components (West & Markiewicz, 2004; West & Poulton, 1997 (b)):

1. Task Effectiveness: the extent to which the team is successful in achieving its task-related objectives.
2. Mental Health: the well-being, growth and development of team members.
3. Team Viability: the probability that members of a team will continue to work together and function effectively as a team.

2.8.3.3 Financial Structures & Teamwork

‘Cost Shifting’ is referred to in Johnson et al. (2003). They conducted case studies to consider the issues which influence interprofessional collaboration in healthcare. They state that the greatest impediment to collaborative working across localities is a concern over ‘whose budget would pay for what’. The need for population health data was highlighted to be able to project future costs for different models and mixes of health and social services. In Ireland, currently healthcare budgets are not integrated. The Expert Group on Resource Allocation and Financing in the Health Sector (DoHC, 2010) suggest that while they are not convinced it is appropriate to see PCCC as a single entity, there needs to be a formal decision making process which covers all three sectors (hospital, primary care and community and continuing care) so that explicit account can be taken of the fact that higher expenditure on a programme in one sector means either less for another programme in that sector, or less for a programme in one of the two other sectors. Pooled budgets were identified as a driver of integrated working by Maslin-Prothero & Bennion (2010). The difficulties in achieving such funding is acknowledged (Jansen, 2008; Clemens et al., 2007; Tussing & Wren, 2006). Tussing and Wren (2006) state that in Ireland GPs are essentially self-employed operators of small local businesses, however there is a need to integrate with the public sector. In terms of funding there should be a public contribution because primary healthcare teams are partly public and serve the public interest. However there should also be a private contribution because a large fraction of the gains will be privately appropriated as net revenues for GPs.
2.8.3.4 Co-location

Co-location of primary healthcare teams is considered to be of importance to team function and facilitation of collaborative practice (Kaehne & Catherall, 2012). Xyrichis & Lowton (2008) suggest that team members having separate bases or buildings can result in them being less integrated with the team, which may limit function. Harris et al. (2010) suggest that communication and teamwork outside of the general practice were a lower priority for staff than establishing team systems within the practice. Therefore co-location of all staff may be of significant help in the team building process. Sargeant et al. (2008) refer to the importance attached by professionals to the ‘corridor consultations’ which were considered central to teamwork, unachievable if team members are dispersed across multiple sites. West and Poulton (1997) suggest that where teams share a premises they have an organisational identity as a work team and this is supported by San-Martín-Rodriguez et al., (2005) who refer to the potential of shared space reducing professional territoriality. Other research links a shared geographical location with facilitating an ease and timeliness in interprofessional and interagency communications (Cook et al., 2001; Molyneux 2001), with Oandasan et al. (2009) suggesting it may alleviate a sense of exclusion from the main team.

However Maslin-Prothero & Bennion (2010) state that while many studies report co-location as a driver of interprofessional working others report this not to be the case. Davey et al. (2005) found that co-location does not lead to substantially closer interprofessional working in terms of greater contact between professions. It is also suggested that team meetings provide the space for professionals to gain understanding of other professionals roles and to plan care for complex needs of patients in a holistic manner. However facilitation and support for meetings is needed; scheduling concern over meeting times, length of meeting, and concern over how practitioners can be facilitated to attend these meetings is evident (ICGP, 2011; Hansson et al., 2008). Where professionals are collocated many of these concerns may be alleviated. The Primary Care Strategy (DoHC, 2001 (b)) acknowledged that ideally team members should be collocated and the provision of new physical infrastructure was part of the action plan for implementation.
2.8.3.5 Education & Training

The importance of interprofessional education (IPE) and training is clearly articulated in the literature (Hood et al., 2014; Weaver et al., 2014; Harris et al., 2010; Zwarenstein et al., 2005; D’Amour & Oandasan 2005). It is defined as where two or more health professionals engage in interactive learning to improve collaboration and provide more effective patient care (Thannhauser et al., 2010; Hosburgh et al., 2001). Teamwork requires new competencies (Greiner & Knobel, 2003, Boaden & Leaviss, 2000). Drinka and Clarke (2000) state that frequently healthcare professionals graduate assuming they should be able to become part of an interprofessional team and have all the skills and knowledge they need to perform well in this role, while organisations contribute to this problem by creating teams, assigning members to them without thinking of the significant challenges of learning to collaborate. This is especially relevant within a context where individual professionals are socialised into very narrow disciplinary roles and know relatively little about what service other health professions can provide. It is suggested that a lack of team training undermines team success (Taplin et al., 2013; Soklaridis et al., 2007), yet is rarely a teaching focus (Belánger & Rodríguez, 2008; Moaveni et al., 2008; Leipzig et al., 2002). However, progressing IPE and training may be complicated by several factors.

Early professionalisation exerts some influence with medical students placing less value on IPE than other healthcare professions (Curran et al., 2010; Yarsborough et al., 2002) and where IPE is provided the majority is to the allied health professions (Hall & Weaver, 2001). Other challenges such as logistical issues, and financial implications for funding such programme are highlighted (Bridges et al., 2011; Horsburgh et al., 2001; Cloonan et al, 1999) Furthermore in practice professionals perceived inability to participate in such training related to heavy workloads and therefore prioritising patient care over such training opportunities (Way et al., 2007). A follow up study of a mandatory interprofessional course undertaken by medical, nursing, physiotherapy and occupational therapy undergraduate students found that such training creates lasting impressions that may promote teamwork in future occupational life (Hylin et al., 2007). Nationally the need for a greater focus on the primary healthcare setting and integrated teamwork in terms of education and training has been raised as a concern (Kelly
et al., 2013; Finucane & Kellett, 2007; O’Neill & Cowman, 2008). An evaluation of an IPE project in Ireland concluded that team members reported heightened self-esteem, enhanced respect for other healthcare professions and that each session resulted in particular benefits for specific patients (Foley, 2012). However it is suggested that there is currently insufficient evidence to inform team based learning strategies (Curran et al., 2010; McPherson et al., 2001; Hall & Weaver, 2001) with Reeves et al., (2013, 2008) stating that there is a need for more research to allow rigorous conclusions to be reached to support its effectiveness.

Language is a critical component of effective communication and for team development (Weaver, 2008; Mur-Veeman et al., 2001, Hojat et al., 1999). This may be reflective of the level and type of training and disciplinary language/jargon afforded to them at undergraduate level. The National Primary Care Steering Group Progress Report (DoHC, 2004) refers to the ‘traditional medical curriculum’ and its reliance on didactic teaching methods which are excessively narrow and reductionist and concludes that the cultures and values transmitted by the current model of undergraduate teaching are inherently conservative. The HSE (HSE, 2009) refer to the current educational arrangements as having a paucity of interprofessional education with little systematic collaboration across disciplines. What is clear from these and other studies is that profound professional culture differences do exist (Richardson & Asthana, 2006). Within organisations a team model and language that all professions can relate to is needed. This could be developed as part of IPE and training programmes.

### 2.8.3.6 Communication Infrastructure

Communication is a human endeavour, a skill which may be impeded by uniprofessional training with research outlining that communication can be enhanced by use of universal documentation and sharing case notes across the professions as discussed previously. Another aspect to communication relates to information technology (IT), the electronic bridge (Reeves & Freeth, 2003) and flow (Grumbach & Bodenheimer, 2004) of information. Drinka and Clarke (2000) state that where teams are ‘virtual’, in that they are not working from the same location, without allocation of appropriate computer networks and hardware teams are set to fail. Choi and Pak (2007) consider IT as a promoter of teamwork stating that the internet is a logical platform to support IPTW, which is commensurate with
other research (Cameron et al., 2013, Harris et al., 2010; ICGP, 2011; Weaver, 2008). Training and support in this area were found to be key aspects of enabling primary healthcare teams to improve chronic disease care (Paquette-Warren et al., 2014).

Much of the research relating to IT use has been conducted in the general practice area (Schoen et al., 2006; Davis et al., 2005; Mitchell & Sullivan, 2001). Other research raises concerns that IT provision can be problematic (Marshall & Olphert, 2009; Scott et al., 2005; Hartwood et al., 2003). However, Reeves et al. (2010) states that collectively the literature concludes that the use of IT can help support communication processes between team members. The Primary Care Strategy (DoHC, 2001(b)) acknowledges the need for appropriate electronic communications and electronic record systems being central to the operation of both the primary healthcare team and the wider network. It outlined the need for significant investment in IT infrastructure due to what it outlined as the current inadequacy of communications between professionals and sectors. Also the development of an electronic health record was proposed, it would include a unique client number with patient information remaining confidential and link with secondary care electronic records. It stated that appropriate hardware, software, education, training and technical support would be made available.

2.8.3.7 Professional Representation

The strength of professional associations historically created a context where practitioners were accountable to their professional associations and were independent of non-professionals thus ensuring their autonomy (Freidson, 1984). Hill (2003) suggests that this may have implications when trying to manage autonomous practitioners within organisations and promote changes to practice. Medicine was the first healthcare occupation to professionalise, developing an authoritative and expertise position which is associated with both distinguished social status and economic reward (Freidson, 1970). It has successfully maintained this dominant position over other health and social care professions (Reeves et al., 2010). Contemporary professional associations provide professional boundaries or scopes of practice which determine the range of professional practice, however they also play a significant role in protecting and advancing profession-specific agendas (Reeves et al., 2010; San-Martín-Rodríguez et al., 2005). Yet examples of
professional association support for IPTW is evident in the literature nationally and internationally (An Bord Altranais agus Cnamhseachais, 2013; College of Nurses Ontario, 2011; Irish Medical Council, 2007; General Medical Council, 2001). This dual role highlights another aspect of the complexity and conflicting elements relating to the introduction of teamworking into a healthcare context.

2.8.3.8 Fear of Litigation
Clements et al. (2007) outline that self-regulation and current malpractice and liability laws places responsibility onto individuals and discourages the establishment of teams and that much work needs to be done to clarify the accountability for non-medical team members in performing shared tasks. Reeves et al. (2010) suggest this fear of litigation has grown particularly over the last ten years and is particularly evident in the United States. They cite Davies et al. (2003) who discuss the benefits of an administrative system in New Zealand which operates a compensation scheme without a need to prove fault. They found that significantly higher levels of patient injuries are recorded in patient records and this openness is thought to be a consequence of the no fault scheme. Clear governance structures could also aid create more openness sharing care. As previously outlined the governance structures for primary healthcare teams and reporting relationships in Ireland remain uncertain (DoHC, 2012).

2.8.4 Contextual
These factors relate to the broader social, political and economic conditions within which teams operate (Reeves et al., 2010).

2.8.4.1 Gender
Bell et al. (2014) suggest that maximising the benefits of interprofessional working is not only hindered by what they refer to as a ‘rigid occupational status hierarchy but broader societal-level differences between men and women. Research by Borrill et al. (2001) which looked at four hundred healthcare teams, one hundred of which were primary healthcare teams, considered gender to be of influence. They outlined that while women dominate in numbers, men occupy higher status positions in healthcare with a greater number of male GPs in the primary healthcare team cohort. They suggest that gender influences communication patterns with different expectations for men and women, and that sex-role stereo typing may
exert a negative influence affecting the perception of women in teams and thus women’s readiness to communicate. Historically medicine made up largely of men assumed the lead role, with women adopting subordinate supporting roles in nursing. As new roles emerged in healthcare (e.g. physiotherapy, occupational therapy, speech & language therapy) these professions are also composed largely of women and this had resulted in similar patriarchal relations with medicine (Reeves et al., 2010). Atwal and Caldwell (2005) found that within interprofessional teams the non-medical professionals are reluctant to voice their opinions. Cook and Hutchinson (2001) found that male doctors see themselves as ‘natural leaders’ more frequently than female doctors, with female GPs reporting more positively in relation to non-hierarchical team structures. Findings in Falk et al. (2015) report that healthcare students ‘do gender’ (pg. 616) with male students significantly less positive regarding interprofessional training. Research by Wilhelmsson et al. (2011) who found in relation to both medical and nursing students, overall female students were more positive about teamwork. Other research highlights female doctors’ preference for partnership and group practice arrangements (Mayorova et al., 2005; Boerma et al., 2000). Kilminister et al. (2007) refer to research that has identified gender differences, yet they also highlight research that found that gender differences are minimal and provide little explanatory value. While research by Hylin et al. (2007) conducted across healthcare professions found no differences when data was analysed by gender and profession. However as the numbers of female medical students rise it is suggested patriarchal relationship between medical and other health professionals may change (Reeves et al., 2010; Kilminister et al., 2007). In Ireland currently 50% of GP’s are female (ICGP, 2013) which may be of significance in terms of teamwork participation.

2.8.4.2 Political Will

Political support for teamwork models in healthcare is evident internationally in terms of strategies and statements (DoHA, 2010; MoH, 2001; CIHI, 2001; DoHC, 2001). It is also evident in supportive documentation published by professional bodies (An Bord Altranais agus Cnamhseachais, 2013; College of Nurses Ontario, 2011; Irish Medical Council, 2007; General Medical Council, 2001). However there appears to be less determination to translate strategies into practice or develop
operating policies (Øvretveit 1997). The literature also depicts a lack of commitment in terms of sustained funding to provide appropriate team structures and support team processes, the absence of mechanisms that can meaningfully address the complex challenges relating to professional differences and the need for unambiguous governance frameworks to provide clarity in terms of reporting relationships within shared care models considered essential to facilitate interprofessional work (C&AG, 2010; Jansen, 2008; Clements et al., 2007; Tussing & Wren, 2006).

2.8.4.3 Resource Provision

Hackman (1998) states that teams must be adequately resourced and outlines the basic resources teams cannot function without such as equipment, tools, space, money and staff. Drinka and Clarke (2000) suggest that organisations that do not want teams but feel compelled to initiate them will frequently not assign resources to support them. However it may also be the case within the Irish context that the organisation (HSE) never had the necessary funding provided by Government to implement the Primary Care Strategy as envisaged. The Primary Care Strategy (DoHC, 2001 (b)) outlined that implementation of the strategy would require approximately €615 million, of which €70 million has being provided thus far (HSE, 2012 (c)). While healthcare funding grew between the years 2000 to 2009, severe budgetary cuts were imposed in 2010 and 2011 across the Irish health system (OECD, 2014). However Tussing and Wren (2006) state that while primary healthcare is the foundation and centre of the Irish healthcare system it had being neglected and forgotten when the State considers reforms and resources for the system. Therefore the lack of resources predates the recent economic crisis and points to a more systematic neglect of primary healthcare in Ireland. Tussing and Wren are unequivocal stating that primary healthcare in Ireland needs money and a credible plan. They suggest that while a free GP service should be a high priority of the Irish healthcare system, immediate Government commitment should be long term adequate resourcing focusing on achieving interprofessional public-private primary healthcare teams in technologically modern primary healthcare centres, built with State support.
2.9 Summary

The literature can be summarised at theoretical, conceptual, empirical and policy levels.

Theoretical

Theory provides a lens which aids and fosters greater understanding in relation to the determinants of interprofessional teamwork in different settings and contexts. Many different theorists’ views are used to explore teamwork within the literature. Organisational Theory focuses particularly on work groups and self-managed teams and has been used to identify salient factors associated with teamwork within many workplace contexts including healthcare (Sicotte et al., 2002, D’Amour et al., 2005; Hackman, 1998). Contingency Theory is also used to consider if the nature of the work impacts on team effectiveness (Gladstein, 1984). Reeves et al. (2010) elucidate further outlining that perceived task predictability, sense of urgency and level of complexity are factors related to interprofessional working in healthcare. Social Science Theories are examined by Reeves et al. (2010) and used to underpin their sociological approach to exploring teamwork across the four domains (relational, processual, organisational, contextual). Two theories are of particular interest in this study. Firstly, Social Identity Theory (Tajfel and Turner, 1986) is significant in terms of its consideration of professional identity and belonging to a particular group (in group) which may lead to discrimination towards other groups (out groups). Secondly Realist Conflict Theory (Brown et al., 1986), which assumes that groups holding divergent objectives will have conflicting intergroup relations and that the conflict is a result of competition for limited and valued resources. However, where groups share goals and objectives levels of conflict are reduced. Overall such theories explore the influence of possible professional tensions and boundaries, how members negotiate and interact across settings, the relevance of team task and what role power exerts at both an individual and organisational level. These factors may ‘conspire to overwhelm the primary task of such teams’ (Reeves et al. 2010 (pg. 88)). Possible limitations of such theoretical contributions may include having a too narrow singular-type focus at a micro level (the individual) or macro levels factors (wider social and contextual factors). Yet together they do offer a comprehensive lens with which to consider
interprofessional teamwork (Reeves et al., 2010). Path Dependency Theory (Liebowitz & Margolis, 1995) suggests that past decision making and historical decision-making conditions exert an influence over current decision-making parameters. Crampton et al. (2005) use this theory to underpin their exploration of the historic evolution of the primary healthcare setting in New Zealand, and illuminate the challenges that have been created for primary healthcare teams. They posit that in order to understand contemporary healthcare, its historical development must be understood. These theoretical positions are considered to be of significance to create a better understanding of the model of primary healthcare and levels of interprofessional working achieved in Ireland today.

Conceptual

Concepts or models are shaped by theories (Seedhouse, 1997). Interprofessional working models are useful in order to explore how factors may facilitate or inhibit teamwork. They are underpinned by theory and help to synthesise the multiple dimensions of healthcare teams. Various models of teamwork were identified. IPO (input, process, output) models are widely used (West & Lyubovnikova, 2013) to reflect team characteristics. Some IPO models added another construct to explore other potential sources of influence such as Sicotte et al. (2002) by introducing ‘task’ as a moderator in their model. While Corbin and Mittlemark (2008) introduced the construct ‘antagony’ in their model, which relates to disturbing or unwanted outcomes where teamwork in introduced. Reeves et al. (2010) conceptualises teamwork characteristics within four domains (relational, processual, organisational, contextual) developing a more sociological-related construct of teamworking. Other models delineate team characteristics by creating team types (e.g. pseudo, real, interdisciplinary, transdisciplinary teams). However most significantly, Reeves et al. (2010) posit that such models are linear, that there appears to be an assumption shared between these models that teams should endeavour to move from ‘lower end forms’ of teamwork to ‘higher end’ forms (pg. 56). Their typology (please refer to Figure 2-2) suggests that all interprofessional working is contingent on the healthcare task and setting and therefore the focus should be on the appropriate level of professional interactions in a given situation rather than striving to achieve an ‘ideal’ teamwork position. However it is acknowledged that these conceptual models are largely based on personal
conceptualisations (Reeves et al, 2010) not empirical evidence and do not provide clear direction on how to create or maintain high-functioning teams (Lemieux-Charles & McGuire, 2006).

Within the primary healthcare area two models of care have evolved, comprehensive and selective primary care. They have been shaped by how health and primary healthcare are interpreted historically both internationally and nationally (Cueto, 2004; Barrington 2000, Starfield 1998). In this study the Framework for Understanding IPTW (Reeves et al., 2010) is adapted to include this contextual construct which considers the potential influence of the historical and contemporary factors on the development of interprofessional teamwork for healthcare professionals assigned to primary healthcare teams within the primary healthcare setting in Ireland (please refer to Fig. 2-3).

Empirical

The empirical literature in relation to interprofessional teamwork was explored. While there is a body of literature that reports on many key dimensions for teamwork, there is a dearth of high quality, empirical evidence to confirm how these different factors may influence teamwork (Green et al., 2015; Reeves et al., 2010; Lemieux-Charles & McGuire, 2006; Schofield & Amodeo, 1999). However in the absence of such evidence the findings from a wide range of studies conducted and published in academic peer reviewed journals were reviewed and considered to relation to teamwork dimensions. The four domains headings outlined in the Framework for Understanding Teamwork are used to synopsise the findings.

Relational issues affect the relationships between the professionals involved. Professional socialisation and the resulting perceived disparities in hierarchical status and professional power across the professions are perceived to hinder teamwork (Lancaster et al., 2015; Hannson et al., 2008; Murray et al., 2008). Healthcare team members’ voice concern over a lack of role clarity within interprofessional teams (Suter et al., 2009; Long et al., 2003) and was considered to be a barrier to teamwork generally and more specifically in primary healthcare teams (Brault et al., 2014; Al Sayah, 2014; Burke & O’ Neill, 2010). Team processes were of influence, where there were perceived benefits of being part of a team enhanced teamwork participation and professional interactions (Boudioni et
al., 2007; Lowe & O’Hara, 2000). GP’s who participated in a Team-link intervention reported that where there were no perceived benefits there was little incentive to change from working independently (Harris et al., 2010). Where there is a clear team vision with team goals and objectives team members perceived they work more effectively as a team (Joyce & Casey, 2004). Team meetings were found to be of benefit (Nisbet et al., 2015; Borrill et al., 2001) however other studies suggest such meetings were about creating team visibility rather than improving team performance (Lewin & Reeves, 2011; Hannson et al., 2008). Enhanced communication structures and the provision of communication skills training (Paquette-Warren et al., 2014; Harris et al., 2010), clear leadership (Burke & O’Neill, 2010) team stability (Delva et al., 2008) and trust (Pullon et al. 2009) were all perceived to facilitate teamwork. In terms of team processes implementing teamwork is considered to take time (Rodríguez & Pozzebon, 2010), professionals reported that where teams had protected team-time it helped to improve communication (Oandasan et al., 2009). Team task and setting influenced the intensity of interprofessional working (Casimiro et al., 2015). Organisational support programmes for interprofessional working were perceived to facilitate team building (Paquette-Warren et al., 2014; Sicotte et al., 2002; Lowe & O’Hara, 2000), as was co-location (Burke & O’Neill, 2010; O’Neill & Cowman, 2008; Cook et al., 2001). Interprofessional education and training were found to help professional understand and participate in teamwork (Heath et al., 2015; Paquette-Warren et al., 2014; Foley et al., 2012), however medical students and practitioners report less positively on such training experiences (Curran et al., 2010; Yarsborough et al., 2002). In relation to contextual factors when gender was explored it yielded mixed results with some studies reporting that female healthcare students and professionals are more positive about interprofessional education and training and are more willing to engage with interprofessional working (Falk et al., 2015; Wilhelmsson et al. (2011), however Hylin et al. (2007) did not find any significant gender difference within data analysed by both gender and health profession in this regard. A lack of funding and resources create barriers for teamwork (C & AG, 2010), as did the organisational boundaries between the primary healthcare teams and general practice structures (Boudioni et al., 2007).
Policy

Healthcare policy has increasing focused on the potential for interprofessional teamwork to create greater efficiencies and more effective patient-centred care. This is underpinned by reported increased demands on health services caused by a growing prevalence of chronic disease-related and ageing population needs (Barrow et al., 2015; Paquette-Warren et al., 2014). Interprofessional teamworking is seen as an effective work model to deal the associated increase in complex healthcare needs, with the primary healthcare setting prioritised in this regard (Barrow et al., 2015; Al Sayah, 2014). It is possible to see international and national Government healthcare policy clearly reflecting this position and outlining the need for interprofessional teamwork to deal effectively with the growth in complex patient care provision (DoHA, 2010; MoH, 2001; DoHC, 2001). It is also reflected across the professional bodies and professional practice competencies that are outlined therein (Suter et al., 2009). There is evidence that suggests that while policy may be supportive of teamwork, it appears to poorly operationalised within practice settings (Øvretveit, 1997). Legal responsibilities and reporting mechanisms within an interprofessional team structure are of concern (Rämgård et al., 2015, Schadewaldt et al., 2013; Clements et al., 2007; Way et al., 2000) and reflect a need for policy development in this area.

The literature review recounts the issues both historic and contemporary relating to health, primary healthcare, healthcare settings and teamwork internationally and more specifically within the Irish context in consideration of what impact this may exert in terms of interprofessional working. While other theoretical frameworks were identified, the Framework for Understanding Interprofessional Teamwork (Reeves et al., 2010) was used in the development of a theoretical lens for this study, outlining the myriad determinants for teamwork which highlights the challenges and associated complexities which must be considered generally and more specifically in the healthcare area relating to teamwork. Professional culture, training and traditions, level of professional autonomy, values and beliefs exert significant influence, while appropriate organisational structures, support mechanisms and resources are required in order to make innovative practice changes a viable option. Team related issues such as size, meetings, stability, participation, clarity, leadership, incentives, and contractual issues are perceived as
factors which also can influence teamwork function. At a macro level issues relating to how we define health and primary healthcare, gender, the political and economic climate can all impact on teamwork contexts, while governance and medico-legal concerns regarding shared care models need to be addressed urgently.

Forty years ago Lamberts and Riphagen (1975) titled their paper “Working together in a team for primary health care- a guide to dangerous country”, which outlined the challenges they encountered as a team. Contemporary research presents similar issues relating to interprofessional working across various healthcare settings. At theoretical, conceptual, empirical, policy and practice levels interprofessional teamwork continues to challenge organisations and professionals in terms of embedding interprofessional working in healthcare practice.
Chapter Three: Methodology

3.1 Introduction
This chapter outlines the overview of the study design, methodological approach and rationale for such an approach. The specific methodological strategies employed within both phases are then considered in detail.

Two research questions underpinned this project:

- What are the current levels of IPTW function within primary healthcare teams in Ireland?
- What are the facilitators and barriers for IPTW for primary healthcare professionals in Ireland?

The aim of this study was to explore the perceptions and experiences of IPTW of primary healthcare professionals working in primary healthcare teams in Ireland. Its objectives were to:

- To explore their understanding of teamwork.
- To explore their perceptions of the current levels of teamwork and teamworking generally.
- To explore different professional perspectives of IPTW.
- To explore the facilitators and barriers to IPTW.
- To make recommendations for future progress.

In order to answer the research questions and meet the aim and objectives outlined, a study design must be developed. Creswell (2009) suggests that the research design is reflective of the philosophical worldview, the strategy of inquiry which is related to that worldview and the specific methods and procedures that translates the design into practice.

3.2 Overview of the Study Design
The sequential explanatory strategy is a popular strategy for mixed methods design. It is characterised by the collection and analysis of quantitative data in the first phase followed by the collection and analysis of data in the second phase that builds on the results of the initial data. The two forms of data are separate but connected
(Creswell, 2009). The research design is a mixed methods study from the perspectives of healthcare professionals who are working in the primary healthcare setting and assigned to primary healthcare teams, using research participants as expert witnesses to teamworking within this setting. The study design is a partially mixed methods sequential study (Creswell, 2010; Leech & Onwuegbuzie, 2009). Leech & Onwuegbuzie’s (2009) typology of mixed methods provides a framework for mixed methods designs outlining the mixing dimensions, time dimensions and emphasis dimensions (please see appendix 2). The study is divided into two distinct yet connected phases:

Phase One – a cross sectional survey of primary healthcare team members to investigate the inputs, process and outcomes relating to levels of teamworking currently experienced in practice and to examine if there are professional differences present in terms of collaborative behaviour.

Phase Two- semi structured in-depth interviews with healthcare professionals to explore their knowledge, attitudes and experience of interprofessional teamwork and teamworking generally, their different professional perspectives and the perceived facilitators and barriers for teamworking. See Figure 3-1 overleaf for outline of study design:
3.3 Methodological Approach

3.3.1 Quantitative Methods

Quantitative methods are useful for answering research questions on frequency and providing data which is numerical in nature. Criticism of this method relates to the implicit expectation that survey respondents comprehend the questions posed in the same way as the researchers, that they hold attitudes on the issues raised and are willing to share. Furthermore quantitative findings do not provide details of the potential underlying complexity of issues or of ‘unwanted noise’ such as notes attached to surveys returned (Creswell & Clark, 2007; Feilzer, 2010). A cross-sectional survey documented the teamworking processes and possible facilitators and barriers that may be present within the workplace.

3.3.2 Qualitative Methods

Qualitative methods produce rich data from participants describing their experiences. It allows exploration of issues which may be of influence. Such
methods have been criticised for their subjectivity and difficulties in generalising findings as they can be context specific and be based on data generated from a small number of participants (Creswell & Clark, 2007). Semi-structured interviews were used to provide a detailed account of the type of teamworking experienced by the different professions.

3.3.3 Mixed Methods Research

Mixed methods research represents research that involves collecting, analysing and interpreting quantitative and qualitative data in a single study or in a series of studies that investigate the same underlying phenomenon. Since the 1960’s mixed methods research has become more popular within many disciplines e.g. education, psychology, nursing, health sciences, organisational and management, information science research and programme evaluation (Leech & Onwuegbuzie, 2009), with Creswell et al. (2004) noting the increasing use of mixed methods research specifically in the primary healthcare setting.

Mixed methods are not without challenge, such as the need for extensive data collection, the time-intensive nature of analysing both text and numeric data and the requirement for the researcher to be familiar with both quantitative and qualitative forms of data. Furthermore as methodology research has evolved several typologies for classifying and identifying types of mixed methods strategies have been published resulting in a diversity of terminology in design types, consequential to this is a substantial amount of overlap in the typologies that exist (Creswell, 2009). Green (2008) proposes that a given mix of two methods such as a structured survey and in-depth interviews can accomplish several different mixed methods purposes and therefore can be characterised by several different mixed methods design dimensions. When combinations of quantitative and qualitative methods are used a better understanding of the research question is achieved verses either approach used alone (Creswell & Clark, 2007). Therefore, mixed methods research can deliver a more comprehensive analysis of the research subject.

3.3.4 Rationale for Mixed Methods Design

The research questions sought to explore the current levels of IPTW in primary healthcare teams in Ireland in the context of a health strategy which saw the establishment of teams and the introduction of an interprofessional teamworking
approach to service provision (DoHC, 2001 (b)). Measurement of the level of IPTW achieved has so far been assessed through assigned primary healthcare staff reporting the number of teams that are conducting team meetings in the areas that they are responsible for (O’Connor, 2012). Grumbach & Bodenheimer (2004) speculate if it is possible to call a group of people who are thrown together in a surgical suite or primary care office an actual team. They suggest a functioning team is much more than that, listing 5 key characteristics needed for a team to function effectively: clear goals with measurable outcomes, clinical and administrative systems, division of labour, training of all team members and effective communication. Therefore, in order to understand the levels of team function, knowing if meetings are taking place or not was insufficient. This study addresses this knowledge gap.

Denscombe (2008) suggests that the research world is made up of three paradigms: quantitative, qualitative and mixed methods, each of which is grounded in a philosophical belief system i.e. positivism, constructivism and pragmatism respectively. Morgan (Morgan, 2007) discusses the need for a more pragmatic approach for conducting research not only as a basis for supporting work that combines qualitative and quantitative methods but as a way to redirect attention to methodological rather that metaphysical concerns. Morgan’s Pragmatic Alternative is considered appropriate to this study. Abduction will provide the opportunity to find useful points of connection between the data sets while intersubjectivity will support the creation of a collection of rich ‘world views’ of team function and what team members perhaps perceive as influencing their participation within those teams. Creswell & Clark (2007) state that the evidence gathered from one level of an organisation might differ from evidence examined from other levels and in these situations using only one approach would be deficient. This is particularly relevant to this study where the participants come from varying health professional backgrounds and cultures and may have very different views of the meaning of primary healthcare, their role within a primary healthcare team and what they perceive to be significant to team function as part of that interprofessional environment.

There may be factors which influence team function that are not overtly visible to the professionals or supporting organisation. The quantitative aspect of this study
seeks to address this by using a questionnaire developed and validated as part of this study to measure interprofessional teamworking. Yet to understand the levels of functioning achieved, the participants must be heard and the qualitative semi-structured interviews will give voice to the participants and their personal and professional experiences which have informed their views and involvement in the teams. The use of mixed methods enriched this research process and create the optimum opportunity for (i) corroboration (establishing convergence) (ii) elaboration (providing richness and detail) and (iii) initiation (bringing fresh insight, a creative leap seeking thought-provoking as well as confirmatory evidence) (Rossman & Wilson, 1985). Morgan (2007) asserts that conceptually paradigms are not mutually exclusive. Neither one of them is right and the other wrong. Instead he states the question should be which version is most appropriate for any given reason.

This choice of methodology was guided by an acceptance of a post positivist paradigm, multiple constructed realities (Crabtree & Miller, 1999) and the knowledge that mixed methods research in the health service area has the potential to produce rigorous, methodologically reliable studies in the primary healthcare setting (Creswell et al., 2004). Mixed methods offered an opportunity to achieve a greater level of depth and breadth of understanding in a complex research area. Pope & May (1995) suggest that we need to have a range of methods available if we are to appreciate the complexities of modern healthcare.

The use of a mixed methods design in this study allows for the exploration of the levels of teamwork achieved. The survey tool provides a measure of the level of teamwork in practice, the organisational structures and general demographic information. However this would not fully explain the levels of teamworking achieved and it was anticipated that a situation where quantitative results needed further explanation; a more detailed view of select participants would help explain and enhance the quantitative findings (Creswell & Clark, 2007). The Ecological-Transactional Systemic Map of Primary Care (Crabtree & Miller, 1999) illustrates the care providers’ role within primary healthcare and acknowledges the influence of what is referred to as the ‘healer’s voyage’. The qualitative aspect of this study uses in depth interviews to understand participants’ personal experiences and how this may influence practice. It is a sequential mixed methods design using the
quantitative findings to enhance the qualitative study by informing the direction, sensitivity and accuracy of the interview schedule. The qualitative phase builds on the results of the quantitative phase (Creswell, 2009)

3.4 Methodological Considerations in Mixed Methods Research
A number of methodological issues have to be considered when conducting mixed method research. Leech & Onwuegbuzie (2009) provide a typology of mixed methods research which refer to the mixing, time and emphasis dimensions, while Creswell (2009) suggests there are four important aspects to research design to consider which are: timing, weighting, mixing and theorising:

3.4.1 Timing
The data was collected in two phases. The quantitative data was collected first in the form of a postal questionnaire. It was followed by the qualitative data collection in the form of semi-structured interviews. The timing is referred to as a sequential explanatory strategy. It was used to explain and interpret quantitative results by collecting and analysing follow-up qualitative data.

3.4.2 Weighting
Creswell (2009) states that weighting often reflects the researchers’ interests, whether quantitative or qualitative information is emphasised first, the extent of treatment of one type of data or the other in the project or the use of an inductive verses deductive approach. However the pragmatic approach uses an abductive approach which offers the opportunity to move back and forth between induction and deduction as a way of connecting theory and data (Morgan, 2007). So while typically in sequential explanatory designs, priority is given to the quantitative approach with a smaller qualitative component following, it can depend on the study goals, the scope of both quantitative and qualitative questions or the particular design of each phase. Considering these elements, the researcher can give priority to the qualitative phase within this design type (Ivankova et al., 2006; Morgan, 1998). In this study priority was given to the qualitative phase despite the qualitative phase following the quantitative phase. While the study aimed to ascertain the current level of teamworking and identify the level of factors present in the setting associated with team functioning, it sought to do so in context,
reflecting the realities for the professions within practice settings, based on their perceptions and experiences of teamworking in practice.

3.4.3 Mixing

Creswell (2009) describes three levels of data ‘mixing’; connected, integrated and embedded. Connected refers to two data bases kept separate but connected. He uses the example of a study where a quantitative phase will identify participants for the second qualitative phase of the study. Integration refers to actually merging a quantitative with the qualitative data. An embedded design is where the data is not connected or integrated but where the researcher embeds a secondary form of data within a larger study having a different form of data as the primary database. Leech and Onwuegbuzie (2009) elaborate further describing mixing as being partially or fully mixed. Fully mixed methods are described as when mixing occurs at research objective, data analysis and inference stages. Partially mixed methods are where the data sets are analysed separately and mixing takes place at the data interpretation stage. This study is a partially mixed because the data sets are analysed separately and two points of connection are made:

The first connection occurs between phase one and two where the quantitative findings were used to inform the qualitative phase. Two examples are provided below:

- The findings revealed significant differences in the levels of collaboration between HSE and non-HSE team members. This highlights a situation unique to Ireland where not all team members are employed by the National Health Service (HSE). Thus how this working context influences interprofessional working relationships between HSE and non-HSE team members in practice was a key consideration to explore further during interviews across the professions.

- A significant relationship was found between gender and collaborative behaviour. This influenced the recruitment process in phase two and became a key consideration when recruiting interviewees in order to explore the possible impact of gender in interprofessional working environments. While this was not possible to achieve in the NMHP group, significant effort was made to recruit both male and female GPs for interview.
The second connection was made in the general discussion chapter which connected and considered the findings of the two phases providing the optimum environment to establish convergence, elaboration, confirmatory evidence and fresh insight (Rossman and Wilson, 1985) into what are the key issues for health professionals in Irish primary healthcare currently. It also allowed comparison of possible divergent themes in phase one and two to be identified and discussed.

3.4.4 Theorising
In any study the theoretical perspective guides the entire design. It is what Morse and Niehaus (2009) refer to as the ‘theoretical drive’ of a study. This may be in the form of an explicit theory or implicit in the form of a broad theoretical lens. Qualitative researchers use different terms for theories such as patterns, theoretical lens or naturalistic inquiry (Creswell, 2009). This study was designed to explore the participants’ perspectives in relation to their experience of IPTW in the primary healthcare setting and therefore was informed by a broad theoretical lens outlined in the literature reviewed in chapter two.

3.5 Rationale for Research Location
This study was granted permission from the HSE’s National Director of Primary Care on the condition that recruitment of the Primary Care Development Officers (PCDO) who manage the development and direction of the primary healthcare teams within the seventeen ISA’s across Ireland was voluntary. It would not be possible to access participants without their cooperation. All thirty PCDO’s were asked to participate, seven expressed interest however only three were willing to participate.

3.6 Sampling Procedures
Primary healthcare is defined as essential healthcare based on practical, scientifically sound and socially acceptable methods and technology made universally acceptable to individual and their families in the community (WHO, 1978). While there are differing views as to the exact definition of primary healthcare, it is considered to be the client’s first point of entry into the health system (Starfield, 1998; Keleher, 2001). It is practiced by a range of healthcare professionals based in communities and serves local populations as defined by the health services. For the purpose of this study the range of professionals were
defined by the most conventional staffing arrangement within primary healthcare teams in Ireland (General Practitioners (GP), Practice Nurses (PN), Public Health Nurses (PHN), Physiotherapists (PHYSIO), Occupational Therapists (OT) and Speech & Language Therapists (SLT); as outlined by the PCDO’s during the scoping out exercise as part of the development of the study design.

3.6.1 Study Sample- Phase One & Two

The phase one sample included primary healthcare professional team members as defined and working in the primary care setting. All eligible professionals in the three participating ISA’s were included in the recruitment of study one (n=956).

The phase two sample included a smaller sample from within the same geographical areas (n=26), with representation achieved from within all the professions (GP= 8; PN= 4, PHN= 4, PHY= 3, OT= 3, SLT=4).

The three participating ISA’s covered very diverse geographical terrain, providing a very comprehensive mix of city, urban and rural workplace settings.

3.7 Phase One

The following sections deals specifically with phase one methodological considerations. It describes the methodology for the quantitative postal questionnaire survey of primary care health professionals working in primary healthcare team structures in Ireland. The study consisted of a cross-sectional survey of a sample of such professionals across three geographical areas within the Health Service Executive (HSE) who manage the Irish healthcare system. A detailed account of the questionnaire design, survey and response rate strategy, and other methodological issues is provided.

3.7.1 Sampling Procedure

Probability sampling (quantitative sampling) enables generalisations to be made from small to large populations through the selection of a large number of research participants who are representative of the population. However research suggests that there has been a significant downward trend in survey response rates among health professionals over the last half century (Cho et al., 2013), with the development of response rate strategies to support and maximise the response rate in phase one data collection recommended as part of the overall research designs.
A response rate strategy was developed and implemented to support phase one data collection (Burke & Hodgins, 2015). A postal questionnaire was sent to all eligible participants (n=956). There were two rounds of data collection, with all non-responders contacted again in round two. The final response rate achieved was 52% (n=493).

### 3.7.2 Sample Selection.

Three ISA’s provided a sample frame serving a total population of 689,718. These areas were self-selecting as permission to conduct the study was based on the voluntary participation of the PCDO's allowing access to health professionals working in the setting. A survey pack was sent to each potential participant (n=956), including a cover letter explaining the background to the study, a participant information sheet, a survey and stamped addressed return envelope. Consent was assumed if the completed survey was returned. As response rates within the health service domain have been highlighted to be in decline (Glidewell et al., 2012; vanGeest & Johnson, 2011; Cook et al., 2009), a response rate strategy (Burke & Hodgins, 2015) was designed to maximise the response rate, the elements of this strategy are summarised in Figure 3-2 overleaf:
Figure 3-2: PMC, a strategy for maximising response rates

- **P**: Professional Bodies, Pre-notification, Personalisation, Postcard Reminders, Persistence
- **M**: Media Managers
- **C**: Connections, Collections, Cross-checks, Context
All means of cross checking staff listings were used. The HSE had a public website and teams/team members were listed and were cross checked with staff listings provided. This was helpful in refining sample eligibility over the data collection period. Some information was also available in relation to primary healthcare teams on community websites which listed local services, and professional associations also provided information which could be cross-checked with the other sources. Ineligible clinicians were eliminated and others identified and contacted, reducing the initial number of potential eligible participants from 1000 to 956.

The initial survey packs were sent out to all 956 potential participants. Two weeks later this was followed up with a postcard reminder (Phase 2). One month later all non-respondents were again contacted with a full survey pack (Phase 3). All postage occurred mid-week as recommended by Dillman (2000). During data collection, the sample frame altered as checking of existing personnel within the ISAs was a continuous process in an effort to strengthen the sample fidelity (Martins et al., 2012). In one ISA direct contact with practice nurses was refused.

3.7.3 Survey Instrument
The choice of a postal survey was based on two considerations; incomplete access of primary healthcare professionals to the internet, thus excluding an electronic survey option and research comparing paper and electronic surveys consistently achieves higher response rates among the health professions from the use of paper (Cho et al., 2013; Freise et al., 2010; Guise et al., 2010; Kramer et al., 2009; Estabrooks et al., 2008; Lusk et al., 2007).

3.7.4 Data Collection
Data collection was facilitated by a self-administered postal questionnaire (please see appendix 3) designed to measure the current levels of interprofessional teamwork in primary healthcare practice settings and to assess the levels of teamwork processes and organisational supports within teams as experienced by the professionals. The questionnaire development process was influenced by:

- The literature in the area.
- The four domains outlined in the Framework for Understanding Interprofessional Working. (Reeves et al., 2010): relational, processual, organisational and contextual.
• The Irish Primary Healthcare system.
• The scoping out exercise conducted as part of the research design plan which highlighted specific issues of concern (organisational structures and resources, current team processes, structure and attendance team meetings)
• Two scales from a validated tool used to measure the intensity of interprofessional collaboration (Sicotte et al., 2002). These were adapted and incorporated into the survey.
• One new scale item developed as result of the scoping out exercise was included.

All three scale items were entered into Principle Component Analysis with orthogonal rotations (varimax) to verify the validity of the new and adapted scale items. The questionnaire was tested during a pilot study.

3.7.5 Questionnaire Development
The questionnaire used scales extracted from a Canadian survey tool developed to measure interprofessional collaboration in Canadian primary care centres (Sicotte et al. 2002). Initially consideration was given to using this interprofessional collaboration questionnaire however there were issues in terms of the questionnaire design that required consideration and are outlined below:

• To reflect the current study’s target organisational structures and the nature of team working among the professions involved in teamworking, the team processes and the structures characteristic of the Irish primary healthcare setting.
• To reflect the focus of the current study on primary healthcare in general rather than specific community programmes as in the Canadian study. This difference is of importance with respect to its impact on potential response rate. Gore-Felton et al. (2002) suggests that low response rates ‘plague’ research surveying health professionals. With the primary healthcare setting highlighted as of particular concern in this regard (Clarke et al., 2011; Wanless, 2003; Morris et al, 2001). Response rates reported in the literature clearly show, those achieved in the health professions are lower than from the general public (Glidewell et al., 2012; vanGeest & Johnson, 2011; Cook
et al., 2009; vanGeest et al., 2007; Badger & Werrett, 2005). Therefore making the questionnaire relevant to the target audience was critical.

- Length of the questionnaire (original questionnaire comprised 17 pages). In the Canadian study only one manager per health centre was requested to fill out the survey, however in the current study frontline healthcare practitioners were asked to participate directly in the research, and while there is overwhelming agreement among such professionals on the importance of research for practice, treating patients is perceived to take precedence over research activities (Gore-Felton et al., 2002; Metcalfe et al., 2001). Therefore it was considered important that the participants would not perceive the survey to be too lengthy or time consuming.

- Finally, this study was taking place in the midst of an economic crisis, with a severely reduced workforce (a reduction in health service staff of 9,000 was being sought by the Department of Health and Children by 2014). It was considered important therefore not to burden potential participants with a survey instrument which could be perceived as too time consuming within this working context but instead create a survey tool that could be completed in a reasonable time frame and was easy to engage with (Dillman, 2000). This study had a clear response rate strategy as part of the overall research design which was underpinned by Dillmans’ Tailored Design Method (Dillman, 2000) which suggests that shorter, user friendly surveys can be used as part of a strategy to maximise response rates.

### 3.7.6 Scoping Process

A scoping out exercise of this topic area was conducted in October and November 2011. The Director of Primary Care, a GP, PN, PHN, OT, PHYSIO and SLT agreed to discuss the topic area. There appeared to be significant experiences of teamworking in practice, varying between teams from non-existent to regular engagement with much debate about the factors which influence this approach to caring for patients in the community setting. However opinion on the merit of IPTW in primary healthcare was interesting, unequivocal support was expressed for its universal benefits in a theoretical sense however there were quite polarised attitudes to its place in practice.
3.7.7 Contacting Key Informants

Key informants were identified and contacted. Three HSE-based Primary Healthcare Specialists and three PCDO’s offered feedback during the development of the questionnaire. This was very helpful in terms of gaining understanding of the HSE’s PCCC structures, team development issues and their experience of the process and the professions involved. Both the scoping out exercise and the information provided by the key informants was very helpful in developing the questionnaire so that it was relevant to the Irish context and to the potential participants in practice.

3.7.8 Questionnaire Structure

This phase of the study reflects components of the analytical framework in Sicotte et al. (2002) and the Framework for Understanding Interprofessional Teamwork domains offered by Reeves et al. (2010). It is reflective of the universally acknowledged input, process, output model used to conceptualise team effectiveness (Hackman, 1990). Factors not addressed quantitatively were explored qualitatively in phase two (e.g. political will, culture, role clarity, task). Figure 3-3 overleaf provides a visual representation and influenced the questionnaire design and structure:
The questionnaire was laid out in three sections; interprofessional teamwork organisation, interprofessional relationships and demographics. There were a total of 33 questions, some with multiple items within each question. There were some questions that could be omitted depending on the previous question response and this was clearly outlined. The questionnaire is reflective of an input-process-output model (Hackman, 1990) and incorporates subscales from the Interdisciplinary Collaboration Scale (Sicotte et al., 2002) adapted for use in this study. It is also consistent with the conceptual framework domains developed by Reeves et al. (2010) for understanding IPTW (please see Figure 2-1) and the framework as adapted (please see Figure 2-3). Inputs were comprised of questions related to...
work contexts; organisational supports, profession, education and training. Process questions related to the benefits of being part of a team, communications, beliefs related to teamworking and sharing activities (e.g. interprofessional working methods/innovative work practices which have evolved from teamworking, sharing of patient files, team meetings). This input, process, output model reflects the four interprofessional working domains (relational, processual, organisational, contextual) as outlined by Reeves et al., (2010) and considered influential factors in terms of interprofessional working in practice. The questionnaire items which deal with the intensity and levels of information sharing, modes of communication used and type of team meetings are linked to the team typology (please see Figure 2-2) as they indicate how focused or broad the interprofessional approach may be between practitioners, thus reflecting the possible differing forms of interprofessional working as defined in the typology.

Four items unique to this study related to process and were derived from the scoping exercise completed as part of the study. Practitioners and managers spoke of their need to experience benefits of teamworking in order for it to become embedded in practice. They expressed this in the context of an environment where historically and culturally diverse disciplines are being asked to change the way in which they work. A scale capturing the ‘Benefits of being part of a Team’, included four items testing perceived teamwork experiences; levels of organisational and professional support, isolation in the workplace and efficiencies in dealing with patient needs by working within a team. This ‘Benefits of being part of a Team’ scale measures team members’ experience of such benefits, in other words, had teamworking made a positive contribution in practice on a day to day basis. The input/process variables are representative of those factors generally understood to facilitate teamworking.

The output variable (teamwork) was measured by the collaborative behaviour scale (Sicotte et al., 2002). It was adapted and included items representative of the intensity of collaboration (e.g. professional/interprofessional logic, collaborative/conflictive behaviour). This adapted scale was representative of the intensity of collaboration achieved within teams as perceived by team members based on their experiences in the workplace.
Factor Analysis was used to refine and reduce the measurement tool to best represent the interrelationships among the set of items. The aim was to determine the number of factors to extract that best described the underlying relationship among the item and to balance two conflicting needs; to find a simple solution with as few factors as possible and to explain as much of the variance in the data as possible (Pallant, 2010). As suggested by Field (2013) Principle Component Analysis (PCA) can be used in the construction of a questionnaire and this approach was used to identify and verify the validity of the scales, thus identifying clusters of items and reducing them into smaller sets of dimensions or factors (Field, 2013).

3.7.8.1 Section 1: Interprofessional Teamwork Organisation (Q1-25)

This section contains 25 questions. Question 1 established team membership and the following six questions related directly to team structure and the benefits experienced from being part of a team. Question 7 is a sub-scale created for this study and is the result of the scoping out exercise conducted with PCDO’s and frontline practitioners. Collectively they expressed a strong view that there must be tangible benefits for both patient and professional alike, the items represent the benefits they felt are most essential to stimulate and sustain teamworking. It is a five-point Likert scale ranging from ‘totally agree’ to ‘totally disagree’. A sum score was computed by adding the scale items together (α= .918). Questions 8 to 10 dealt with resources (inputs) for teamwork (e.g. instruction, guidelines, training provision). Questions 11-24 dealt with team processes (e.g. meetings, communication, care sharing activities, innovation in work practices resulting from teamworking, belief in teamworking based on experience). The response format of question 11 determined whether participants answered the following seven questions as they addressed team meetings and interactions related to the processes of clinical team meetings, therefore could only be answered by professionals who attended such meetings. The sub-scale used in question 24 was adapted from Sicotte et al. (2002) Interprofessional Practice Questionnaire and addresses ‘Belief in Interprofessional Teamworking’(α=.962) and reflects the broader literature which suggests a tension between professional and interprofessional logics or beliefs related to teamworking and its negative impact as a barrier to teamworking (Sicotte et al., 2002). Question 25 was an open question that asked participants to suggest one thing that would improve teamwork. The questions in this section were
created within the context of the Irish Primary Care Strategy (DoHC, 2001), its aims and objectives in terms of enabling and progressing teamworking within the setting and the broader international literature on the subject and key indicators of teamwork.

3.7.8.2 Section 2: Collaborative Behaviour (Q26)

This section contains a 12 item sub-scale designed to measure collaborative behaviour. Responses were scored on a five-point Likert scale ranging from ‘totally agree’ to ‘totally disagree’. A sum score was computed by adding the scale items together (\( \alpha = .852 \)). Four items (a, h, k, l) required reverse scoring. This sub-scale was adapted from Sicotte et al. (2002) Interprofessional Practice Questionnaire.

3.7.8.3 Section 3: Demographics (Q27-33)

Demographic information was sought in the section, in particular gender, age, profession, education, practice area and overseas practice experience.

3.7.9 Questionnaire Pilot

The survey instrument was piloted with six primary care team health professionals. The survey was sent to each professional asking them to complete and return with comments attached. To provide clarity and resolve concerns raised in feedback from two of the pilot participants, phone conversations provided successful resolutions. Feedback related to structural issues e.g. layout of questions and question clarity e.g. phraseology used. All of the feedback was considered and changes made to address these issues and did not affect the questionnaire content or scale items.

3.7.10 Procedure

A cross-sectional survey of three ISA’s took place (n=956). Data was collected from January to March 2013. The response strategy involved initial postal survey pack sent to all, reminder email (where possible), reminder/thank you postcard sent one week later to all participants, second round of postal survey packs sent to non-responders, final reminder email to encourage potential participants. A response rate of 52% was achieved (n=493). Data collection effort was closed in April 2013.
3.7.11 Analysis Plan

The IBM SPSS 20.0 Statistics programme was used to conduct analysis, with close reference to the literature in this area to assist in discerning the ‘true message’ in the output (Tabachnick & Fidell, 2007). Field (2013) warns about normality of the distribution of continuous data and the importance of interpreting the significance of the Kolmogorov-Smirnov (K-W) and Shapiro-Wilks (S-W) in conjunction with the histograms, P-P plots or Q-Q plots and the values of skew and kurtosis. The sample size was adequate (n=493) however by profession the sub groups within the sample were unequal. Therefore for analysis within sub groups the assumptions of normality needed to be checked within each group, which was completed. A decision map was created as an aid to making an informed selection of analytical statistical methods employed to determine normality.

The six statistical estimates considered were; mean v. trimmed mean, Kolmogorow-Smirnov, Shapiro-Wilk, Z-score, Variance ratio and P-P plot. The criteria employed for normality was that the data fulfilled (reached significance) for at least 3 of these six tests. Field (2013) suggests that the Levene’s test is not relevant in determining normality within unequal group sizes, while Stevens (1996) suggests that analysis of variance is reasonably robust to violations of this assumption provided the group sizes are reasonably similar (largest/smallest= 1.5). However, the group sizes in this study were very dissimilar (188/25= 7.1), therefore the decision to use non-parametric tests is based on how the data responded to the six measures applied: See Table 3-1 overleaf:
Participation was voluntary and the initial sampling frame was determined by the participation of the PCDO’s who are charged with the development of the primary healthcare teams.

Two issues outside of the researchers’ control determined participation:

- The voluntary participation of the PCDOs who created access to the potential participant populations in the ISA’s.
- The voluntary response to a postal survey sent to these participants.

The survey was sent to all primary healthcare professionals (n=956) assigned to teams in these areas and the final sample size was reliant on their completion and return of the postal survey (n=493).

Calculation of a minimum sample size based on Cohen (1992) provided information on the sample sizes necessary for 8 standard statistical tests, with power of .8 and an alpha level of .05. The sample required to detect a medium effect as operationally defined by Cohen confirmed the adequacy of the sample size for this study. In addition this sample size achieved satisfies Graves (2002) recommendation of 60-120 participants for correlational statistical analysis.

*Examined within each professional group (n=6)

### Table 3-1: Decision Map for Quantitative Analysis Testing

<table>
<thead>
<tr>
<th>Variable</th>
<th>P-P Plot</th>
<th>Mean/Trimmed Mean of Variable (total group)</th>
<th>K-S*</th>
<th>S-W*</th>
<th>Z-score*</th>
<th>Variance Ratio</th>
<th>Meets Normality Criteria?</th>
<th>Decision re. Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefits</td>
<td>Normal</td>
<td>3.19/3.22</td>
<td>Sig. in 4/6 professions</td>
<td>Sig. in 4/6 professions</td>
<td>3/6 outside range</td>
<td>1.8</td>
<td>2/6</td>
<td>Non-para</td>
</tr>
<tr>
<td>Beliefs</td>
<td>Normal</td>
<td>3.58/3.64</td>
<td>Sig. in 6/6 professions</td>
<td>Sig. in 6/6 professions</td>
<td>5/6 outside range</td>
<td>2.2</td>
<td>2/6</td>
<td>Non-para</td>
</tr>
<tr>
<td>Behaviour</td>
<td>Normal</td>
<td>3.61/3.64</td>
<td>Sig. in 2/6 professions</td>
<td>Sig. in 2/6 professions</td>
<td>2/6 outside range</td>
<td>3.8</td>
<td>3/6</td>
<td>Non-para</td>
</tr>
</tbody>
</table>
3.7.13 Effect Size

Using non-parametric tests SPSS does not provide an effect size statistic. However the z value can be used to calculate an approximate value for r (Field, 2013; Pallant, 2010) and will be used in this study:

\[ r = \frac{z}{\sqrt{N}} \]

where \( N \) = total number of cases.

Cohens (1988, 1992) criteria of effect r values were used to quantify effect as outlined in Table 3-2 below:

<table>
<thead>
<tr>
<th>( r )</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>( .1 )</td>
<td>Small effect</td>
</tr>
<tr>
<td>( .3 )</td>
<td>Medium effect</td>
</tr>
<tr>
<td>( .5 )</td>
<td>Large effect</td>
</tr>
</tbody>
</table>

Table 3-2: Calculating Effect Size for Non-Parametric Tests

Correlation analysis was used to describe the strength and direction of the linear relationship between two variables. To assess how much variance two variables shared a calculation of the coefficient of determination was calculated by squaring the value of r, this provided the percentage of shared variance value (Pallant, 2010).

Chi-square tests were used to explore the relationships between two categorical variables. To assess effect size the phi coefficient was used. It ranges from 0-1 with a higher value indicating a stronger association using Cohens (1988, 1992) criteria of effect. Where variables had two or more categories the effect size is assessed using Cramer V, which takes into account the degrees of freedom. To determine which criteria to use the calculation (R-1)(C-1) was used, where R is the number of categories in the row variable and C is the number of categories in the column variable. The lower value was used to determine the effect size as outlined in Table 3-3 overleaf:
| R-1 or C-1 = 1 (two categories) | Small = .01  
|                               | Medium = .30  
|                               | Large = .50   |
| R-1 or C-1 = 2 (three categories) | Small = .07  
|                                   | Medium = .21  
|                                   | Large = .35   |
| R-1 or C-1 = 3 (four categories) | Small = .06   
|                                   | Medium = .17   
|                                   | Large = .29    |

Table 3-3: Calculating Effect Size for Chi-square Test for Independence
(adapted from Pallant, 2010 (pg. 220))

3.7.14 Dealing with Missing Data

No definitive values were found in relation to what size the sample needs to be to tolerate ‘X’ percentage of missing data (Tabachnick & Fidell, 2007; Comrey & Lee, 1992; McCallum, Widaman, Zhang & Hong, 1999; Stevens, 2002; Tabachnick & Tidell, 2012 and Field, 2013). Given the sample size of 493, the percentage of missing data for each variable was calculated. Missing values percentages per variable vary between 0.2%- 14%. Only one variable (question 20) has missing values of 14%. The remainder are all below 10% and the missing value average is 5.7% (total of missing percentages/number of variables). This value is within those suggested by Tabachnick & Fidell (2012) to indicate that any procedure for handling missing data will yield similar results. Pallant (2010) recommends that ‘excluding cases pairwise’ be used to deal with missing data as this only excludes the case if it has missing data required for that specific analysis, and will be included in any analysis for which the case has the necessary information. On this basis the ‘excluding cases pairwise’ option was used to deal with missing data during statistical analysis for this project.

3.7.15 Looking for Patterns

All missing data was examined for patterns. The highest missing value was in Q20, equating to a missing data value of 14%, examining this by profession the missing values are outlined in Table 3-4 overleaf in percentages terms and broadly reflect professional representation within the sample:
<table>
<thead>
<tr>
<th>Professional Representation in Sample (%)</th>
<th>Missing Values Q 20 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GP</td>
<td>38</td>
</tr>
<tr>
<td>PN</td>
<td>14</td>
</tr>
<tr>
<td>PHN</td>
<td>26</td>
</tr>
<tr>
<td>PHYSIO</td>
<td>10</td>
</tr>
<tr>
<td>OT</td>
<td>7</td>
</tr>
<tr>
<td>SLT</td>
<td>5</td>
</tr>
</tbody>
</table>

**Table 3-4: Missing Values by Profession**

Question 26 had missing values which were similar across all of the 12 items (6-9%). It was also the last question in the survey and may reflect ‘participant fatigue’. Any variable with more than one item also had higher missing values than the single item variables, if the participant did not fill out the first item it appears that this resulted in the whole variable being ignored. They may have felt this style of variable to be too time consuming.

**3.7.16 Other Measures Considered in Phase One Study**

**3.7.16.1 Akaike Information Criterion (AIC)**

Hierarchical regression involves adding predictors to the model in stages. It is used to know whether these additions improve the model. Given that a larger R² indicates a better fit, it could be suggested that checking the R² value of the new model would be sufficient. However as predictors are added the R² value will always be bigger. The AIC is a goodness-of-fit measure that penalises the model for having more variables and was used in this study. AIC values alone have no meaning or worth, rather its utility is to compare AIC values generated of models with have the same outcome variable. Where AIC values are compared, as AIC values get smaller the better the model fit (Field, 2013).

**3.7.16.2 Beta Values**

Pallant (2010) suggests that the beta values obtained in regression analysis can be used for more practical purposes than theoretical model testing. Standardised beta values indicate the number of standard deviations that scores in the dependent variable would change if there was a one standard deviation unit change in the predictor. The beta value was used to investigate a potential change in collaborative behaviour scores.
3.8 Phase Two
In phase two, interprofessional teamworking was explored qualitatively during interviews with primary health care professionals in Ireland. This section deals specifically with phase two methodology, describing the interview design process employed for the semi-structured interviews and the analytical technique, its development and application to support the data set.

3.8.1 Sampling Procedure
Sampling strategies in qualitative research strive for information-rich data. It is suggested that random sampling would be inappropriate in most cases and that the recruitment of even one single case should be done purposively, with the sample size typically between 5-20 units of analysis (Kuzel, 1999). Purposive sampling was planned for phase two. It became apparent through the scoping out exercise early in the planning for this study that professionals could be attached to two or more teams concurrently (the subsequent survey results provided confirmation of this type of teamworking arrangement). This would make it difficult to ask participants to effectively ‘bracket’ their experiences to one team when being interviewed. In order to gain as much information rich data as possible and to not only to compliment the survey data but to enrich the exploration of the topic area, it was decided to specifically target individual primary healthcare team professionals, to explore their perceptions and experiences of teamworking, rather than primary healthcare teams. Guest et al. (2006) conducted a review of non-probability sampling and found that guidelines for determining sample size are virtually non-existent. However they outline studies that provide some guidance in this area and cite Kuzel (1999) in terms of sample homogeneity. Where the sample is homogenous 5-8 participants is thought to be sufficient, while in a heterogeneous sample 12-20 participants is recommended. Morse (1995) suggests that the key to achieving high quality qualitative work is data saturation, however similarly to sample size, there is a dearth of evidence to guide researchers in the area. Furthermore review data based on sixty in depth interviews, found that data saturation occurred within the first twelve interviews with basic meta themes present as early as interview six. They also found that variability within the data followed similar patterns (Guest et al., 2006).
As the sample needed to include representation from the six different professional
groups working in the primary care teams, the sample size target was 24. However
participation was on a voluntary basis and the data collection period had a specific
time limit. Twenty three interviews were completed across the professions and the
ISA’s to get as comprehensive a view as possible.

3.8.2 Sample Selection & Recruitment
Several survey participants indicated they would be willing to participate in a
follow-up interview. However at the time some were unwilling or unable to do so.
Purposeful sampling was used in conjunction with demographic information such
as profession and geographical area, to maximise the variation in participants which
is considered particularly useful to explore common and unique manifestations of
the topic area (Sandelowski, 2000). Participants were selected from the three
participating ISA’s and telephone contact was made. Twenty three professionals
agreed to be interviewed. As there was no change to the interview schedule the data
from the pilot phase is also included in the analysis. A total of 26 transcripts were
available for analysis. Representativeness of profession was considered important
in terms of interviewing all team members (as defined in this study) and across the
participating ISA’s, this was achieved during data collection (July-September
2014) and outlined in Table 3-5 below:

<table>
<thead>
<tr>
<th>Profession</th>
<th>Participants</th>
<th>Total No. of Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>GP</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>PN</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PHN</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PHYSIO</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>OT</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SLT</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>26</td>
</tr>
</tbody>
</table>

Table 3-5: Professional Representation, Phase Two

While Sandelowski (2000) suggests that qualitative researchers want to collect as
much data as they can, research by Guest et al. (2006) suggest that saturation is
achieved within the first twelve interviews, although basic elements for meta-themes are present after six interviews. Crabtree & Miller (1999) suggest there are no definite rules but that 12-20 are more commonly needed when trying to maximise variation. King (2014) suggests for those using Template Analysis 15-30 participants is customary. The number of interviews completed was considered to be sufficient to allow meaningful exploration of the concepts of interest and the potentially similar and/or divergent positions which may impact on interprofessional teamworking in the primary care setting by profession.

3.8.3 Study Instrument
Semi-structured in-depth interviews were conducted with healthcare professionals. These explored the interviewees’ personal understanding of teamworking, their perceptions and experiences of interprofessional teamworking and the perceived barriers and enablers for teamworking. Interviews involve unstructured and open-ended questions intended to illicit views and opinions from the participants (Creswell, 2003) with an emphasis on depth, detail, vividness and nuance (Rubin & Rubin, 1995). Crabtree & Miller (1999) state that interviews should be flexible, iterative and continuous. They outline three aspects that are important to mapping the interview journey, firstly a comprehensive literature review, secondly a cultural review which they define as not only the researchers and professionals’ everyday ‘commonsense’ understanding about the research topic but sub-cultures such as media reporting on the topic and key informants and self-reflection:

The Literature Review: This looked at teamworking, specifically within the primary healthcare setting. Therefore the literature relating to how primary healthcare is defined and understood was of interest. The teamworking literature also influenced the development of the interview schedule, specifically Reeves et al. (2010) in terms of their framework domains and typology. The typology highlighted the need to explore the potential presence of differing types of interprofessional working as defined which would allow a more nuanced understanding of varying types of teamwork that may be more suitable to the primary healthcare setting.

Cultural Review: this was an important aspect to be aware of within this study as one of the objectives was to explore different professional perspectives of the topic.
area. Furthermore in Ireland there has been extensive media coverage of primary healthcare, largely negative in terms of primary healthcare team function and therefore may have informed their understanding of the topic.

Self-Review: self-review is recommended, which is defined as a self-exploration of any personal bias, feelings or value inconsistencies that may exist. It is suggested that as well as facilitating critical selfreflection, it increases the researcher’s focus, listening skills, intuition and empathy with the respondents. This was also supported by the research logbook kept throughout the study (please refer to section 3.8.7).

The interview guide was not only developed based on these three aspects but also through the first point of connection between phase one and two where the findings revealed in phase one were also considered during the development of the interview schedule (section 3.4.3).

3.8.3.1 Interview Schedule Design
A schedule of open-ended questions was designed for the semi-structured interviews. This method was chosen as it enables the participants to articulate their understanding and experiences of the topic areas. A total of 14 questions were devised to explore the meaning of interprofessional teamworking, their experiences of teamworking and their view of the perceived barriers and facilitators within the setting (please refer to appendix 7 for full interview schedule).

3.8.4 Data Analysis
Qualitative research or a naturalist inquiry is conducted through an intense and/or prolonged contact with a field or life situation, reflective of the everyday life of individuals, groups, societies or organisations. The researchers’ role is to gain a holistic overview of the context under study and attempt to capture data on the perceptions of the local actors within the local context allowing for understanding of possible latent, underlying, or nonobvious issues (Miles & Huberman, 1994).

Crabtree and Miller (1999) prefer the term constructivist inquiry, because it is human constructions being studied and it is the construction that the researcher is co-creating with the texts. They suggest if one wishes to understand how patients or clinicians experience an issue, this is the paradigm of choice. They concede that
knowledge within primary healthcare is based on taxonomies and specialised biomedicine, yet outline the importance of theoretical, historical and cultural influences in research and see qualitative research as a critical addition to science, specifically for its emphasis on theory development, reflexivity and iteration. They posit that it restores the importance of theory and culture to our work in healthcare. They warn of the powerful cultural forces pushing and pulling towards universal, reliable and valid ‘truths’ and state there is no ultimate truth but context bound constructions that are all part of the larger universe of stories. Furthermore they suggest that the interpretation of the resulting data is a subjective/objective iterative dance towards contextual truth, with three prototypical organising styles from which to develop an analysis strategy; template, editing or immersion/crystallisation.

The actual analysis begins with selecting appropriate organising styles to guide and serve as a basis for creating, innovating and bringing data alive. Each style characterises a particular manner and stance for acting and for entering text and getting into the phase of connecting. They are idealised metaphors of how researchers reduce, highlight, arrange and rearrange the data and new connections are made. They provide a formal method of identifying meaningful units, developing analysable units, categories for connecting/corroborating/legitimising and finally producing a representative account. They are part of the overall analysis process. They are flexible and some studies may move between the styles to fit particular needs and opportunities. The three styles are distinguished by:

- The timing of the classification
- Process of organising

The process of organising when using template analysis involves using initial codes or categories to interact with the text, additional ones can emerge or old ones changed based on that interaction. The use of a template or code manual may be more focused and time efficient than the other organising styles. Crabtree and Miller (1999) outline studies within the primary healthcare setting which successfully integrated the template organising style into the interpretive process. Template organising style was used in the qualitative phase of this study.
3.8.5 Rationale for Template Analysis

Template analysis is not a complete and distinct methodology, but rather a technique that may be used within a range of epistemological positions (King, 2012). While the priority of the qualitative phase of this research project is clearly outlined in the weighting (Creswell, 2009), it also reflects the study’s overall philosophical underpinning of pragmatism, where the research question drives the methods used (Miles & Huberman, 1984) and seeks to avoid what Onwuegbuzie & Leech (2005) refer to as the faulty perception of a one-to-one relationship between epistemology and method.

Template analysis is a style of thematic analysis that balances a relatively high degree of structure in the process of analysing textual data with the flexibility to adapt it to the needs of a particular study. It is used mostly to analyse data from individual interviews (King, 2012). It emerged from the United States in the 1990’s and its use is closely associated within the area of organisational research followed by health and has gained credibility in the United Kingdom through the work of Nigel King and others in the fields of health and sociology (Howard et al., 2008; Waring & Wainwright, 2008; Crabtree & Miller, 1999). One of the objectives of this study is to explore different professional perspectives of the topic area and template analysis facilitates the exploration of patterns of experiences across cases to be examined (King et al., 2004).

Nvivo Software was used to refine and produce the coding template. Nvivo is a software tool which allows deconstruction of interview transcripts from their original chronological into reconstructed codes for analysis that makes sense for a given study. This reflected the second stage of four within template analysis where large ‘chunks’ of text are identified, coded into large segments which can then be analysed further to create a coding hierarchy.

3.8.6 Rigour in Qualitative Research

Robson (2000) suggests that anyone moving away from studies based on quantitative data is likely to have to face criticism that the work is unreliable, invalid and generally unworthy of admission to the magic circle of science and states that the approach to qualitative data and its analysis needs to be rigorous and systematic. Polit & Beck (2010) state that while statistical generalisability in
quantitative research has been ‘cherished’ as the ‘gold standard’ in research (pg.1457), qualitative research seeks not to generalise but provide a rich contextual view of some human experience. Creswell (2009) points out the in the latter half of the 20th century interest in qualitative methods increased and with it the development of mixed methods research. Crabtree and Miller (1999) assert that qualitative research must focus on the multiple voices in the texts. Yet they acknowledge that often one of the most important audiences for primary healthcare research are clinicians where research is traditionally defined quantitatively. They suggest that it is critical to outline the quality and rigour of any qualitative research process. Lincoln and Guba (1985) suggest that the quality criterion for qualitative data means it must be credible, transferable, dependable and confirmable. Rolfe (2006) questions the appropriateness of any predetermined quality criteria in qualitative research suggesting instead that each study could be considered unique and individual and instead outlines the need for a clear audit trail in the form of a research diary of the research decisions and processes rather than any idealised version.

3.8.7 Validity & Reliability Measures

3.8.7.1 Credibility

Validity measures in mixed methods for both quantitative and qualitative data are advocated. The validity of any instruments used and scores reliability must be outlined, this includes the strategies used to check the accuracy of the qualitative findings. These may include triangulating data sources, member checking, detailed descriptions or other sources (Creswell, 2009). Creswell (2007) considers the validation of qualitative research as an attempt to assess the accuracy of the findings and outlines eight validation strategies; prolonged engagement and persistent observation in the field, triangulation, peer review, negative case analysis, clarifying researcher bias, member checking, rich and thick descriptions and eternal audits. Furthermore he suggests that researchers engage in at least two. Another strategy which is discussed in the literature is researcher reflexivity. Rolfe (2006) suggests that researchers should leave an audit trail recounting not only the rationale underpinning the research decisions and processes but also an on-going critique and self-appraisal process of the researcher. Finlay (2002) supports this
view stating it increases the reliability and trustworthiness of the research. Three validation strategies were employed:

- Triangulation refers to the use of multiple sources of evidence aimed at corroborating the same phenomenon to enhance credibility. Yet there is the possibility that data sets could be biased in the same direction thereby producing equally right or wrong results (Hammersley, 2008; Moran-Ellis et al., 2006; Kelle, 2001). In a review of mixed methods evaluation projects Greene et al. (1989) conclude that methodological triangulation in the classic sense is actually quite rare in mixed methods and that such practice confuses the concept as originally construed and outlines four alternative options to triangulation- complementarity, development, initiation and expansion. Hammersley (2008) concurs and refers to four different meanings of triangulation; validity checking, indefinite, complementary and juxtaposition. He suggests that the third definition of triangulation (complementary) is the most common meaning employed currently by researchers. It is defined as the use of different methods to investigate a domain which can be examined from two different viewpoints or angles. This study employed complementary triangulation to capitalise on different sources (literature, theory) and methods (quantitative, qualitative data) used. By connecting the data sets and considering the findings within the extant literature the study seeks to illuminate themes and perspectives (Creswell, 2007). Furthermore complementary triangulation also serves as a validation strategy as it provides further information about a phenomenon increasing interpretability, meaningfulness and validity of constructs and clarification of the results (Greene et al., 1989; Hammersley, 2008).

- Peer debriefing is where the analysis process is assessed on a continuous basis by one’s peers which can assist with the development of both design and analysis of the study where the exercise of having to formulate presentations or report to a peer fosters credibility (Robson, 2000). The peer debriefer’s role is to play ‘devil’s advocate’, who keeps the researcher honest and asks the hard questions about methods, meaning and interpretation (Creswell, 2007). Peer debriefings were carried out within the
supervisory structure of the NUI, Galway Structured PhD programme. Both the researcher and peer kept written accounts of these sessions.

- Reflexivity was the third method employed. Finlay (2002) refers to this as ‘thoughtful, self-conscious awareness’ (pg. 532). Rolfe (2006) suggest that a ‘detailed reflexive research diary’ (pg. 309) should be kept for research quality purposes. A detailed research logbook was kept and each year this logbook was submitted for yearly review to the Graduate Research Committee within the university. This was very helpful in being able to improve the overall research process by exploring what went well, what should be altered or avoided (Curtin & Fossey, 2007)

While more than the recommended validity strategies were employed, member checking which is referred to as ‘writ large’ in most qualitative studies by Creswell (2007) was not employed. Carslon (2010) writes of her experience with what she describes as ‘traps’ related to member checking, where participants may suffer possible embarrassment or anxiety about their role or choices in member checking, and cautions against placing a higher level of importance in transcribing procedures over the participants dignity and voice. While Barusch et al. (2011) suggests that rather than clarify meaning of data participant reviews may confuse an issue by changing accounts from one time to another. To avoid any such discomfiture or confusion, member checking was not employed.

3.8.7.2 Transferability

Lincoln & Guba (1985) stress the need to provide a database that makes transferability judgements possible on the part of the potential appliers; while Marshall and Rossman (1989) stress the need for full specification of the theoretical frameworks to help others determine if the research design can be transferred to another setting. Transferability refers to the provision of thick descriptions which specifies everything the reader may need to know to understand the findings (Robson, 2000, Creswell & Clark 2007). Information from complementary data sources can enhance generalisability and promote understanding and transferability (Polit & Beck, 2010). All aspects of the study are clearly outlined from the theoretical underpinning to the detailed methodological considerations and processes of both quantitative and qualitative phases.
3.8.7.3 Dependability & Confirmability

It is considered if the research process is credible it is also dependable (Robson, 2000). Confirmability refers to a clear audit trail where various categories of information is available e.g. raw data, processed data, data construction, process notes, materials relating to intentions and dispositions and instrument development information. All of the above were meticulously recorded throughout the project, reviewed regularly, are securely stored and accessible.

3.8.8 Interview Pilot

Pilot interviews were conducted with three health professionals prior to arranging interviews and data collection. The aim was to ensure clarity in terms of the questions and correct use of recording equipment. The pilot interviews took place within the three participating ISA’s and were fully transcribed. As part of the design phase of an interview schedule, pilot testing is recommended (Creswell, 2007, Sampson, 2004, Teijlingen & Hundley, 2001). Hill et al. (2005) suggest that researchers should complete as least two pilot interviews with people from the target population to aid refining the interview protocol. Doing pilot interviews allows researchers to revise their questions, provides information about the data that are likely to be obtained from each question, and allows for the practice using the protocol in the interview setting. Three professionals were interviewed as part of the phase two pilot study. The audio recordings were reviewed and there were some minor changes made to the interview schedule related to the order of the questions and clarity relating to what information was being sought in some questions. It provided an opportunity to practice conducting semi-structured interviews and critically reflect on the process. It also provided valuable feedback in terms of pace and use of appropriate prompts. Furthermore, all three participants reported that they would have liked to have read the interview schedule prior to being interviewed to reflect on the topic as they felt that would have been helpful.

It was decided to include the pilot interviews in the qualitative analysis phase as no major adjustment was made to the interview schedule and it was valuable rich data. As the only comment from the pilot participants was that they would have liked to have had the questions prior to the interview to reflect on their experiences, the interview schedule was sent in advance of the interview date to all the participants.
in phase two (n=23). No changes were necessary to the interview schedule, however additional prompts were required during the interviews. The pilot interviews ranged in length from 17 to 30 minutes.

### 3.8.9 Procedure
All interviews were scheduled and cover the period July- September 2014. The interviews were conducted in the participants’ workplace. The interviews varied in length ranging from 25 minutes to the longest interview of 1 hour and 30 minutes.

### 3.8.10 Participant Information
Phone contact was made with potential participants and if they consented to be interviewed a participant information pack was sent to each interviewee which included information about the project, the interview schedule and an agreed date and time for interview. Contact details were provided if the participant wished to reschedule or cancel the interview at any time. Consent was assumed if participants did not cancel the interview appointment.

### 3.8.11 Equipment
The interviews were transcribed using two Olympus digital voice recorders, in case of one malfunctioning. The equipment was placed to try to optimise the sound quality. The recordings were transferred to a PC and saved as VLC media files and used to transcribe the interviews verbatim. Some field notes were also taken.

### 3.8.12 Data Analysis Technique
A review of qualitative methods for analysing the interview data was conducted, and Template Analysis (organising style) was chosen as the most suitable for this phase of the study. Template Analysis differs from thematic analysis in terms of the flexibility of the coding structure, the use of a priori themes and the use of an initial template (King, 2012). It is not theory bound, rather a flexible technique than methodology, and can be used from varying philosophical positions. It allows the researcher to focus on particular aspects of the text first; this is described by Crabtree and Miller (1999) as submersion in the jungle of text with the set purpose of identifying ‘chunks’ of text to facilitate future data retrieval and analysis (pg. 166). The template process reduces the amount of data being considered at any one time and brings together related pieces of text earlier in the process, which can
facilitate making connections. It differs from the other styles in the ‘explicit use of codes as a starting point of the process’ (pg.165). The preliminary codes or themes can be based on a theoretical position, prior research or a literature review. Suggested criticism of this technique refers to it being more difficult to discover new, unanticipated insights. However, Miles & Huberman (1994) reflect that ‘data collection is a selective process, you cannot and do not get it all even though you might think you can and are’ (pg. 56), rather they emphasise the need to be explicitly mindful of the purpose of your study, the conceptual lens you are applying while still being open to and re-educated by things you didn’t know or expect.

3.8.13 Developing the Template

This was an iterative process of applying, modifying and reapplying the initial template. The stages described below are based on the template analysis process outlined by Nigel King (King, 2012). The 26 interviews were transcribed into MS word documents and formatted for importation into QSR Nvivo 10 package.

The first step is to develop a priori themes and preliminary codes. A key decision is when to start to develop an initial template. This is usually done by reading a sub-set of the data. The greater the diversity in accounts provided by the participants the larger the subset of data would need to be for initial analysis. The decision was made to read six transcripts (representing each professional group). The data explored was comparable thus negating the need for a larger subset to be read at that point. King (2012) suggests that the initial template and codes can be developed be drawing on many sources such as academic literature, personal, anecdotal/informal experiences, exploratory research and/or the aims and objective of a study. It may also be devised by drawing on the issues that emerged during the interviews. In this study the initial template and codes were based on the stated aims and objective of the study and the most prominent issues that emerged from within the examination of a sub-set of the transcript data. The codes reflected the overall aim of the study which sought to explore participant’s perceptions and experiences, their understanding of teamwork, the current levels of teamwork and the barriers and facilitators to teamwork. The remaining transcripts were read for familiarisation and to check for errors.
Crabtree and Miller (1999) suggest that the initial broad preliminary themed segments are advantageous, being longer and preserving ‘broad contexts’ (pg. 167), allowing access to more text for interpretation with a given search. All the transcripts were now read and Nvivo 10 was used to deconstruct the interview data from their original chronology and reconstructed into broad categories using the a priori themes and creating large segments of text as part of the Template Analysis process. This meant that the data was sorted into coded segments and were then printed. These were referred to as the preliminary themes. Crabtree and Miller (1999) also provide examples of primary care-based studies which used software to sort the data into the initial template themes and these were then printed for further analysis. Furthermore template analysis does not insist on a fixed number of levels of theme development instead encourages the analyst to develop themes where the richest data are found (King, 2012).

By using Nvivo software initially to create the segments it was possible to highlight the units of meaning (references) applied into the preliminary themes. Crabtree & Miller (1999) refer to this as ‘the frequency of different codes occurrences’ which is used by some researchers as a way of identifying potentially key areas for analysis while using the template analysis technique (pg. 169). These are outlined in Table 3-6 overleaf:
<table>
<thead>
<tr>
<th>Initial Broad Themes</th>
<th>References/ Unit of Meaning in Coded Segments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barriers</td>
<td>608</td>
</tr>
<tr>
<td>Enablers</td>
<td>281</td>
</tr>
<tr>
<td>Team Meetings</td>
<td>176</td>
</tr>
<tr>
<td>Defining</td>
<td>137</td>
</tr>
<tr>
<td>Interprofessional Teamworking</td>
<td></td>
</tr>
<tr>
<td>Benefits</td>
<td>116</td>
</tr>
<tr>
<td>Does it work</td>
<td>106</td>
</tr>
<tr>
<td>Goals &amp; Objectives</td>
<td>47</td>
</tr>
</tbody>
</table>

Table 3-6: Number of Sources Coded against the Initial Template

It can be seen that potentially the barriers, enablers and team meetings themes were key topic areas in relation to teamworking in the primary care setting with the level of corresponding references made. Participants spoke more extensively in relation to these aspects of the topic area. In their current form they are only a provisional set of themes to organise (King, 2012).

Table 3-7 overleaf outlines the seven priori themes identified and presents a visual representation of the initial template and themes and the issues raised by the participants during the interview process. It also reflects many of the factors discussed in the teamwork literature:
<table>
<thead>
<tr>
<th>A Priori Themes</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Barriers</td>
<td>• Includes: professionalisation, medical dominance, negative experiences, organisational issues, conflicting financing, conflicting infrastructures.</td>
</tr>
<tr>
<td>• Enablers</td>
<td>• Includes: participation, communication, colocation, organisation, incentives, professional experiences.</td>
</tr>
<tr>
<td>• Team Meetings</td>
<td>• Includes: Meetings process, complex cases, organisation, outcomes, professional experiences.</td>
</tr>
<tr>
<td>• Defining Interprofessional Teamwork</td>
<td>• Includes: Attitudes, professional interactions, team structures, meetings, complex cases, impact, positive and negative experiences.</td>
</tr>
<tr>
<td>• Benefits</td>
<td>• Includes: Patient, profession, organisation, complex cases, professional experiences.</td>
</tr>
<tr>
<td>• Does it Work?</td>
<td>• Includes: positive and negative responses, professional and organisational relationships, teams, theory, intensity of teamwork, professional experiences.</td>
</tr>
<tr>
<td>• Goals &amp; Objectives</td>
<td>• Includes: role clarity, team purpose, collective team vision, professional experiences, organisational</td>
</tr>
</tbody>
</table>

Table 3-7: A Priori Theme & Initial Template
3.8.14 Revising the Template

Once the initial template is constructed reading and rereading of the segments will reveal inadequacies and modifications will need to be made (King, 2012). The segments were printed, with further reading and rereading allows for modification, deletion and insertion of themes within the template if required. All sections of text were marked with the appropriate themes. This process highlighted inadequacies in the initial template.

Looking at the a priori themes and descriptions (Table 3-7) it is possible to see similarity between the themes. At this point clustering of the preliminary themes took place, with groups of similar themes clustered together to produce more general higher order themes (hierarchical themes). These hierarchical themes allow the researcher to analyse text at varying levels of specificity and can result in as many levels of themes as deemed useful. The level of sub-themes should reflect how rich they prove in terms of offering insight into the topic area being explored, but should not reach the state at which description is so finely detailed that any attempt to draw together an interpretation becomes impossible. It is also stated that during this process it should not be assumed that a priori themes will end up as a hierarchical theme, they can be moved around in the emerging structure.

Modification of Themes: Firstly it became clear that two of the preliminary themes were actually one theme. Participants outlined potential enablers which were perceived solutions to another theme ‘barriers’, therefore presenting a dual aspect of the same factor so to speak. Secondly, clear opposition to team meetings and frustration with regard to a lack of clear goals and objectives were frequently articulated and while initially identified as individual preliminary themes (Team Meetings, Goals and Objectives), current meeting processes and a dearth of clear goals and objectives were actually barriers. There were very clear views on defining teamwork, its presence, form and value in practice and could have been mapped onto the remaining preliminary themes (Defining Interprofessional Teamwork, Benefits, Does it Work) but what could not be mapped onto any of these preliminary themes were the most prominent themes which emerged the ‘swampy, messy lowlands’ (Schon, 1987). These were the interprofessional tensions within and outside of the primary healthcare teams, levels of dissatisfaction and frustration with the team processes articulated by participants and various aspects of
organisational-level chaos which appeared to affect every aspect of teamwork described and therefore every preliminary theme within the initial template. These issues consistently came to the fore from reading and re-reading the texts. It was considered possible to retain the template and explore teamwork from, as Schon (1987) suggests, the ‘high ground technical problems’ which would have neatly reflected the initial template themes. However with thorough peer discussion, reflection and consideration of the data it was felt that this would reduce the significance of the concerns articulated loudly and persistently from the ‘messy lowlands’ of practice. This could potentially mask what the real issues were for primary healthcare professionals and the impact on teamwork within this setting.

The revision of the template is outlined in Table 3-8 below. These themes represent not only the issues that emerged and were outlined in the initial template but the very divisive aspects that are unique to the Irish primary healthcare context and teamworking.

<table>
<thead>
<tr>
<th>Revised Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conflict &amp; Consensus</td>
</tr>
<tr>
<td>Them &amp; Us</td>
</tr>
<tr>
<td>The Implementation Paradox</td>
</tr>
<tr>
<td>Resourced to Fail</td>
</tr>
</tbody>
</table>

Table 3-8: Revised Theme Template

3.9 Ethical Considerations: Phase One & Two

Ethical approval was sought and granted by NUI, Galway Ethics Committee prior to any data collection. In phase one all potential participants received a survey pack. A cover letter explained the study details and a participant information sheet was included with each survey pack (please see appendix 4 & 5). Contact details were provided to facilitate addressing any concerns raised. A number of queries were received and all concerns raised were addressed in a timely manner. It was clearly
outlined that consent would be assumed if the survey was completed and returned. The survey was anonymous; it was not possible to link individuals to their responses. Only the researcher had access to the staff lists provided for the purpose of the sampling. The three participating ISA’s are not identified in this document but referred to as areas A, B and C.

In phase two potential participants were contacted by email or phone. Participants were sought for the interview process during the quantitative data collection, all participants were asked if they would be willing to participate. Some potential participants exercised their right to refuse to be interviewed when asked. When participants agreed to be interviewed they received a letter outlining the purpose of the study, an interview date and time and the interview schedule (please see appendix 6 & 7) and consent was assumed. Anonymity was assured and the participants were free to withdraw at any stage from the process. Recordings were stored in a locked cupboard, media files of the recordings and MS word documents of the interview created were anonymised and held on a password secured PC. Printed coded segments were stored securely in the researchers’ home office. Interviewees could withdraw from the study at any time. No geographical location, primary healthcare team or professional is identified in this study.
Chapter Four: Phase One Results

4.1 Introduction
The results from the survey are presented in two sections. Descriptive and inferential analyses are used to provide an overview of the data set and explore potential differences and relationships between variables. Organisational features and professional diversities are examined and how these may interrelate with team attributes and collaborative behaviour. Multivariate regression modelling is used to assess the most powerful predictors of collaborative behaviour and if such predictors are influenced by profession.

4.2 Response Rate
The response rate strategy achieved 52% participation with a level of professional representation reflective of the staffing ratios within each service setting (GP 38%, Nursing 39% and Allied Health 23%). Of the 956 surveys sent, 496 were returned yielding a final sample size of 493. Two were not completed but were returned with letters outlining why they felt they could not do so and one other was returned many weeks after the final submission date that was provided. Practice nurses were underrepresented in the study as in Area A direct contact was refused by the Practice Co-ordinator. An agreement was reached with the Practice Co-ordinator to forward an invitation-to-participate email to this group of practitioners containing contact details. This however yielded only 2 participants. Where postal contact was allowed a total of 65 PN’s returned surveys from within Area B (n= 39) and C (n=26) respectively.

4.3 Questionnaire Scale Validation
All 5-degree scale items (19) were entered into PCA with orthogonal rotations (varimax) to verify the validity of input, process and output scale variables. Careful inspection of the correlation matrix revealed some values less than 0.3. Field (2013) recommends removal of such items. Five items were removed (Q26 a, c, h, k and l). The smaller set of items was re-entered into PCA.

The Kaiser- Meyer- Olkin measure verified the sampling adequacy for the analysis, KMO=.93 (‘marvellous’ according to Hutcheson & Sofroniou, 1999), and all KMO values for individual items were greater than .88, which is well above the
acceptable limit of .5 (Field, 2013). Three factors had eigenvalues over Kaisers Criterion of 1 and in combination explained 72% of the variance as outlined in Table 4-1 overleaf:
<table>
<thead>
<tr>
<th>Items</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provides me with workplace support for teamwork</td>
<td>.332</td>
<td>.259</td>
<td>.799</td>
</tr>
<tr>
<td>Provides me with more professional support</td>
<td>.432</td>
<td>.284</td>
<td>.748</td>
</tr>
<tr>
<td>Reduces my professional isolation</td>
<td>.344</td>
<td>.274</td>
<td>.781</td>
</tr>
<tr>
<td>Increases my ability to access services for patients more efficiently</td>
<td>.443</td>
<td>.164</td>
<td>.726</td>
</tr>
<tr>
<td>A better tool to provide for the psychosocial needs of the patient</td>
<td>.890</td>
<td>.108</td>
<td>.195</td>
</tr>
<tr>
<td>Facilitates provision of a clear care plan for discussion with the patient</td>
<td>.886</td>
<td>.184</td>
<td>.217</td>
</tr>
<tr>
<td>Contributes to a higher level of patient satisfaction</td>
<td>.885</td>
<td>.143</td>
<td>.243</td>
</tr>
<tr>
<td>Develops the care plan for the patient in a positive way</td>
<td>.874</td>
<td>.140</td>
<td>.255</td>
</tr>
<tr>
<td>Interprofessional teamwork improves the quality of treatment and services for patients</td>
<td>.836</td>
<td>.113</td>
<td>.285</td>
</tr>
<tr>
<td>Supports professionals when dealing with a patient</td>
<td>.831</td>
<td>.182</td>
<td>.312</td>
</tr>
<tr>
<td>Professionals from different professions consult with each other informally on a regular basis</td>
<td>-.149</td>
<td>.516</td>
<td>.289</td>
</tr>
<tr>
<td>There is a high level of mutual trust between the professions</td>
<td>.052</td>
<td>.814</td>
<td>.118</td>
</tr>
<tr>
<td>The contributions of each professional are valued equally</td>
<td>.105</td>
<td>.810</td>
<td>.130</td>
</tr>
<tr>
<td>Decisions taken for patients with complex needs take into account the opinions of professionals from different disciplines</td>
<td>.174</td>
<td>.749</td>
<td>.110</td>
</tr>
<tr>
<td>There is a high level of motivation to work with other team members</td>
<td>.284</td>
<td>.695</td>
<td>.266</td>
</tr>
<tr>
<td>In general, tensions over the sharing of responsibilities between professionals are easily resolved</td>
<td>.215</td>
<td>.655</td>
<td>.116</td>
</tr>
<tr>
<td>Interprofessional relationships are good between the different professions</td>
<td>.161</td>
<td>.718</td>
<td>.112</td>
</tr>
</tbody>
</table>

*Table 4-1: Summary of Principle Component Analysis Results of IPTW Questionnaire*
The items that cluster on the same factor suggest that factor 1 represents Belief in being part of a Team, factor 2 Teamworking/Collaborative Behaviour and factor 3 represents the Benefits of being part of a Team.

Internal consistency (Cronbach’s Alpha) statistics for the multi-item measures are reported in Table 4-2 below:

<table>
<thead>
<tr>
<th>Scale</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefits</td>
<td>.918</td>
</tr>
<tr>
<td>Belief</td>
<td>.962</td>
</tr>
<tr>
<td>Collaborative Behaviour</td>
<td>.852</td>
</tr>
</tbody>
</table>

**Table 4-2: Internal Consistency of Sub-Scales**

### 4.4 Demography of Sample

The mean age of respondents was 45 years, with the majority of the sample (42%) aged between 41-55 years. The gender balance was uneven (female= 73%). Although the HSE was unable to provide a gender breakdown of primary healthcare professionals, examining the gender balance of the health professional representative associations in Ireland, membership by gender reflects the survey sample, with greater female representation as outlined below in Table 4-3:

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Profession</th>
<th>Female Membership (%)</th>
<th>Female Survey Respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICGP</td>
<td>GP</td>
<td>48</td>
<td>37</td>
</tr>
<tr>
<td>IMNO</td>
<td>PHN</td>
<td>96</td>
<td>100</td>
</tr>
<tr>
<td>IPNA</td>
<td>PN</td>
<td>99</td>
<td>100</td>
</tr>
<tr>
<td>AOTI</td>
<td>OT</td>
<td>87</td>
<td>94</td>
</tr>
<tr>
<td>ISCP</td>
<td>PHYSIO</td>
<td>70</td>
<td>83</td>
</tr>
</tbody>
</table>

**Table 4-3: Gender Balance by Professional Organisation and by Survey Respondent**
The Irish Association of Speech and Language Therapists (IASLT) were unable to provide information on gender distribution of their members but advised that a large percentage of their membership is female (IASLT, 2013). All the professions responded to the survey request, GP (38%), PN (14%), PHN (26%), PHYSIO (10%), OT (7%) and SLT (5%).

Table 4-4 below gives the staff composition of the study sample compared to composition figures from an Economic and Social Research Institute (ERSI, 2010) review of the Irish health care system. The current study’s sample closely reflects of that documented by the ESRI (2010):

<table>
<thead>
<tr>
<th>OCCUPATION (%)</th>
<th>ESRI</th>
<th>STUDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>GP</td>
<td>36</td>
<td>38</td>
</tr>
<tr>
<td>PN</td>
<td>Not reported</td>
<td>14</td>
</tr>
<tr>
<td>PHN</td>
<td>25</td>
<td>26</td>
</tr>
<tr>
<td>PHYSIO</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>OT</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>SLT</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 4-4: Staff Composition of Primary Healthcare Teams

4.5 Colocation

Responses to a question regarding the requirement for single based location of primary healthcare teams revealed that 34% (n=122) worked in collocated teams.

4.6 Team Membership

Of the total sample 79% (n=390) perceived themselves to be team members. The median tenure of team membership was reported as being 3 years (n=366). Twenty five per cent (n=92) reported working on more than one team concurrently. Of that group 85% (n=76) worked on 2-3 teams concurrently and 42% (n=38) of those who worked in more than one team reported that they perceived that this work practice inhibited IPTW.
4.6.1 Team Membership by Workplace Context
By grouping professionals to reflect the workplace context of primary healthcare
health professionals by GP/PN or HSE employment and team membership, a
significant difference was found in reported non-membership of a team among the
GP/PN group (29% n=73) compared with 12% (n=29) of the HSE employed group
($\chi^2 = 19.882$, df=1, p=<0.001, n=491).

4.6.2 Team Membership by Integrated Service Area (ISA)
A significant difference in perceived team membership was found between the 3
ISAs included in the study with Area A (89%) showing the highest level of
membership compared to, Area B (78%) and Area C (73%) ($\chi^2 = 9.177$, df =2,
p=0.01, n=492).

4.6.3 Team Membership by Profession
The relationship between the various professions and team membership revealed
that SLT’s, PN’s and GP’s reported the highest levels of non-membership in that
order, ($\chi^2 = 39.987$, df=5, p=<0.001, n=491).

4.6.4 Team Membership & Perceived Collaborative Behaviour Scores
Median collaborative behaviour scores where significantly higher for those who
perceived themselves as team members (Md=3.71, n=378) compared to non-
members (Md= 3.14, n= 314), (Mann-Whitney U test: U= 11146, z= 4.96,
p=<0.001, r = .23. Although the difference is statistically significant, the
relationship between team membership and collaborative behaviour scores is small.

4.6.5 Multiple Team Membership Status & Perceived Collaborative
Behaviour
Membership of more than one team was reported by 19% (n=94) of participants
and of these 42% (n=39) of this group perceived multiple team membership
inhibited IPTW. However, median collaborative behaviour scores for those with
multiple team membership (Md= 3.57, n=93) compared to those with single team
membership (Md=3.83, n=279), were not significantly different (Mann-Whitney U
test: U=11499, z=-1.645, p= .1, effect size: r=.08).
4.6.6 Gender, Team Membership & Perceived Collaborative Behaviour

Chi² analysis reveals that there is a significant difference between the percentage of males (73%, n= 129) and females (81%, n=361) who are members of primary healthcare teams ($\chi^2=4.237$, df= 1, p= 0.04, n=490). A Mann Whitney U Test revealed a significant difference between gender and collaborative behaviour scores with females (Md=3.71, n=346) and males (Md=3.29, n=119), U=13858, z=5.331, p=<0.001, r=.25. Although there is a statistically significant difference, the relationship between gender and collaborative behaviour scores is small approaching moderate one. See Table 4-5 below:

<table>
<thead>
<tr>
<th>Profession</th>
<th>Team Membership % (n)</th>
<th>Gender</th>
<th>Collaborative Behaviour Score (Median)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female % (n)</td>
<td>Male % (n)</td>
<td></td>
</tr>
<tr>
<td>GP</td>
<td>74 (139)</td>
<td>37 (69) 63 (118)</td>
<td>3.43</td>
</tr>
<tr>
<td>PN</td>
<td>64 (43)</td>
<td>100 (67)</td>
<td>3.67</td>
</tr>
<tr>
<td>PHN</td>
<td>91 (115)</td>
<td>100 (126)</td>
<td>3.86</td>
</tr>
<tr>
<td>PHYSIO</td>
<td>90 (47)</td>
<td>83 (43) 17 (9)</td>
<td>3.71</td>
</tr>
<tr>
<td>OT</td>
<td>94 (31)</td>
<td>94 (31) 6 (2)</td>
<td>3.71</td>
</tr>
<tr>
<td>SLT</td>
<td>56 (14)</td>
<td>100 (25)</td>
<td>3.57</td>
</tr>
</tbody>
</table>

Table 4-5: Perceived Team Membership, Gender Balance of Membership & Collaborative Behaviour by Profession

4.7 Profession & Perceived Collaborative Behaviour

There were significant differences in median perceived collaborative behaviour scores across the professions, Kruskal-Wallis: $\chi^2= (5, n=466) = 31.11$, p= <0.001. On a scale of 1-5, the GP group recorded the lowest median score (3.43) with the PHN group recording the highest score of (3.86).

To ascertain differences between groups, follow up Mann-Whitney U testing was used with the Bonferroni adjustment applied to the alpha values to control for possible Type 1 error. Using a recommendation offered by Pallant (2010) this analysis was completed using a select number of groups. The test was repeated for three occupational groupings; Medical (GP’s n= 173), Nursing (PN & PHN n= 185) and Allied Health (PHYSIO, OT & SLT n=108). A Bonferroni adjustment (.05/3)
was used to calculate the required alpha value ($\alpha=.017$). This revealed statistically significant differences in Collaborative Behaviour levels across the three different professional groups (Kruskal-Wallis ($\chi^2 (2, n= 466) = 25.66, p=<.001$). The nursing group recorded the highest median score (Md=3.86) with the medical group recording the lowest (Md= 3.43). Post-hoc tests found a significant difference between GP and Nursing, $z= -4.92, p=<0.001$ with a medium effect size ($r=.3$) and GP and Allied Health, $z=-3.12, p= 0.02$ with a small effect size ($r=.2$). No significant difference was recorded between the nursing and allied health groups as outlined in Table 4-6 overleaf:
<table>
<thead>
<tr>
<th>Collaborative Behaviour (Median) Scores by Profession</th>
<th>Professional Group</th>
<th>Collaborative Behaviour Scores (Median) by Professional Grouping</th>
<th>Post-Hoc Tests between Professional Groups</th>
<th>r Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>GP 3.43</td>
<td>1. GP</td>
<td>3.43</td>
<td>1 and 2 GP (Md= 3.43, n=173) and Nursing (Md= 3.86, n=185), U=11193, z=-4.923, p=&lt;0.001</td>
<td>0.3</td>
</tr>
<tr>
<td>PN 3.67</td>
<td>2. Nursing</td>
<td>3.86</td>
<td>1 and 3 GP (Md=3.43, n=173) and Others (Md=3.71, n=108), U= 7273, z=-3.128, p=0.02</td>
<td>0.2</td>
</tr>
<tr>
<td>PHN 3.86</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSIO 3.71</td>
<td>3. All Others</td>
<td>3.71</td>
<td>2 and 3 Nursing (Md=3.86, n=185) and Others (Md=3.71, n=108), U=9055, z=-1.338, p=0.181</td>
<td></td>
</tr>
<tr>
<td>OT 3.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLT 3.57</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\chi^2 = (5, n=466) = 31.11, p= &lt;0.001$</td>
<td>$(\chi^2 (2, n= 466) = 25.66, p=0.001$</td>
<td>Bonferroni adjustment applied: .05/3=.017</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4-6: Profession & Perceived Collaborative Behaviour
4.8 Organisational Supports

4.8.1 Clerical Support, Team Leadership & Formalised Team Documentation

Other factors investigated for their influence on teamwork capacity potential were the levels of clerical support, team leadership, the presence of other organisational supports such as formalised team documentation for shared use and the actual use of such documentation by team members and the types of meeting held. Mann-Whitney U Tests revealed a significant difference in collaborative behaviour scores and receiving clerical support. While it is a significant result the effect is small approaching a moderate one. None of the other factors investigated reached significance. The results are summarised in the Table 4-7 overleaf:
Table 4-7: Organisational Supports & Collaborative Behaviour Scores

<table>
<thead>
<tr>
<th>Support</th>
<th>(n)</th>
<th>%</th>
<th>Collaborative Score (Median)</th>
<th>Repeated Mann-Whitney U Test</th>
<th>Effect size (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clerical Support</td>
<td>Yes</td>
<td>(179)</td>
<td>48%</td>
<td>3.86</td>
<td>U=11341, z=5.476, p=&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>(189)</td>
<td>52%</td>
<td>3.50</td>
<td></td>
</tr>
<tr>
<td>Team Leader</td>
<td>Yes</td>
<td>(202)</td>
<td>55%</td>
<td>3.77</td>
<td>U=14672, z=1.603, p=0.109</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>(161)</td>
<td>45%</td>
<td>3.71</td>
<td></td>
</tr>
<tr>
<td>Standardised Care Record</td>
<td>Yes</td>
<td>(101)</td>
<td>37%</td>
<td>3.86</td>
<td>U=7882, z=1.499, p=0.134</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>(175)</td>
<td>63%</td>
<td>3.86</td>
<td></td>
</tr>
<tr>
<td>Shared Records</td>
<td>Yes</td>
<td>(41)</td>
<td>15%</td>
<td>3.86</td>
<td>U=4374, z=-1.138, p=0.255</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>(240)</td>
<td>85%</td>
<td>3.86</td>
<td></td>
</tr>
<tr>
<td>Separate Case-Specific Meetings</td>
<td>Yes</td>
<td>(139)</td>
<td>49%</td>
<td>3.86</td>
<td>U=8720, z=-1.691, p=0.091</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>(142)</td>
<td>51%</td>
<td>3.86</td>
<td></td>
</tr>
<tr>
<td>Patient &amp; Family involved in</td>
<td>Yes</td>
<td>(135)</td>
<td>47%</td>
<td>3.86</td>
<td>U=8410, z=-1.459, p=0.063</td>
</tr>
<tr>
<td>meetings</td>
<td>No</td>
<td>(143)</td>
<td>53%</td>
<td>3.86</td>
<td></td>
</tr>
</tbody>
</table>

Further investigation revealed that there was a significant difference between the perceived levels of clerical support provided with GP’s, PN’s and SLT’s reporting significantly less support than the other professions as outlined below, with a moderate approaching large effect ($\chi^2 = 88.562$, df=5, p=<0.001, n=486, Cramer’s V= 0.48). See Table 4-8 overleaf.
### Table 4-8: Perceived Clerical Support by Profession

<table>
<thead>
<tr>
<th>Profession</th>
<th>Yes %</th>
<th>No %</th>
<th>Chi. Sq.</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>GP</td>
<td>18</td>
<td>82</td>
<td>&lt;0.001</td>
<td>0.48</td>
</tr>
<tr>
<td>PN</td>
<td>50</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHN</td>
<td>71</td>
<td>29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSIO</td>
<td>74</td>
<td>26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OT</td>
<td>58</td>
<td>42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLT</td>
<td>50</td>
<td>50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 4-9: Information Sharing Structures

<table>
<thead>
<tr>
<th>Information Sharing Structures</th>
<th>Yes (%)</th>
<th>No (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are all care decisions made are communicated regardless of attendance at clinical team meetings?</td>
<td>39</td>
<td>61</td>
</tr>
<tr>
<td>Sharing of patient care plans</td>
<td>15</td>
<td>85</td>
</tr>
</tbody>
</table>

#### 4.8.2 Information Sharing Structures: Decision Dissemination, Patient Record Sharing

A Mann-Whitney Test revealed a significant difference in perceived collaborative behaviour scores and decisions communicated, with those who perceive that decisions are communicated recording higher collaborative behaviour scores (Md=3.86, n=159) than the other group (Md= 3.43, n=247), $U= 13545$, $z=5.288$, $p= <0.001$, $r=.28$.

$\chi^2$ analysis reveals a statistically significant difference between ISA’s and sharing of patient care plans ($\chi^2 = 9.527$, df=2, $p=0.009$, n=290) with Area A= 23% Area B= 16% and Area C= 4%. Area A, similar to reporting on other variables reports the highest use of shared care plans, however overall use of shared care plans is very low. Furthermore reporting on the most frequent methods of referral used, reveals that the most frequent mode is by written request (58%, n= 263) and use of email 6% (n=27). Only 2% (n= 12) report using the clinical team meetings to communicate in relation client referrals between professionals.
4.8.3 Team Resources within ISAs

Examples (e.g. guidelines for conducting clinical team meetings, clear role descriptions, specific team tasks and responsibilities) were given to respondents and asked if they were aware of such resource availability in their workplace to support them. Thirty two percent (n=156) reported that there were resources in place, with 34% (n=163) reporting that no resources were in place and 38% (n=168) reporting that they did not know what resources were available. There was a statistically significant difference in awareness across the ISA’s ($\chi^2 = 25.503$, df=4, $p= <0.001$, n=486, Cramer’s V= 0.16) and between the professions ($\chi^2 = 41.789$, df=10, $p= <0.001$, n=486, Cramer’s V= 0.21) and revealed a small effect by ISA and profession as outlined in Table 4-10 below:

<table>
<thead>
<tr>
<th>ISA</th>
<th>Yes %</th>
<th>No %</th>
<th>Don’t Know %</th>
<th>Chi-Sq. Test</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>45</td>
<td>15</td>
<td>40</td>
<td>&lt;0.001</td>
<td>0.16</td>
</tr>
<tr>
<td>B</td>
<td>31</td>
<td>37</td>
<td>32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>23</td>
<td>42</td>
<td>35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>31</td>
<td>37</td>
<td>32</td>
<td>&lt;0.001</td>
<td>0.21</td>
</tr>
<tr>
<td>C</td>
<td>23</td>
<td>42</td>
<td>35</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Profession</th>
<th>Yes %</th>
<th>No %</th>
<th>Don’t Know %</th>
<th>Chi-Sq. Test</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>GP</td>
<td>23</td>
<td>29</td>
<td>48</td>
<td>&lt;0.001</td>
<td>0.21</td>
</tr>
<tr>
<td>PN</td>
<td>27</td>
<td>39</td>
<td>34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHN</td>
<td>45</td>
<td>38</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSIO</td>
<td>29</td>
<td>39</td>
<td>32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OT</td>
<td>49</td>
<td>27</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLT</td>
<td>32</td>
<td>24</td>
<td>44</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4-10: Perceived Resource Availability for Establishing Team Function by ISA & Profession

4.8.4 Education

Respondents were asked if they had received education specific to primary healthcare. Responses revealed that 42% (n=200) had received specific education in this area, while 58% (n=276) had not. There was no significant difference in primary healthcare education received between the ISA’s ($\chi^2=3.138$, df= 2, $p= 0.248$, n=476). There was a significant difference by profession ($\chi^2= 36.704$, df=
5, \( p<0.001, n=476 \), with GP’s (52%, \( n=93 \)), PHN’s (51%, \( n=64 \)), and OT’s (38%, \( n=12 \)) reporting specific primary healthcare education most frequently. However professionals who reported having worked in the primary healthcare setting abroad report having received such education more frequently than those practitioners who did not work abroad \( (\chi^2=18.611, df=1, p<0.001, n=476) \). The levels (%) of specific primary healthcare education received in relation to having worked outside of the Irish healthcare system are outlined in Table 4-11 below:

<table>
<thead>
<tr>
<th></th>
<th>Yes (%)</th>
<th>No (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education/worked abroad</td>
<td>62</td>
<td>38</td>
</tr>
<tr>
<td>Education/not worked abroad</td>
<td>37</td>
<td>63</td>
</tr>
</tbody>
</table>

*Table 4-11: Primary Healthcare Education relative to Education Experience Abroad*

### 4.8.5 Primary Healthcare Specific Education & Perceived Collaboration

A Mann-Whitney U Test reveals no significant difference between receiving specific primary healthcare education and collaborative behaviour scores, received specific primary healthcare education (Md=3.71, \( n=191 \)) and not having received specific primary healthcare education (Md= 3.57, \( n=269 \)), \( U=23165, z=-1.8, p=0.72, r=-.08 \).

### 4.8.6 Interprofessional Teamwork Training

Interprofessional training and continuing professional development were described as part of the action plan within the primary care strategy (Actions 50, 51, 104). Interprofessional teamwork training is a method of facilitating continuing professional development.

In relation to training, 80% (\( n=388 \)) of respondents report not having received interprofessional training, with 20% (\( n=96 \)) reporting that they had received training. Where training had been undertaken, 75% (\( n=69 \)) report that the training is delivered in an interprofessional manner. However, 81% (\( n=366 \)) do not believe that sufficient effort is been made to provide such training. There was a significant
difference between the ISA’s and levels of training received ($\chi^2=18.273$, df=2, $p=<0.001$, n=483), which is outlined in Table 4-12 below:

<table>
<thead>
<tr>
<th>ISA</th>
<th>Yes (%)</th>
<th>No (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>34</td>
<td>66</td>
</tr>
<tr>
<td>B</td>
<td>14</td>
<td>86</td>
</tr>
<tr>
<td>C</td>
<td>20</td>
<td>80</td>
</tr>
</tbody>
</table>

Table 4-12: Interprofessional Teamwork Training Received

By profession there is a significant difference in the levels of interprofessional training reported ($\chi^2=40.617$, df=5, $p=<0.001$, n=482). GP’s, PN’s and SLT’s report training less frequently than other professions. This corresponds with reporting on being a member of a primary healthcare team with these professions most frequently reporting non-membership.

As PN’s are employed by GP’s who are themselves private contractors and all other groups are employed by the HSE, professions were grouped to reflect this division (GP/PN vs. PHN/PHYSIO/OT/SLT). This analysis revealed a significant difference in the training receive by the GP/PN group ($\chi^2=28.499$, df=1, $p=<0.001$, n=482), with 10.5% (n=26) of the GP/PN group reporting having received interprofessional training verses 30% (n=70) by the HSE group. This division of training levels is reflective of divisions in team membership, when similarly grouped to reflect the nature of workplace configurations; i.e. the GP/PN cohort reported significantly less membership than that in the HSE employed group (PHN, PHYSIO, OT, SLT).

A Mann-Whitney U Test reveals a significant difference in the collaborative behaviour scores of those who report having received training (Md= 3.86, n=94) and those who did not (Md= 3.57, n= 368), U= 12603, $z=-4.069$, $p=<0.001$, $r=.18$. This is consistent with a small effect size (Cohen, 1988).

Where interprofessional teamwork training is reported the majority of the training is provided by the HSE (88%, n= 84) from within the Organisational Design & Development Department.
4.8.7 Interprofessional Education (IPE)

Respondents were asked to report on IPE sessions taking place in their areas. Less than one fifth (17%) reported sessions in their areas. Significant differences in the levels of awareness were reported between the professions ($\chi^2=56.634$, df=10, p= <0.001, n=466, Cramer’s V=0.25), revealing a small to approaching moderate effect and which is represented by the ‘Don’t Know’ column below. Significant differences were also revealed between the professions and being motivated to work as part of a team with 39% (n=176) reported being motivated ($\chi^2=67.002$, df= 20, p= <0.001, n= 454, Cramer’s V=0.19), revealing a small effect as outlined in Table 4-13 below:

<table>
<thead>
<tr>
<th>Profession</th>
<th>Interprofessional Education Sessions</th>
<th>Motivated to work with other team members</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n)</td>
<td>%</td>
</tr>
<tr>
<td>GP</td>
<td>23</td>
<td>13</td>
</tr>
<tr>
<td>PN</td>
<td>13</td>
<td>20</td>
</tr>
<tr>
<td>PHN</td>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td>PHYSIO</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>OT</td>
<td>8</td>
<td>24</td>
</tr>
<tr>
<td>SLT</td>
<td>2</td>
<td>8</td>
</tr>
</tbody>
</table>

($\chi^2=56.634$, df=10, p= <0.001, n=466, Cramer’s V=0.25), ($\chi^2=67.002$, df= 20, p= <0.001, n= 454, Cramer’s V=0.19)

Table 4-13: Levels of IPE Session Awareness & Motivation to Work with other Team Members by Profession

These professional differences highlight a similarity between GP’s, PN’s and SLT’s appearing to report similarly lower levels across team membership, training and IPE awareness. The GP’s and SLT’s also share similarly low levels of perceived motivation to work with other team members.
4.8.8 Innovations

The respondents were asked if they were aware of any new innovative ways of working in their team areas, with 21% (n=97) of respondents reporting being aware of such innovations; while 79% (n=375) are not aware of any such changes. Of those who are aware, 43% (n=43) state they are involved in such initiatives. An open question asked respondents to list any team initiatives they were aware of; those reported included the Falls Prevention Programme, Smoking Cessation, Diabetes Education, Parkinson’s Group, Pain Management and Post Natal Classes. The most frequently cited was the Falls Prevention Programme run jointly by the physiotherapists and occupational therapists.

4.8.9 Clinical Team Meetings

Overall attendance at clinical team meetings is reported with 61% (n=298). Chi² analysis reveals a significant difference between the ISA’s and attending clinical team meetings, Area A (67%), Area B (64%) and Area C (52%) ($\chi^2=7.151$, df=2, p=0.028, n=484). This reflects the findings in terms of team membership with Area A having the highest reported membership and Area C the lowest.

A Mann-Whitney U Test reveals a significant difference between meeting attendance and collaborative behaviour scores, attending meetings (Md= 3.86, n=288) and those who do not (Md=3.29, n= 175), U= 13633, z=8.301, p=<0.001, r=.35, revealing a moderate effect.

4.8.10 Barriers to Attending Team Meetings

Scheduled recorded meetings are currently the defining measurement of an ‘operating team’ as described by the HSE. However 40% (n=187) of respondents reported not attending team meetings. The most frequently cited barrier was having no time to attend due to caseload (n=231), with Chi² analysis revealing significant differences between the professions and levels of perceived barriers as outlined in Table 4-14 overleaf:
### Table 4-14: Perceived Barriers to Team Meetings & by Profession

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Overall</th>
<th>GP</th>
<th>PN</th>
<th>PHN</th>
<th>PHYSIO</th>
<th>OT</th>
<th>SLT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conflict with my schedule***</td>
<td>45</td>
<td>71</td>
<td>30</td>
<td>31</td>
<td>33</td>
<td>15</td>
<td>32</td>
</tr>
<tr>
<td>No time to attend meetings***</td>
<td>48</td>
<td>62</td>
<td>30</td>
<td>48</td>
<td>31</td>
<td>33</td>
<td>52</td>
</tr>
<tr>
<td>Inconvenient location**</td>
<td>16</td>
<td>24</td>
<td>14</td>
<td>11</td>
<td>8</td>
<td>6</td>
<td>28</td>
</tr>
<tr>
<td>No financial compensation***</td>
<td>28</td>
<td>48</td>
<td>33</td>
<td>13</td>
<td>4</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>Not aware of team meetings***</td>
<td>12</td>
<td>8</td>
<td>36</td>
<td>4</td>
<td>16</td>
<td>9</td>
<td>16</td>
</tr>
<tr>
<td>No barriers to attending team meetings***</td>
<td>18</td>
<td>7</td>
<td>21</td>
<td>23</td>
<td>28</td>
<td>49</td>
<td>4</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 45.311, \text{df}=5, p=<0.001, n=477 \]

***p=<0.001, **p=<0.001, *p=<0.05

**Table 4-14: Perceived Barriers to Team Meetings & by Profession**

#### 4.8.11 Comparing Organisational Supports across ISAs

Table 4-15 overleaf highlights differences in organisational supports (team leaders, rotating leadership, used of standardised care plans, sharing of patient records, percentage of patients and family-level team meetings) across the ISA’s. Chi2 analyses were used to determine significant differences in reporting on organisational support variables across ISA’s:
<table>
<thead>
<tr>
<th>ISA</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes (%)</td>
<td>No (%)</td>
<td>Yes (%)</td>
<td>No (%)</td>
</tr>
<tr>
<td>Designated Team Leader</td>
<td>83</td>
<td>17</td>
<td>37</td>
<td>63</td>
</tr>
<tr>
<td>Rotating leadership</td>
<td>90</td>
<td>10</td>
<td>28</td>
<td>72</td>
</tr>
<tr>
<td>IPTW Training</td>
<td>34</td>
<td>66</td>
<td>14</td>
<td>86</td>
</tr>
<tr>
<td>Clinical team meeting</td>
<td>67</td>
<td>33</td>
<td>64</td>
<td>36</td>
</tr>
<tr>
<td>attendance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monthly Meetings</td>
<td>68</td>
<td>32</td>
<td>73</td>
<td>27</td>
</tr>
<tr>
<td>Specific case meetings</td>
<td>62</td>
<td>38</td>
<td>39</td>
<td>61</td>
</tr>
<tr>
<td>Family meetings</td>
<td>76</td>
<td>24</td>
<td>43</td>
<td>57</td>
</tr>
<tr>
<td>Standardised care plan</td>
<td>60</td>
<td>40</td>
<td>41</td>
<td>59</td>
</tr>
<tr>
<td>use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared Care plans</td>
<td>23</td>
<td>77</td>
<td>16</td>
<td>84</td>
</tr>
<tr>
<td>Multiple team membership</td>
<td>40</td>
<td>60</td>
<td>22</td>
<td>78</td>
</tr>
</tbody>
</table>

Table 4-15: Statistical Differences in Organisational Supports across ISAs

However, a Kruskal-Wallis test reveals no significant differences in the levels of perceived collaborative behaviour scores achieved across the three ISA’s (Area A, n= 107, Area B, n= 232, Area C, n=128), $\chi^2$ (2, n=467)=.979, p=.613. Median scores are identical in Area A and B (Md= 3.71) with Area C (Md= 3.57).

The literature suggests these support variables are key issues for enabling teamwork. However using this particular analytical method, scores do not appear
to have been significantly impacted by these factors when analysed at the integrated service area level. It may be that the resources and supports are present at ineffective levels in the workplace so that they have not made a meaningful impact to teamworking over time thus far.

4.9 Other Potential Interprofessional Teamwork Factors

4.9.1 Perceived Hierarchical Status

Respondents were asked if they perceived there to be hierarchical status differences within the team depending on discipline with over half of the respondents reporting perceived differences in hierarchy. The teamwork literature reveals that hierarchical culture in healthcare is considered one of the greatest obstacles for teamwork. Reeves et al. (2010) outline power and hierarchy as a relational factor which affects interprofessional working. It is therefore a possible barrier within the Irish context. The potential that perceived hierarchical status could influence collaborative behaviour scores was tested using Spearman’s rho correlation coefficient which revealed a negative correlation with small effect. This test was repeated (GP vs. other professions) revealing a marginally higher negative correlation but the effect remained small. This is reported in Table 4-16 below:

<table>
<thead>
<tr>
<th>Profession</th>
<th>Hierarchical Status Differences between Disciplines (n) %</th>
<th>Spearman’s rho</th>
<th>Shared Variance %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Undecided</td>
</tr>
<tr>
<td>Overall</td>
<td>(182)</td>
<td>(148)</td>
<td>(109)</td>
</tr>
<tr>
<td>GP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All other professions</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4-16: Spearman’s rho correlation between Measures of Hierarchical differences between Discipline and overall Collaborative Behaviour, and between GPs and other Team Members
The literature also suggests that more contemporary less hierarchical healthcare models are perceived as a threat to medical dominance, while other NMHPs are anxious to expand their roles within such teams. Within the Irish context the power sharing teamwork model introduced by the HSE, could be considered a barrier to engaging in teamwork by GPs. The relationship between perceived hierarchical status and collaborative behaviour was tested (GP v. NMHP groups) in order to determine if such changes are considered a perceived barrier and impact negatively on perceived collaborative behaviour scores. To do so the values observed are assessed to prove the probability that the difference in the correlations observed for the two groups was not a function of a sampling error but were statistically different from each other (please see appendix 8 for details of Zobs calculations). If the $Z_{obs}$ value is $\leq -1.96$ or $Z_{obs}$ value is $\geq 1.96$: coefficients are statistically significant. In this case the score was -0.21, therefore perceived hierarchical status does not explain significantly more variance in GP’s collaborative behaviour than that of the other professions. However the analysis does reveal that the perceived presence of a hierarchical status structure within the team structure is negatively associated with levels collaborative behaviour across the professions (please refer to appendix 8 for details of $Z_{obs}$ calculation).

### 4.9.2 Motivation, Benefits & Belief in Teamwork

The relationships between motivation to teamwork and perceived benefits of and belief in teamwork were investigated using Spearman’s rho correlation coefficient. There was a strong positive correlation between motivation and the perceived benefits of ($r=0.51$, $n=360$, $p<0.001$) and belief ($r=0.41$, $n=455$, $p<0.001$) in teamwork. Also a strong positive correlation was revealed between the perceived benefits of teamwork and belief in teamwork ($r=0.67$, $n=370$, $p<0.001$) indicating higher levels of motivation are associated with higher levels of perceived benefits of and belief in teamwork and higher levels of perceived benefits is strongly associated with higher levels of belief in teamwork. The coefficient of determination was calculated to reveal shared variance with motivation explaining 26% of the variance of respondent’s scores on the perceived benefits of teamwork and 17% of the perceived belief in teamwork scores. Perceived benefits explained 44% of the variance in respondent’s perceived belief in teamwork scores as outlined in Table 4-17 overleaf:
4.9.3 Benefits, Beliefs & Collaborative Behaviour

The overall mean scores in terms of the Benefits of, Belief in Teamwork and Collaborative Behaviour on a scale of 1-5 (low-high) are 3.2, 3.6 and 3.6 respectively. The scores by profession reflect perceived professional differences as outlined in Table 4-18 below:

<table>
<thead>
<tr>
<th>Profession</th>
<th>Mean Benefit Score</th>
<th>Mean Belief Score</th>
<th>Mean Collaborative Behaviour Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>GP</td>
<td>2.55</td>
<td>3.19</td>
<td>3.36</td>
</tr>
<tr>
<td>PN</td>
<td>3.70</td>
<td>3.98</td>
<td>3.69</td>
</tr>
<tr>
<td>PHN</td>
<td>3.57</td>
<td>3.71</td>
<td>3.84</td>
</tr>
<tr>
<td>PHY</td>
<td>3.49</td>
<td>3.71</td>
<td>3.78</td>
</tr>
<tr>
<td>OT</td>
<td>3.58</td>
<td>3.92</td>
<td>3.69</td>
</tr>
<tr>
<td>SLT</td>
<td>3.07</td>
<td>3.77</td>
<td>3.53</td>
</tr>
</tbody>
</table>

Table 4-18: Benefits of, Belief in and Collaborative Behaviour Scores by Profession

GP’s score the lowest across all three variables with SLT’s again reporting lower scores than that of their allied health professional colleagues.

4.9.4 Benefits of being part of an Interprofessional Team & Collaborative Behaviour

The relationship between perceived benefits of teamwork and perceived collaborative behaviour is investigated using Spearman’s rho correlation coefficient. There is a strong positive correlation between the two variables (r = .51, n = 370, p = <0.001), with perceived higher levels of perceived benefits associated
with higher perceived collaborative behaviour scores. This explains 26% of the variance in perceived collaborative behaviour scores.

4.9.5 Benefits of being part of an Interprofessional Team & Collaborative Behaviour by Gender

As previously outlined a statistically significant relationship is reported between the perceived benefits variable and the perceived collaborative behaviour variable. A Spearman’s rho correlation coefficient reveals that when investigated by gender, the correlation between benefits of being part of a team and collaborative behaviour illustrates a higher correlation for females, $r=.53$ (female), $r=.36$ (male). The hypothesis that gender is significant in the relationship between perceived benefits and perceived collaborative behaviour is tested. To investigate this hypothesis, the values observed were assessed to prove that the probability that the difference in the correlations observed for the two groups was not a function of a sampling error but were statistically significantly different from each other (please appendix 9 for details of $Z_{obs}$ calculations).

If the $Z_{obs}$ value is $\leq -1.96$ or $Z_{obs}$ value is $\geq 1.96$: coefficients are statistically significant. In this case the score was -2.566. Therefore perceived benefits explain significantly more variance in perceived collaborative behaviour for females than males.

4.9.6 Belief in Interprofessional Teamwork & Collaborative Behaviour

The relationship between perceived belief in IPTW and perceived collaborative behaviour was investigated using Spearman’s correlation coefficient. There was a moderate positive correlation between the two variables, $(r=.36, n=467, p<0.001)$, with perceived higher levels of perceived benefits associated with higher perceived collaborative behaviour scores. This explains 13% of the variance in perceived collaborative behaviour.

4.9.7 Exploring the Relationships between Benefits, Beliefs and Collaborative Behaviour

In order to test influences on the relationships between benefits and beliefs with collaborative behaviour each was tested while controlling for the other factor.
Controlling for Beliefs: partial correlation was used to explore the relationships between perceived belief (belief scale) and collaborative behaviour (collaborative behaviour scale) while controlling for scores on the perceived benefits scale. There was a positive partial correlation between perceived benefits and collaborative behaviour, controlling for perceived belief, (r=.39, n= 367, p= <.001), with higher levels of perceived benefits associated with higher levels of perceived collaborative behaviour. An inspection of the zero order correlation (r= .524) suggested that controlling for belief did reduce the strength of the correlation but the relationship still remained significant (p= <0.001), suggesting that perceived beliefs had little effect on the strength of the relationship between benefits and collaborative behaviour scores.

Controlling for Benefits: partial correlation was used to explore the relationships between perceived belief (belief scale) and collaborative behaviour (collaborative behaviour scale) while controlling for scores on the perceived benefits scale. There was no partial correlation between perceived belief and collaborative behaviour, controlling for perceived benefits, (r=.022, n= 455, p= .67). An inspection of the zero order correlation (r= .37) suggests that controlling for benefits did reduce the strength of the relationship significantly and that perceived benefits has a large effect on the strength of the relationship between these two variables. The strength of relationship between perceived benefits and perceived collaboration is more significant than the relationship recorded between perceived beliefs and collaborative behaviour. This is summarised in Table 4-19 overleaf:
### Correlations & Partial Correlations for Benefits, Belief & Collaborative Behaviour

<table>
<thead>
<tr>
<th>Scale</th>
<th>Collaborative Behaviour</th>
<th>Benefits</th>
<th>Beliefs</th>
<th>CB (Controlling for Belief)</th>
<th>CB (Controlling for Benefits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaborative Behaviour</td>
<td></td>
<td>.524**</td>
<td>.370**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>p=&lt;0.001</td>
<td>p=&lt;0.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benefits</td>
<td></td>
<td>-</td>
<td>.671**</td>
<td></td>
<td>.399**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>p=&lt;0.001</td>
<td></td>
<td>p=&lt;0.001</td>
</tr>
<tr>
<td>Beliefs</td>
<td></td>
<td>-</td>
<td></td>
<td>.022</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>p=.676</td>
</tr>
</tbody>
</table>

***p=<0.001, **p=0.01, *p=0.05

**Table 4-19: Correlations & Partial Correlations for Benefits, Belief & Collaborative Behaviour**

#### 4.9.8 Benefit, Belief & Collaborative Behaviour: Professional Differences

The strength of relationship between the benefits and belief scales in relation to collaborative behaviour is investigated by profession using Spearman’s rho correlation coefficient. Table 4-20 overleaf provides a visual outline of the differing levels of strength in relationship as perceived by the professions:
Regression Analysis

The second research question underpinning this study seeks to establish what are the possible facilitators or barriers to interprofessional working. Furthermore one of the objectives is to explore perceived professional differences to teamworking. The questionnaire outlines many potential factors of influence. These are tested using regression analysis. The perceived benefits and beliefs in interprofessional teamworking and other potentially influential factors are tested to assess their predictive strength in terms of facilitating or hindering teamworking. Regression analysis was used to test the following research questions:

- Can either benefits or belief predict collaborative behaviour?
- Do other factors known to be related to teamwork, predict collaborative behaviour?
- Does the level of collaborative behaviour explained by benefits and beliefs vary by profession?

<table>
<thead>
<tr>
<th>Scale</th>
<th>Profession</th>
<th>Collaborative Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefits</td>
<td>GP</td>
<td>.36**</td>
</tr>
<tr>
<td></td>
<td>PN</td>
<td>.63**</td>
</tr>
<tr>
<td></td>
<td>PHN</td>
<td>.59**</td>
</tr>
<tr>
<td></td>
<td>PHYSIO</td>
<td>.37**</td>
</tr>
<tr>
<td></td>
<td>OT</td>
<td>.49**</td>
</tr>
<tr>
<td></td>
<td>SLT</td>
<td>-.19**</td>
</tr>
<tr>
<td>Belief</td>
<td>GP</td>
<td>.37**</td>
</tr>
<tr>
<td></td>
<td>PN</td>
<td>.25**</td>
</tr>
<tr>
<td></td>
<td>PHN</td>
<td>.46**</td>
</tr>
<tr>
<td></td>
<td>PHYSIO</td>
<td>.37**</td>
</tr>
<tr>
<td></td>
<td>OT</td>
<td>-.04**</td>
</tr>
<tr>
<td></td>
<td>SLT</td>
<td>.15</td>
</tr>
</tbody>
</table>

***p=<0.001, **p=0.01, *p=0.05

Table 4-20: Spearmans’ rho correlation coefficient between Measures related to Collaborative Behaviour by Profession

4.10 Regression Analysis

The second research question underpinning this study seeks to establish what are the possible facilitators or barriers to interprofessional working. Furthermore one of the objectives is to explore perceived professional differences to teamworking. The questionnaire outlines many potential factors of influence. These are tested using regression analysis. The perceived benefits and beliefs in interprofessional teamworking and other potentially influential factors are tested to assess their predictive strength in terms of facilitating or hindering teamworking. Regression analysis was used to test the following research questions:

- Can either benefits or belief predict collaborative behaviour?
- Do other factors known to be related to teamwork, predict collaborative behaviour?
- Does the level of collaborative behaviour explained by benefits and beliefs vary by profession?
4.10.1 Standard Multiple Regression

Figure 4-1 below is a visual representation of the model below:

![Diagram of Standard Multiple Regression Model]

**Figure 4-1: Standard Multiple Regression Model**

Standard multiple regression was used to assess the ability of the two independent variables (Benefits and Belief sub-scales) to predict levels of collaborative behaviour. Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity and homoscedasticity. Correlations ranged from .37 to .68. The two control measures explained 27.4% of the variance, of these two variables only one, Benefits makes a significant contribution \( (F(2, 367) = 69.42, p<0.001) \). Table 4-21 below provides detailed results from this initial regression model:

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>β</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>2.491</td>
<td>.119</td>
<td>20.913</td>
<td>.000</td>
</tr>
<tr>
<td>Benefits of</td>
<td>.330</td>
<td>.04</td>
<td>.51</td>
<td>8.34</td>
</tr>
<tr>
<td>Beliefs in</td>
<td>.018</td>
<td>.04</td>
<td>.03</td>
<td>.42</td>
</tr>
<tr>
<td>F=69.420</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p=&lt;0.001</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tolerance=</td>
<td>.536</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIF=</td>
<td>1.866</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( R^2 )=</td>
<td>.274</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted ( R^2 )=</td>
<td>.271</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 4-21: Regression Model Predictors of Collaborative Behaviour**
4.10.2 Hierarchical Regression

Following on from the initial regression analysis, hierarchical regression was used to evaluate the ability of the model to predict (which includes Benefits and Belief) collaborative behaviour scores, after controlling for a number of additional variables. Figure 4-2 below presents a visual representation of the hierarchical regression model:

![Hierarchical Regression Model](image)

Hierarchical multiple regression was used to assess the ability of the two independent variables to predict levels of collaborative behaviour after controlling for the influence of age, gender, PC education, worked abroad and specific IPTW training. Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity, and homoscedasticity. Some correlations were noted to be below Pallant’s (2010) recommended figures of 0.3 as outlined in Table 4-22 overleaf:
Correlation coefficients (r) for potential independent variables with CB

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th>Gender</th>
<th>PC Education</th>
<th>Worked Abroad</th>
<th>IPTW Training</th>
<th>Benefits</th>
<th>Beliefs</th>
</tr>
</thead>
<tbody>
<tr>
<td>-.65</td>
<td>.206</td>
<td>-.115</td>
<td>.009</td>
<td>-.185</td>
<td>.390</td>
<td>.356</td>
<td></td>
</tr>
</tbody>
</table>

Table 4-22: Correlation Coefficients for Potential Independent Variables with Collaborative Behaviour

Hierarchical regression was first conducted for the sample as a whole, as outlined in Table 4-23 overleaf:
<table>
<thead>
<tr>
<th>Block</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>β</td>
<td></td>
</tr>
<tr>
<td>Block 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>2.82</td>
<td>2.94</td>
<td>9.607</td>
<td>.000</td>
</tr>
<tr>
<td>Age</td>
<td>.000</td>
<td>.004</td>
<td>-.006</td>
<td>-.114</td>
</tr>
<tr>
<td>Gender</td>
<td>.47</td>
<td>.094</td>
<td>.270</td>
<td>4.936</td>
</tr>
<tr>
<td>F= 14.408</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tolerance = .899</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²= .074</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p= &lt;0.001</td>
<td>VIF = 1.112</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>3.495</td>
<td>.381</td>
<td>9.164</td>
<td>.000</td>
</tr>
<tr>
<td>Age</td>
<td>-.001</td>
<td>.004</td>
<td>-.010</td>
<td>-.182</td>
</tr>
<tr>
<td>Gender</td>
<td>.427</td>
<td>.096</td>
<td>.247</td>
<td>4.434</td>
</tr>
<tr>
<td>PC Ed</td>
<td>-.132</td>
<td>.080</td>
<td>-.086</td>
<td>-1.651</td>
</tr>
<tr>
<td>Worked</td>
<td>.055</td>
<td>.101</td>
<td>.029</td>
<td>.544</td>
</tr>
<tr>
<td>Abroad</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPT training</td>
<td>-.269</td>
<td>.098</td>
<td>-.141</td>
<td>-2.751</td>
</tr>
<tr>
<td>F= 8.380</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tolerance = .806 to .952</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²= .105</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p= &lt;0.001</td>
<td>VIF = 1.051 to 1.241</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>2.608</td>
<td>.356</td>
<td>7.329</td>
<td>.000</td>
</tr>
<tr>
<td>Age</td>
<td>.002</td>
<td>.004</td>
<td>.022</td>
<td>.450</td>
</tr>
<tr>
<td>Gender</td>
<td>.203</td>
<td>.089</td>
<td>.187</td>
<td>2.282</td>
</tr>
<tr>
<td>PC Ed</td>
<td>-.110</td>
<td>.071</td>
<td>-.072</td>
<td>-1.548</td>
</tr>
<tr>
<td>Worked</td>
<td>-.058</td>
<td>.090</td>
<td>.030</td>
<td>.645</td>
</tr>
<tr>
<td>Abroad</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPT training</td>
<td>-.92</td>
<td>.089</td>
<td>.048</td>
<td>1.036</td>
</tr>
<tr>
<td>Benefits</td>
<td>.303</td>
<td>.042</td>
<td>.465</td>
<td>7.256</td>
</tr>
<tr>
<td>Belief</td>
<td>.014</td>
<td>.043</td>
<td>.020</td>
<td>.327</td>
</tr>
<tr>
<td>F= 21.144</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tolerance = .483 to .910</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²= .294</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p= &lt;0.001</td>
<td>VIF = 1.074 to 2.070</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R²= .28</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4-23: Hierarchical Regression Model of Predictors of Collaborative Behaviour
Age and Gender were entered in block one, explaining 6.9% of the variance. PC Education, Worked Abroad, IDTW training were added in block 2, explaining 9.3% of the variance in collaborative behaviour. After entry of the Benefits and the Belief variables in block 3 the total variance explained by the model as a whole is 28%, F (7, 362) = 21.14, p=<0.001. These two variables explain an additional 19% of the variance in collaborative behaviour, after controlling for age, gender, PC education, Worked Abroad and specific IPTW training R squared change= .19, F change (2, 355) = 47.56, p= <0.001. In the final model, while gender reaches significance, its contribution to the model is low, overall 28% of the variance is explained, with the benefits scale making the most statistically significant and highest beta value (.47, p=<0.001).

4.10.3 Hierarchical Regression: By Professional Grouping

The analysis was repeated by professional groupings (GP, Nursing and All Others) and revealed differences in the levels of variance explained by each model. Tables 4-24, 4-25, 4-26 provides detailed results overleaf:
<table>
<thead>
<tr>
<th>Block</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>β</td>
<td></td>
</tr>
<tr>
<td>Block 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>2.89</td>
<td>.49</td>
<td>5.88</td>
<td>.000</td>
</tr>
<tr>
<td>Age</td>
<td>.00</td>
<td>.01</td>
<td>.000</td>
<td>.002</td>
</tr>
<tr>
<td>Gender</td>
<td>.35</td>
<td>.16</td>
<td>.21</td>
<td>2.23</td>
</tr>
<tr>
<td>F= 2.769</td>
<td>Tolerance = .899</td>
<td>R² = .042</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p= .67</td>
<td>VIF = 1.112</td>
<td>Adjusted R² = .027</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>4.08</td>
<td>.07</td>
<td>5.88</td>
<td>.000</td>
</tr>
<tr>
<td>Age</td>
<td>-.001</td>
<td>.01</td>
<td>.01</td>
<td>.09</td>
</tr>
<tr>
<td>Gender</td>
<td>.33</td>
<td>.16</td>
<td>.19</td>
<td>2.14</td>
</tr>
<tr>
<td>PC Ed</td>
<td>-.14</td>
<td>.15</td>
<td>-.08</td>
<td>-.94</td>
</tr>
<tr>
<td>Worked Abroad</td>
<td>.03</td>
<td>.16</td>
<td>.02</td>
<td>.21</td>
</tr>
<tr>
<td>IPT training</td>
<td>-.55</td>
<td>.27</td>
<td>-.18</td>
<td>-2.06</td>
</tr>
<tr>
<td>F= 2.228</td>
<td>Tolerance = .823 to .991</td>
<td>R² = .084</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p= .06</td>
<td>VIF = 1.009 to 1.215</td>
<td>Adjusted R² = .046</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>3.28</td>
<td>.71</td>
<td>4.63</td>
<td>.000</td>
</tr>
<tr>
<td>Age</td>
<td>.00</td>
<td>.01</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Gender</td>
<td>.21</td>
<td>.15</td>
<td>.12</td>
<td>1.42</td>
</tr>
<tr>
<td>PC Ed</td>
<td>-.11</td>
<td>.14</td>
<td>-.07</td>
<td>-.8</td>
</tr>
<tr>
<td>Worked Abroad</td>
<td>-.01</td>
<td>.15</td>
<td>-.003</td>
<td>-0.4</td>
</tr>
<tr>
<td>IPT training</td>
<td>-.44</td>
<td>.25</td>
<td>-.15</td>
<td>-1.77</td>
</tr>
<tr>
<td>Benefits</td>
<td>.18</td>
<td>.78</td>
<td>.25</td>
<td>2.32</td>
</tr>
<tr>
<td>Belief</td>
<td>.11</td>
<td>.08</td>
<td>.15</td>
<td>1.38</td>
</tr>
<tr>
<td>F= 4.626</td>
<td>Tolerance = .552 to .981</td>
<td>R² = .213</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p = &lt;0.001</td>
<td>VIF = 1.019 to 1.19</td>
<td>Adjusted R² = .167</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4-24: Hierarchical Regression of Predictors by Profession (GPs)
Age and gender were entered in block 1 explaining 4% of the variance. After entry of primary care education, worked abroad and IPTW training in block 2 the total variance explained by the model as a whole was 8.4% $F(5, 122)= 2.23, p=.06$. While these measures explain an additional 4.1% of the variance in perceived collaborative behaviour $r$ squared change =.41, $F$ change $(3, 122) = 1.831, p=.15$ the model did not reach statistical significance. After entry of variables in block 3 the total variance explained by the model as a whole was 21.3% $F(7, 120) = 4.626, p=<0.001$. the two control measures of benefits and beliefs explained an additional 13% of the variance in collaborative behaviour after controlling for the other measures, responding $r$ squared change= .13, $F$ change $(2, 120)= 9.82, p= <0.001$. In the final model one of the control measures was statistically significant with the benefits scale recording a significant beta value (.26, $p=.02$).
<table>
<thead>
<tr>
<th>Block</th>
<th>B</th>
<th>Std. Error</th>
<th>β</th>
<th>t</th>
<th>Sig.</th>
<th>F</th>
<th>Tolerance</th>
<th>R²</th>
<th>Adjusted R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.52</td>
<td>.34</td>
<td></td>
<td>10.52</td>
<td>.000</td>
<td>.652</td>
<td>1.0</td>
<td>.005</td>
<td>-.002</td>
</tr>
<tr>
<td>Age</td>
<td>.01</td>
<td>.01</td>
<td>.07</td>
<td>.82</td>
<td>.42</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>3.99</td>
<td>.56</td>
<td></td>
<td>7.12</td>
<td>.000</td>
<td>1.02</td>
<td>.927 to .995</td>
<td>.026</td>
<td>.001</td>
</tr>
<tr>
<td>Age</td>
<td>.01</td>
<td>.01</td>
<td>.07</td>
<td>.82</td>
<td>.42</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PC Ed</td>
<td>-.12</td>
<td>.13</td>
<td>-.08</td>
<td>-.96</td>
<td>.34</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worked Abroad</td>
<td>.01</td>
<td>.19</td>
<td>.01</td>
<td>.09</td>
<td>.96</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPT training</td>
<td>-.18</td>
<td>.14</td>
<td>-.11</td>
<td>-1.28</td>
<td>.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>2.61</td>
<td>.49</td>
<td></td>
<td>5.38</td>
<td>.000</td>
<td>16.843</td>
<td>.440 to .984</td>
<td>.425</td>
<td>.399</td>
</tr>
<tr>
<td>Age</td>
<td>.01</td>
<td>.01</td>
<td>.13</td>
<td>1.89</td>
<td>.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PC Ed</td>
<td>-.14</td>
<td>.09</td>
<td>-.09</td>
<td>-1.46</td>
<td>.15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worked Abroad</td>
<td>-.12</td>
<td>.15</td>
<td>-.06</td>
<td>-0.84</td>
<td>.40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPT training</td>
<td>-.06</td>
<td>.11</td>
<td>-.38</td>
<td>-.56</td>
<td>.57</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benefits</td>
<td>.50</td>
<td>.06</td>
<td>.78</td>
<td>8.08</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belief</td>
<td>-.15</td>
<td>.07</td>
<td>-.22</td>
<td>-2.23</td>
<td>.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4-25: Hierarchical Regression of Predictors by Profession
(Nursing)
Age and gender were entered in block 1 explaining 0.5% of the variance in perceived collaborative behaviour. After entry of primary care education, worked abroad and IPTW training in block 2 the total variance explained by the model as a whole was 2.9% \( F(4, 139) = 1.021, p = .40 \), explaining an additional 2.4% of the variance in collaborative behaviour responding \( r \) squared change \( .024 \) \( F \) change \( (3, 139) = 1.14, p = .34 \). After entry of benefits and beliefs in block 3 the total variance explained by the model as a whole was 42.5%, \( F(6, 137) = 16.843, p < .001 \). The additional control measures explained a further 40% of the variance in collaborative behaviour after controlling for the other measures \( r \) squared change \( = .40 \), \( F \) change \( (2,137) = 47.13, p < .001 \). In the final model only two control measures reached statistical significance, with the benefits scale recording a higher beta value (beta= .78, \( p < .001 \)) than the belief scale (-.22, \( p = .03 \)).
<table>
<thead>
<tr>
<th>Block 1</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.78</td>
<td>.55</td>
<td>6.84</td>
<td>.000</td>
</tr>
<tr>
<td>Age</td>
<td>-.01</td>
<td>.01</td>
<td>-.12</td>
<td>-1.17</td>
</tr>
<tr>
<td>Gender</td>
<td>.14</td>
<td>.23</td>
<td>.07</td>
<td>.63</td>
</tr>
<tr>
<td>F= .95</td>
<td><strong>Tolerance</strong> = .994</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p=.39</td>
<td><strong>VIF</strong> = 1.01</td>
<td></td>
<td></td>
<td><strong>Adjusted R^2</strong> = -.001</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Block 2</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>4.73</td>
<td>.77</td>
<td>6.12</td>
<td>.000</td>
</tr>
<tr>
<td>Age</td>
<td>-.01</td>
<td>.01</td>
<td>-.18</td>
<td>-1.73</td>
</tr>
<tr>
<td>Gender</td>
<td>.17</td>
<td>.23</td>
<td>.08</td>
<td>.75</td>
</tr>
<tr>
<td>PC Ed</td>
<td>-.34</td>
<td>.17</td>
<td>-.22</td>
<td>-2.01</td>
</tr>
<tr>
<td>Worked Abroad</td>
<td>-.01</td>
<td>.24</td>
<td>-.002</td>
<td>-.02</td>
</tr>
<tr>
<td>IPT training</td>
<td>-.13</td>
<td>.16</td>
<td>-.09</td>
<td>-.82</td>
</tr>
<tr>
<td>F= 1.66</td>
<td><strong>Tolerance</strong> = .848 to .979</td>
<td></td>
<td></td>
<td><strong>R^2</strong> = .089</td>
</tr>
<tr>
<td>p= .15</td>
<td><strong>VIF</strong> = 1.021 to 1.179</td>
<td></td>
<td></td>
<td><strong>Adjusted R^2</strong> = .036</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Block 3</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.55</td>
<td>.84</td>
<td>4.22</td>
<td>.000</td>
</tr>
<tr>
<td>Age</td>
<td>-.01</td>
<td>.01</td>
<td>-.15</td>
<td>-1.41</td>
</tr>
<tr>
<td>Gender</td>
<td>.11</td>
<td>.22</td>
<td>.05</td>
<td>.52</td>
</tr>
<tr>
<td>PC Ed</td>
<td>-.22</td>
<td>.16</td>
<td>-.14</td>
<td>-1.30</td>
</tr>
<tr>
<td>Worked Abroad</td>
<td>-.09</td>
<td>.23</td>
<td>-.06</td>
<td>-.84</td>
</tr>
<tr>
<td>IPT training</td>
<td>-.06</td>
<td>.11</td>
<td>-.04</td>
<td>-.43</td>
</tr>
<tr>
<td>Benefits</td>
<td>.22</td>
<td>.09</td>
<td>.29</td>
<td>2.32</td>
</tr>
<tr>
<td>Belief</td>
<td>.05</td>
<td>.08</td>
<td>.07</td>
<td>.59</td>
</tr>
<tr>
<td>F= 2.56</td>
<td><strong>Tolerance</strong> = .631 to .956</td>
<td></td>
<td></td>
<td><strong>R^2</strong> = .178</td>
</tr>
<tr>
<td>p = .02</td>
<td><strong>VIF</strong> = 1.046 to 1.585</td>
<td></td>
<td></td>
<td><strong>Adjusted R^2</strong> = .108</td>
</tr>
</tbody>
</table>

Table 4-26: Hierarchical Regression of Predictors by Profession (All Others: PHYSIO, OT, SLT)
Age and gender were entered in block 1, explaining 2% of the variance in perceived collaborative behaviour. After entry of primary education, worked abroad and IPTW training in block 2 the total variance explained by the model as a whole was 8.9% $f (5, 85)= 1.66, p= .15$. The three additional measures explained a further 6.8% of the variance in collaborative behaviour after controlling for age and gender, responding $r squared change= .068, F change (3, 85) = 2.12, p=.10$. After entry of benefits and beliefs in block 3 the total variance explained by the whole model was 17.8%, $F (7, 83) = 2.36, p=.02$. The two control measures explained an additional 8.8% of the variance in collaborative behaviour after controlling for the other measures, responding $r squared change =.088 F change (2, 83) = 4.46, p=.02$. In the final model the only control measure to reach statistical significance was the benefits scale (beta value= .29, $p=.02$).

The analysis has provided responses for the questions posed:

- The benefits variable predicts and is the strongest predictor of collaborative behaviour across the professional groups, with the belief variable only reaching significance in the nursing group only.
- Of the other factors, gender did reach statistical significance but within the model as a whole failed to reach significance.
- The analysis revealed clear professional differences in terms of the level of variance in collaborative behaviour explained by the benefits scale, with the belief scale explaining a level of variance in the nursing group only.

4.11 Comparing Models

AIC was used to investigate the standard multiple regression and hierarchical models (please see appendix 10 for details). The values indicate that the standard multiple regression is the better fit. However as previously outlined the literature on teamwork clearly refers to the possible influence of the other factors. Research in this area demonstrates these factors do play a role in some team settings. Therefore it was important to explore these issues within the context of this study to ascertain if they were significant in this context.
4.12 Potential Impact for Collaborative Behaviour Scores

The collaborative behaviour score is reported as 3.6. Using the beta value recorded in the standard multiple regression model (beta value=.51) revealed in this study it was possible to calculate that if there was an increase in the Benefits of Teamwork score by one standard deviation unit (SD=1.17), the perceived collaborative work score would be likely to increase by .51 standard deviation units. There is the potential to increase the mean collaborative behaviour score from 3.6 to 4.2, if the benefits of teamwork in the primary healthcare setting were visibly addressed.

4.13 Summary of Findings

4.13.1 Team Membership

A positive relationship between perceived team membership and collaborative behaviour scores was revealed. No significant difference in collaborative behaviour scores were revealed where single or multiple team membership status was reported.

4.13.2 Profession

Profession was significant with GP’s, PN’s and SLT’s reporting highest levels of non-membership of teams, IPTW training and IPE awareness levels. There were also significant differences in collaborative behaviour scores across the professions, with GP’s reporting the lowest scores while PHN’s score the highest. Post-hoc testing revealed that the difference in collaborative behaviour scores of GP’s were significantly different from the Nursing and Allied Health Groups, while scores between the Nursing and Allied Health Group were not.

4.13.3 Gender

Reported membership of primary healthcare teams was more frequently expressed by female than male healthcare professionals. A statistically significant difference is revealed between gender and collaborative behaviour scores with female professionals recording a higher median score. Analysis also revealed that the relationship between the variable ‘benefits of being part of a team’ and collaborative behaviour scores was statistically more significant for the female cohort in this study. Modelling adjusting for other factors showed gender remained a strong predictor of collaborative behaviour.
4.13.4 Perceived Benefits of Teamwork, Belief in Teamwork & Collaborative Behaviour

Adjusting for other factors the perceived benefits of being part of a team remained the strongest predictor of collaborative behaviour. The highest levels of variance in collaborative behaviour were explained by the relationship between Benefits of Teamwork (26%) and Belief in Teamwork (13%). For the other independent variables entered into the models, the levels of variance explained in relation to collaborative behaviour scores varied from 3.2 - 12% only showing small to moderate effects.

4.13.5 Motivation

The analysis revealed statistically significant differences in levels of perceived motivation by profession, with GP’s and SLT’s reporting being less motivated to work with other team members. Furthermore higher levels of reported motivation are positively associated related to the involvement in new innovative teamwork practices. Finally strong positive correlations were revealed between perceived motivation and perceived benefits and beliefs, 27% and 17% respectively. Therefore those who report higher levels of motivation are more likely to positively perceive the benefits of and beliefs in teamwork and be more open to new or novel work practices.

4.13.6 Organisational Supports

Reported levels of organisational supports were low. However organisational factors that are considered to influence to influence levels of teamwork had either no role or a small to approaching moderate role in relation to collaborative behaviour. Where a relationship was revealed in terms of clerical support, analysis also revealed a significant difference in reported clerical support by GP’s, PN’s and SLT’s. No relationship was found between having received specific primary care education and collaborative behaviour. Furthermore interprofessional training had a small effect on collaborative behaviour however adjustments for other factors revealed that training failed to reach significance when ‘perceived benefits of being part of a team’ was introduced in the model. However it did not reach significance when models were conducted by professional grouping.
4.13.7 HSE v. Non-HSE Employment
HSE employees reported team membership more frequently than non-HSE staff. They also reported significantly fewer barriers to attending team meetings than non-HSE employees. They reported having received team training more frequently. However SLT’s who are HSE employees reported the lowest levels of motivation to work with other team members (26%) with only 4% reporting that there were no barriers to teamwork, the lowest across all the professions. Overall the findings indicate there is a level of disparity between the two constituents of the Irish primary healthcare system i.e. General Practice and HSE-led services.

4.13.8 Integrated Service Areas
Reported membership is significantly different across the integrated service areas involved in this study with 89% of participants in Area A reporting team membership, verses Area B (78%) and C (73%). Significantly different levels of organisational supports and resources available to the professions for teamwork were reported, with the highest levels of resources reported in Area A. However no statistical difference was identified between the ISA’s and reported collaborative behaviour.
Chapter Five: Phase One Discussion

“Many countries are now developing primary care services as the cornerstone around which their health services are built. These countries have prepared national strategies that have highlighted the importance of a team-based approach to primary care”

Background (Part 1), Primary Care Strategy (DoHC, 2001(b))

5.1 Introduction

Teamworking is seen as a central component of modern healthcare systems (Fox & Reeves, 2015; Price et al., 2014; Al Sayah, 2014; Curran et al., 2010; Finn et al., 2010; Kvarnström & Cedersund, 2006; D’Amour et al., 2005; Long et al., 2003; Boaden & Leaviss, 2000) with team-based models a major focus within the health and social care literature (West & Lyubovnikova, 2013; Reeves et al., 2010; Shaw et al., 2008; Jansen, 2008; Weaver 2008; Bryar, 2008; Bourgault & Mulvale, 2006; Choi & Pak, 2006; Thylefors et al., 2005; Mc Callin, 2001; Schofield & Amodeo, 1999). Teamworking in the primary healthcare setting is not a new concept (Wiles & Robinson, 1994), however more recent primary healthcare reforms have centred on the development of interprofessional teams for the effective delivery of care (Heath et al., 2015; Oandasan et al., 2009; Moaveni et al., 2008; Bryar, 2008; Shaw et al., 2005, Boaden & Leaviss, 2000). While the rationale behind teamworking is based on the need for a broader knowledge-base and skill set to deal with the growing complex health and social care needs of populations (Ehrlich et al., 2011; Hall & Weaver, 2011; Harris et al., 2010; Thylefors et al., 2005), it is suggested that collaborative practice goes beyond this, requiring a specific set of professional competencies. Yet such competencies cannot be assumed to be inherent of health professionals (Reeves et al., 2010; Suter et al., 2009). Research conducted by Heath et al. (2015) suggests that providing specific interprofessional education may increase the likelihood that professional will work together to effectively meet client needs. Over the last four decades the teamwork literature is peppered with titles such as- ‘Working together in a team for primary health care- a guide to dangerous country’ (Lamberts & Riphagen, 1975), ‘A failure of function: teamwork in primary health care’ (West & Poulton, 1997) and ‘Interdisciplinary
education and teamwork: a long and winding road’ (Hall & Weaver, 2001) which suggests teamworking remains a challenge, conceptually and in practice settings.

The aim of this study is to explore the self-reported levels of IPTW function in primary healthcare teams in Ireland. To consider the level of function achieved the potentially influencing factors such as profession, organisational and practice were examined. In this section the findings of the quantitative phase of the study are discussed. The factors related to collaborative behaviour which underpin teamworking such as profession, organisational structures and processes and collaborative behaviour are explored.

5.2 Collaborative Behaviour

“Successful implementation of the primary care model will require the commitment and support of the various professional providers.....”

Introduction (Part 3), Primary Care Strategy (DoHC, 2001(b))

Bourgault & Mulvale (2006) refer to collaborative models of care as a growing phenomenon which raise a host of issues related to the management of professional boundaries and the contemporary state of medical dominance. This study reveals differences in collaborative behaviour scores across the professions with GP’s reporting the lowest scores by profession. They also reported the lowest scores across the professions on the perceived benefit of and belief in teamwork as measured. When GP’s in Ireland were surveyed by the Irish College of General Practitioners in relation to primary care team function, 65% reported team function to be ‘poor’ (ICGP, 2011). This is reflective of the broader literature where the medical profession is identified as a profession that have particular difficulty with interprofessional working conceptually and in practice (Price et al., 2015; Lancaster et al., 2015; Hoskins, 2011; Maslin-Prothero & Bennion, 2010; Hannson et al., 2008; Selle et al. 2008; Joyce & Casey, 2004; Larivaara & Taanila, 2004) with Mur-Veeman et al. (2001) suggesting that health professionals always interpret shared care models as ‘an infringement of their own culture’ (pg. 146). As statistically significant differences were identified in collaborative behaviour scores further post-hoc analysis revealed that this difference was maintained for the
medical group when the professions were grouped into three more basic groupings (medical, nursing, allied health), while the nursing and allied health professions scores were comparable. As mean collaborative behaviour scores by profession clustered around 3.4-3.9, it suggests that collaborative behaviour is not fully embedded in these value patterns. These results are explored from different theoretical and research-based perspectives in relation to collaborative behaviour.

5.3 Professionalisation

“It is important to note that the new model does not affect in any way the current status of GPs or the professional-patient relationship, with members of the primary care team”.

Background (Part 1), Primary Care Strategy (DoHC, 2001 (b))

With the widespread promotion of teamwork one aspect of teamwork-related research focuses on the relationship dynamic within teams and how that impacts on team development and interprofessional collaboration (Bell et al., 2014, Khalili et al., 2014; Reeves et al., 2010; Kvarnström & Cedersund, 2006, D’Amour et al., 2005; Elston & Holloway, 2001). Richardson & Asthana (2006) assert that ‘profound’ differences in professional cultures exist in the health and social care contexts where professional culture refers to values, beliefs, attitudes, customs and behaviour (Nibset et al., 2015; Rämgård et al., 2015; Hall, 2005; Irvine et al., 2002; Mur-Veeman et al., 2001). There are several aspects to consider related to this subject and its relationship with collaborative behaviour.

5.3.1 Historical Influences

As outlined in Chapter 2 the evolution of other health professions can be traced back to nursing (PHYSIO, OT) and medicine (SLT). Studies that examine aspects of interprofessionality reveal that nursing and other healthcare professions report more positively than their medical colleagues on the topic (Wilhelmsson et al., 2011; Curran et al., 2010; Hansson et al., 2008; Yarborough et al., 2000). It may be that for the non-medical health professions (NMHP) these antecedents’ are of influence in terms of current professional education and have a lasting influence related to the process of professionalisation and practice evolution. Price et al.
(2015) suggests that the historical status and hierarchy among the health professions does little to serve the needs of the public and has been shown to negatively impact professional, patient and organisational outcomes.

### 5.3.2 Professional Identity

Healthcare professions learn their traditional role through the education process of their chosen discipline with minimal contact with other health disciplines during this formative time (Curran et al., 2010; Irvine et al., 2002; Hall & Weaver, 2001). Professionals come to a team with a preconceived understanding of their role and that of other professions which may cause anxiety, tension and ineffectiveness as a interprofessional team (Price et al., 2014; Hall, 2005; Lichtenstein et al., 2004; Riley et al., 2003; Sicotte et al., 2002; Hall & Weaver, 2001; Cook et al., 2001). Drinka & Clarke (2000) suggest that socialisation is an active process of ‘self-concept’ or ‘identity creation’ and outline a system of professional socialisation where students are “inducted, trained and credentialed” (pg. 66), socialising their members into a unique way of thinking and acting with collective values that bind them together as a professional group or discipline with a shared view of their world. Students are influenced by their faculty and this socialisation is continued as they move from formal education to the workplace. Values are defined as the internalised norms and standards of the professional culture which is characteristic of the individuals own behaviour and self-concept. They assert that the different value orientations gained by health professions make a major difference in practice patterns, naming one such practice as possessing the ability to practice collaboratively in decision making. Implicit in the development of unique professional identities and being socialised in relation to specific professional and practice norms, is the notion of being different from other professions.

Professions differed in respect to collaborative behaviour scores in this study. These findings reinforce other research in this area. Examples of early socialisation are reported in a study by Curran et al. (2010) where over a three year period medical students reported significantly lower scores compared to other healthcare students in a survey of attitudes towards interprofessional health care teams. Yarborough et al. (2000) reflect on two aspects of IPE, the different value orientation at faculty level and student perception towards a new interprofessional-based learning programme. The medical faculty exhibited the ‘bulk of institutional resistance’ (pg.
800) to the programme and medical students involved in this programme had a higher percentage of negative responses in the evaluation process than the other healthcare students (physician assistants, nursing, and physical therapy). From within practice settings qualitative studies also reveal that health professionals’ differing philosophical and educational backgrounds challenge IPTW development (Nisbet et al., 2015; Finn et al., 2010; Hansson et al., 2008; Boudioni et al., 2007; Jones, 2006; Elston & Holloway, 2001).

5.3.3 Professional Association
Historically professional associations created a context whereby professions were independent of significant formal control by non-professionals, responsible largely to their own professional associations and to fellow professionals thus remaining largely autonomous (Freidson, 1984). More recently professional associations provide ‘scopes of practice’ again defining who they are and what they do, thus playing a significant role in protecting and advancing their profession-specific interests (Reeves et al., 2010; San Martin-Rodriguez et al., 2005; Hall, 2005; Hudson, 2002; D’Amour et al., 1999). Yet they clearly outline support for IPTW in current policy documents (An Bord Altranais agus Cnamhseachais na hEireann, 2013; College of Nurses Ontario, 2011; Irish Medical Council, 2007; General Medical Council, 2001). Such associations therefore have conflicting roles which may impact on interprofessional teamwork progression.

5.3.4 Professional Status, Hierarchy & Power
Reeves et al., (2010) identify power and hierarchy as relational factors which affect interprofessional teamworking and cite Mackay et al. (1995) who argue that interprofessional activities rest upon the readiness to share power. It is suggested that not only is the hierarchical culture of healthcare one of the greatest obstacles for teamwork (Kearns & Pursell, 2011; Hansson et al., 2008; Bleakley et al., 2006; Shaw et al., 2005; Mur-Veeman et al., 2001) but that healthcare teams tend to reflect, reproduce and perpetuate the traditional divisions of labour, status systems and systems of authority (Irvine et al., 2002, Cott, 1997). Dingwall & McIntosh (1978) assert that as long as equal status, power or prestige is not bestowed on all the professions involved interprofessional practice will remain exigent. The need to remove hierarchical structures is a popular concept in terms of team building but
it may reflect what Lingard et al. (2004) refer to as a naive sense of ‘team’ as a unified entity rather than a collection of individuals with distinct professional identities, based on different models of care, skills, economic circumstances and political agendas. Reeves et al. (2010) reflects on a distinct hierarchy within health and social care where medicine continues to dominate based on its gains from the professionalisation process, and cites Gibbon (1999) who states that suggesting there is equality between team members is not only misleading but patronising. However, Leiba (1994) suggests that doctors are often not to blame as a barrier to interprofessional teamworking, rather that the higher status given to the medical profession is reinforced by other health professionals who adopt a defensive and subordinated position. More recently Nisbet et al. (2015) found that an underlying tension remains between medical and other health professionals and until they are addressed it is unlikely that the professions will be willing to adopt a team identity (McKay & Narasimhan, 2012). Entrenched attitudes about scope of practice, professional ‘turf’ and historical power structures can impair the essence of what teamwork is (Clements et al., 2007; Hall, 2005; Lichtenstein et al., 2004; Hudson, 2002; Abbott, 1988). If interprofessional activities rests upon professional willingness to share power, this study reflects traditional professional boundaries and illustrates that differences in perceived hierarchical status and thus power which may contribute to explaining the differences in collaborative behaviour.

5.3.5 Tradition Role & Role Evolution

The findings revealed that all of the NMHP’s with the exception of the SLT group reported being motivated to work collaboratively more frequently than their GP colleagues. Another aspect to consider is the increasing tendency in the non-medical professions to question the medical dominance over health and illness concerns (Irvine et al., 2002, Cook et al., 2002), specifically in the area of chronic disease management which have strong social and psychological components as well as a medical component (Chan et al., 2011; Johnson et al., 2003). Non-medical professions are eager to enhance their contribution in the care delivery process (Reeves et al., 2010; Richards et al., 2001; McCallin, 2001; McPherson et al., 2001; Temkin-Greener, 1983) and are supported by current health policy trends (Hoskins, 2011). Yet studies reveal professional frustration with the perceived continuance of more traditional roles within interprofessional team structures and processes,
perpetuating the ‘status quo’ rather than pursuing the ‘status-equal’ (Clement et al., 2007; Hall, 2005; Wiles & Robison, 1994). Changes in nurse training programmes and discussion around role development emphasises this issue (Hoskins, 2011; Bourgeault & Mulvale, 2006; Hall, 2005; Elston & Holloway, 2001). Recently, Schadewaldt et al. (2013) compare the very differing attitudes between medical and nursing professionals in relation to the contemporary nurse practitioner role in primary healthcare, with nurses seeking more autonomy and medical practitioners expressing the need for such practitioners to be under their direct supervision. Interestingly a study by Rafferty et al. (2001) which surveyed over 10,000 nursing professionals found a strong positive correlation between teamwork and autonomy and suggests that such autonomy promotes synergism in teamwork rather than conflict. Other studies have explored this aspect of role definition (Kilpatrick et al., 2012; Rodriguez & Pozzebon, 2010; Mur-Veeman et al. 2001; Temkin-Greener, 1983), terminology such as ‘physician-extender’ v. ‘expanded nursing role’ (Kilpatrick et al., 2012; Hoskins, 2011; Hall, 2005) illuminating the dichotomised views on the issue of evolving professional roles within healthcare.

Currently in primary healthcare there are no guidelines regarding the skills of non-physician disciplines might be used differently to co-ordinate care within general practice settings (Ehrlich et al., 2011), yet Barr (1996) suggests that when teams are initiated in the primary healthcare setting, new roles will be created for everyone in the team and should be discussed thoroughly or risk a situation where there will be no change to established practice behaviours. Long et al. (2003) outline that such issues can lead to a level of competition within teams. Reeves et al. (2010) posit that while role evolution may be needed to manage and deliver more complex care, it may also lead to greater fragmentation of care and professional divisions.

In this study 53% of participants perceived there to be a difference in hierarchical status within the team depending on one’s profession. Analysis revealed that this had a negative effect on reported levels of collaborative behaviour as measured, with those who perceive there to be hierarchical status differences reporting lower collaborative behaviour scores. Interprofessional tensions have being found to threaten the delivery of quality healthcare in some settings (Price et al., 2015; Lingard et al., 2004). Campbell et al. (2001) report that diabetic care in general practice settings was improved where better team climate was reported by staff.
They conclude that teamwork is a key factor for the provision of high quality care. This is commensurate with other studies which report teamwork enhances health outcomes in terms of physical markers, perceived quality of care and positive staff experiences (Bower et al., 2003; Borrill et al., 2002; Alhmen et al., 1988). However other research suggests that more evidence is needed in terms of the impact of teamwork processes on patient outcomes (Sims et al., 2015; Hewitt et al., 2015).

5.4 Gender

Alexander et al. (1996) posit that gender diversity is positively related to cohesive team function, in this study however gender was more uniform than diverse (male=27%; female=73%) reflecting the gender balance within Irish healthcare professional associations as previously reported. Bell et al. (2014) suggest that maximising the benefits of interprofessional working in healthcare is hindered by a ‘rigid occupational hierarchy’. The findings in this study revealed that gender was significant in terms of collaborative behaviour and perceptions of the benefits of teamwork, revealing higher levels of team membership and higher collaborative behaviour scores for female professionals. The variable ‘perceived benefits of teamwork’ is identified as a strong predictor of collaborative behaviour and was influenced by gender. Analysis identified a stronger relationship for females in relation to perceived benefits to teamworking than that of their male colleagues. Gender therefore is shown to have a role in team processes and outcome as measured in this study.

Other studies concur with these findings. Borrill et al. (2001) identified gender as an issue which influences teamwork. They suggest that communication expectations differ between men and women. Sex-role stereotyping may exert a negative effect on women in teams and thus women’s own willingness to communicate. They outline that while women dominate in number, men predominate in higher status positions in healthcare settings. In this study 63% of GPs were male; conversely the majority of the other professions were female. Three out of the six professional groups had 100% female representation (PN, PHN, SLT). This is consistent with the findings in the Borrill et al. (2001) study where more women appear to work in this setting but were less well represented in the medical profession. Interestingly Cook and Hutchinson (2001) found that female
GP’s were more likely to favour the view of non-hierarchical interprofessional teams. While other studies found that female GP’s favoured partnerships and group practice arrangements (Mayorova et al., 2005; Boerma et al., 2000). This may be of significance for implementing teamwork models in primary healthcare in Ireland given that 50% of GP’s are female (ICGP, 2013).

Gender differences are also highlighted in relation to healthcare students with female students overall more positive about teamworking (Falk et al., 2015; Wilhelmsson et al., 2011). However the evidence varies, in a follow up evaluation study of interprofessional training, Hylin et al. (2007) found there were no differences when data were analysed by gender or profession. Kilminister et al. (2007) in a review of gender issues in medicine acknowledges there are studies which reveal gender differences but advises caution as gendered expectations may influence reported differences.

5.5 Motivation

“Continuing professional and personal development programmes will be made available to primary care professionals....protected time for study, research and courses within core working time”

Action 16: Action Plan for Implementation (Part 3), Primary Care Strategy (DoHC, 2001 (b))

For the participants in this study a strong positive correlation was found between perceived motivation to work with other team members and being involved in new innovative work practices. Therefore such motivation has the potential to create a synergy in developing new and creative teamwork practices. A study by Poulton & West (1999) concluded that practitioners open to innovation are more likely to work more effectively and be more effective in their delivery of healthcare. Harris et al. (2010) describe how after the implementation of the Team Care Arrangement Programme, participating GP’s felt more confident in referring to other health professionals, however they also reported a lack of incentives to change their culture of independent working. Boudioni et al. (2007) found that the provision of motivation and encouragement was a supportive element for team members,
specifically through new learning and skill acquisition opportunities. There were also statistically significant differences found in the reported levels of motivation between the professions, with GP’s and SLT’s reporting the lowest levels of perceived motivation (30%, 26%). Therefore understanding what motivates different practitioners to work together is of fundamental importance to promote and sustain teamworking. Levels of perceived motivation were also positively correlated to ‘perceived benefits of’ and ‘belief in’ teamwork variables. Furthermore analysis using regression modelling found that the ‘benefits of teamwork’ variable was the strongest predictor of collaborative behaviour.

5.6 Benefits of being part of a Primary Healthcare Team

Professional motivation to work collaboratively is strongly related to perceived benefits of being part of a primary healthcare team. Health professionals will always agree that better quality and patient-centred care are foremost in terms of perceived benefits of teamworking. However perceived benefits also relate to the professions self-interests and are a motivation for implementing collaborative practices (Harris et al., 2010; Boudioni et al., 2007; Mur-Veeman et al., 2001). Weaver et al. (2014) suggest that there are professional benefits where teamworking is supported with training, while West et al. (2012) found professionals in ‘pseudo teams’ reported lower levels of well-being and higher levels of stress.

Contratti et al. (2012) state that resistance to change occurs because those involved do not see the benefits as beneficial, don’t view the benefits as being greater than the sacrifices or aren’t involved in the change process. Murray et al. (2008) found that although primary healthcare professionals expressed support for practice change, they did not clearly understand what this implied. Furthermore they note that in relation to the perceived advantages of a collaborative primary teamwork model, very few of the participants reported on its value to improve patient care; but referred to advantages related to access to other services, administrative and allied health professional support and expense sharing. It is imperative that this aspect of professional motivation is acknowledged and should form an integral part of the planning process for collaborative practice in order to gain and sustain the
co-operation of the health professions involved in the implementation of teamwork models.

Regression analysis revealed that the ‘perceived benefits of teamwork’ variable was the strongest predictor of collaborative behaviour, with differences across professional groups also illuminated. While the level of variance in collaborative behaviour explained in the medical and allied health professions were similar (21%, 18%), the variance in collaborative behaviour explained in the nursing cohort was 42%. Both the PN and PHN group report higher mean scores in relation to the perceived benefits (3.7, 3.6), suggesting they value and perceive there to be significant benefits for nurses to work as part of a team more so than other professions. This is highlighted by Burke & O’Neill (2010) where community nurses in isolated rural parts of Ireland who often work alone, really appreciated the collegial support and being part of a ‘visible’ team (pg. 400), and placed value on the multiplicity of professional knowledge and skills that teamworking offers for patients in the long term (O’Neill & Cowman, 2008).

5.7 Beliefs in Interprofessional Teamworking in Primary Healthcare

The literature suggests that interprofessional working is influenced by professional values, attitudes and beliefs (Tremblay et al., 2010; Jansen, 2008; Hall, 2005; Sicotte et al., 2002). Therefore one of the dimensions the survey sought to measure was professional belief in interprofessional teamwork. Analysis revealed that professional motivation to work collaboratively is strongly related to perceived belief in teamwork in primary care. However, regression analysis revealed that the ‘Belief in Teamworking’ variable does not predict collaborative behaviour, while partial correlation analysis revealed that if practitioners perceive being part of a primary healthcare team to be beneficial, this influences their belief in teamwork, but believing in teamwork does not influence practitioners view on the benefits of being part of a primary care team. Therefore those tangible and non-tangible benefits, incentives and motivational components within the setting are central to creating an environment which will support teamworking for all healthcare professions involved.
5.8 Collaborative Behaviour Scores

The mean score for collaborative behaviour in this study was evaluated using a five-degree scale going from (1) a very negative state to (5) a very positive state. The mean score was 3.6, reflecting a moderate positive state. This echoes the score average of 3.5 reported for intensity of interprofessional collaboration as measured by Sicotte et al. (2002). However they express some disappointment that the level remains under 4, reflecting that interprofessional collaboration has been a central objective for over 25 years in this setting. In Ireland the Primary Care Strategy is in place 14 years with an interprofessional teamworking model a central strategy objective. However the reported length of team membership in this study was 3 years, suggesting the implementation process significantly lagged the policy introduction. A significant statistical difference was found between the professions and collaborative behaviour scores, highlighting professional differences and as Sicotte et al. (2002) suggest, indicating the presence of both professional and interprofessional logics. It is interesting to note that both groups of nurse’s record high collaborative behaviour scores, despite their different workplace contexts (General Practice and HSE) with Public Health Nurses reporting the highest collaborative scores while GP’s report the lowest scores. This is consistent with other research that found while different professional groups vary in their attitudes to teamworking, nurses are more team orientated, while doctors are more individualistic and autonomy-driven (Barrow et al., 2015; Freund & Drach-Zahavy (2007).

In a framework for understanding interprofessional teamwork (Reeves et al., 2010) the concept of team emotion and attachment is considered. Miller et al. (2008), found nurses to be strongly influenced by emotion in terms of their interprofessional teamworking. Woods & Magyary (2010) state that nursing has a rich tradition of placing value on the relational elements within health care. This reflects findings in this study where correlational and regression analysis revealed both strong and predictive relationships respectively between belief in teamworking and collaborative behaviour in the nursing profession, with nurses identifying with and prioritising the concept of belonging to a team.
5.9 Benefits, Belief, & Collaborative Behaviour Scores

Calculating the mean scores of these variables offers a valuable insight into the presence of both professional and interprofessional logics across the professions surveyed. Descriptive analysis outline the differences in mean scores of all 3 variables by profession, furthermore correlational analysis by profession highlights the differing strengths of relationship between these variables and collaborative behaviour by profession, in other words how influential these factors are for the different professions in terms of their perceptions of teamwork. While the variable ‘perceived benefits of teamwork’ was found to be the best predictor of collaborative behaviour, it is noteworthy that the variable found to be the best predictor of collaboration received the lowest scores across the professions within the setting. This suggests more organisational supports in this area are needed so that practitioners see and feel the benefits in practical terms. Further analysis revealed that if professionals had more positive perceptions of the benefits of teamwork it is likely that this would positively influence collaborative behaviour. Putting in place organisational support structures for teamwork such as those outlined in the benefits variable (better workplace & professional support, reducing professional isolation, increasing access to patient services) so that practitioners experience benefits of being part of a team, is likely to positively influence teamworking in practice.

5.10 Team Membership

“..the Government has decided that the development of primary care, based on a team approach, will be central to the planning and delivery of health and personal social services ....primary care providers will come together to form an interdisciplinary team, known as the primary care team”

Introduction (Part 2), Primary Care Strategy (DoHC, 2001(b))

The Oxford Dictionary (2014) offers synonyms for ‘membership’ such as belonging, association, community and integration. Hudson (2002) cites Sartow (1975) who argues that professional training produces an allegiance to an authority system different to that which provides employment to the professional, the
implication being that the employing organisation may not have the greater influence in garnering a positive commitment from their professional staff to adopt an innovation such as teamworking. In Ireland, primary healthcare professionals are assigned to primary healthcare teams geographically by the HSE, membership is assumed. A study by Hansson et al. (2008) found that doctors experienced a feeling of ambivalence towards their new role as equal and democratic members of a team and suggest unless they perceive themselves to have been consulted in terms of team roles the risk is that they will choose to ‘stay outside the development of new working methods in primary care’ (pg.14). While Barrow et al. (2015) found that when asked to describe the members of their ‘team’ professionals named members of the same profession. In this study there was a statistically significant difference between the professions relating to perceived membership, with 62% of declared non-membership representing the GP and PN professional groups. Furthermore where examined by employment status, non-membership between the two groups (HSE v. non-HSE) was also statistically significant with 29% of the non-HSE non-members as opposed to 12% of HSE employees. Other analysis revealed that there is a statistically significant difference between collaborative behaviour scores and reported team membership, with non-members reporting lower scores. A study by Delva et al. (2008) found that team membership is a relevance factor for teamworking. Team size is considered to influence team effectiveness (West, 2012; Starfield, 1998). Phase one revealed levels of reported non-membership of primary healthcare teams (21%) and multiple team memberships (19%). It highlights a level of uncertainty in relation to actual team size and composition within the Irish primary healthcare team context. It clearly illuminates a level of instability within the team composition where some professionals either do not perceive themselves to be members of a team or work across multiple teams. Such instability is considered to impact negatively on team development (Drinka & Clake, 2000).

GP’s in Ireland are independent contractors within the HSE structure, working mainly in separate privately owned practices; they reported the lowest scores in terms of perceived benefits of and belief in teamwork and the lowest collaborative behaviour scores. While PN’s report more positively on these variables related to teamwork, their working context is one of employee within a general practice rather
than primary healthcare team and therefore they are members of the general practice unit; while their HSE employed team colleagues (PHN, PHYSIO, OT, SLT) work in what are commonly referred to as ‘health centres’ traditionally owed or rented by the HSE. Other studies highlight difficulties for PN’s being members of primary healthcare teams (O’Neill & Cowman, 2008; Crampton et al., 2005; Curry & Hollis, 2002). Joyce & Casey (2004) reporting on the primary healthcare team implementation process in Ireland, recognised that bringing two distinct cultures together (GP and HSE) was challenging and where teams had recognised, understood and respected these differences teamworking was enhanced. This position is also highlighted by Harris et al. (2010) who found that teamwork outside of general practice was a lower priority for staff than establishing better team care systems within the practice. Research by Shaw et al. (2005) in 21 general practices found that in hierarchical general practice structures that GP’s often limited the participation of staff in planning and decision making which resulted in lower levels of collaboration in terms of team development. Therefore if a GP practice ethos is not to participate in primary healthcare team processes (e.g. team membership/attending team meetings), it may be difficult for a practice nurse employed in such a practice to attend meetings or HSE staff to engage with general practice. In primary healthcare teams where all members were salaried, participants reported this enhanced the development of better working relationships and increased participation of team members in team activities (Pullon et al., 2009; Boudioni et al., 2007). In determining the effectiveness of primary healthcare teams Poulton & West (1999) describe the ideal setting, as one where all primary healthcare teams and team members are employed by and responsible to the organisation. Yet, while contractual arrangements can act as a barrier where good business practice was identified in general practice settings, it contributed positively to teamworking (Pullon et al., 2009; Shaw et al., 2005).

Drinka & Clarke (2000) state that interprofessionalism develops over time and outline the many factors that can affect team development such as inadequate team composition and changes in membership. A study by Casimiro et al. (2015) outline the difficult reality for many teams, where frequent changes in team membership means that professionals must try to find the means to achieve functional, trusting relationships albeit without the luxury of time. Team membership of a primary
healthcare team reported in this study was 3 years and therefore the current primary healthcare teams may still be in early development. The professional differences reported in this study may suggest that individual team members are at the different phases of development. Differential development can impede progression; where part-time membership, staff turnover rates and attitudes towards teamworking are examples of what Drinka & Clarke (2000) refer to as a team in chaos.

5.11 Organisation

“The weaknesses of the current system, the views expressed during consultation with the public, and the international evidence points to the need for change in the way primary care is planned, organised and delivered in Ireland”

Background (Part 1), Primary Care Strategy (DoHC, 2001(b))

In ‘Why Teams Don’t Work’, Hackman (1998) refers to the reluctance of public agency managers to change structures, systems and policies which over the years have being tuned to control and support individual employees in order to see if teamwork generates the purported benefits. Rather he outlines two strategies that managers may use to implement teamwork without ‘upsetting the corporate applecart’ (pg.259). The first is to try to capture the benefits of teamwork by relying on rhetoric and training, neither the organisational structures nor managers own behaviour needs change. The second is to form real teams, but to support them with existing organisational structures and systems. In this scenario Hackman suggests early signs may be positive, but a gradual decrease in team performance and commitment will follow as team members encounter obstacles and team-unfriendly organisational arrangements.

Drinka & Clarke (2000) state that health care systems divide health care into tasks that need to be performed rather than health needs. Poulton & West (1999) posit that as long as organisational structures militate against clear shared team objectives, team workers will continue to struggle. Health service management structures arrange and finance services in separate professional practices units. Therefore professions within the primary healthcare team structure would still be answerable to their head of discipline. It is acknowledged that there are no defined
cost centres assigned to primary healthcare teams (HSE, 2012 (c)). Within the Irish context, the organisational issues are highlighted by the Comptroller and Auditor General report (C&AG, 2010). It outlines that staff assigned to primary healthcare teams continue to report within existing management structures and describes primary care teams as virtual organisational structures rather than self-organising teams. The HSE response to this was to state that it continues to progress work on the governance structures for primary healthcare teams in consultation with staff representative bodies (HSE, 2012 (c)). This suggests that transforming current structuring arrangements continue to challenge the professions and managers involved. Furthermore traditional fee-for-service arrangements for doctors impede collaborative care (Clements et al., 2007; Boudioni et al., 2007). The Economic and Social Research Institute report (ESRI, 2010) clearly outlines the reimbursement for primary healthcare schemes in Ireland and no provision for reimbursing team structured services currently exist.

The importance of enabling organisational factors are clearly identified in the literature (Heath et al., 2015; Nisbet et al., 2015; West & Lyubivnikova, 2013; Reeves et al., 2010; San Martín-Rodríguez et al., 2005; Borrill et al., 2001; Lowe & O’Hara, 2000). There are clear references to the type of organisational supports that are considered to enable teamworking within the literature. This survey sought to examine the types and level of supports that are in place as it enhances understanding in terms of the levels of collaboration achieved in primary healthcare teams in Ireland thus far.

5.11.1 Colocation

“Teams would be likely to operate out of more than one premises in the short term, the development of locally accessible primary care centres ….is a key long-term implementation objective of the new model. Modern well-equipped, accessible premises will be central to the effective functioning of the primary care team”.

Requirements for Implementation (Part 3), Primary Care Strategy (DoHC, 2001(b))

There is a geographical division and a lack of co-location, 34% of respondents reported working in co-located team premises. The Primary Care Strategy outlines that teams should be co-located but where this was not possible that they should be
in very close proximity (DoHC, 2001 (b)). Co-location is outlined in the literature as an enabling factor for teamwork (Kaehne & Catherall, 2012; Weaver, 2008; Rutter et al., 2008; San Martin-Rodríguez et al., 2005; Cook et al., 2001), providing an environment for knowledge creation by social exchange which can often occur informally through interactions in practice settings (Oanasdan et al., 2009; Sargeant et al., 2008). Furthermore, Oandasen et al. (2009) highlight that not only is co-location a concern but that the availability of space specifically for interpersonal interactions is key, as the focus tends to be on the provision of clinical workspace. Using an open question format participants were asked to record the one most important factor they as practitioners perceived to be necessary to improve primary healthcare teamworking, the overwhelming response cited by respondents was the need to be co-located as a team. This is similar to the findings of O’Neill & Cowman (2008) who found primary healthcare nurses anticipated more effective team work when teams would be co-located.

However, data from the HSE states that nationally only 11 primary healthcare teams are fully co-located (ESRI, 2010), while the Comptroller and Auditor General states that only 8% are co-located (C&AG, 2010). Of the variety of staff accommodation arrangements outlined by the HSE, the most common arrangement is where neither HSE staff nor GP’s are co-located which is reported at 32% (HSE 2012 (c)). The PCDO’s provided information into current levels of co-location within the ISA’s surveyed which revealed that only one team within the three ISA’s reflect co-location as per the definition provided in the survey. This represents 1.2% (n=6) of the sample. The discrepancy between the self-reported team co-location status (34%) reported in the results and the actual co-location reality may reflect a level of misunderstanding, in part due to the multiplicity of accommodation arrangements currently in place for teams as was outlined by the PCDO’s:

• All HSE staff + 1 GP Practice (fulfils the HSE definition of co-location)
• GP + PHN in health centre- no permanent presence of allied health professionals
• All HSE in one health centre- no GP/PN
• All located separately.
This also provides an insight into the current accommodation structures and the level of development in terms of provision for co-location in the three ISA’s surveyed. The survey revealed that the respondents reported co-location as the one most essential element to improve teamwork in primary healthcare. Yet, Davies (2000) suggests there is more to collaboration than working side by side, providing co-located structures without attention to processes does not increase teamworking (Davey et al., 2005). Kharicha et al. (2005) found that resources and professional skills are more important than structural arrangements, suggesting that co-location could sometimes lead to greater informality, which could undermine professional practice. With a collaborative behaviour score average of 3.6 reported and the greater majority of professionals working in non-co-located teams, co-location does not appear to have contributed to collaboration within this context.

5.11.2 Clinical Team Meetings

Regular team meetings have been identified as a key element for effective teamwork (Nisbet et al., 2015; Cameron et al., 2013; Reeves et al., 2010; Brown et al., 2010; Sargeant et al., 2008; West & Poulton, 1997). Analysis revealed significant differences in collaborative behaviour scores, with those attending meetings reporting higher scores. Furthermore statistically significant differences were identified between the professions in terms of barriers to attending clinical team meetings. GP’s and PN’s report the highest levels of non-attendance, 46% and 23% respectively. GP’s and SLT’s report ‘inconvenience location’ most frequently. Overall the analysis revealed that GP’s consistently reported higher levels of barriers than the other professions. PN’s reporting the highest levels of not being made aware of meetings (36%). This may form part of the divergent professional and workplace contexts which influence these professions as they also report non-team membership more frequently. Clearly there are barriers to attending clinical team meetings across the professions with only 18% of respondents reporting there to be no barriers to attending team meetings. The most frequently cited barriers were conflicts with schedules (45%), a lack of time (48%), no financial compensation (28%) and inconvenience of meeting location (16%). These findings are commensurate with a study by Oandasan et al. (2009) which found that the quantity and quality of interprofessional communication and collaboration was significantly impacted by both space and time. Nisbet et al. (2015) found that where
a ‘medical model’ was perceived to dominate team meetings it impacted negatively on other team members perceptions of being able to raise and challenge controversial issues.

Lemieux-Charles & Mc Guire (2006) state that there are areas related to team creation and effectiveness that have been ignored. They highlight that multiple and changing membership of teams as one such area which they assert threatens the stability of teams’ cultural boundaries. Instability factors for healthcare teams are documented; their transient nature depending on the task, economic and human resource factors play a role in achieving and maintaining the full complement of staff required to function effectively. Twenty five per cent the participants in this study reported being a member of more than one team. Forty two per cent of those who were assigned to multiple teams perceive this it inhibit teamwork. Attending multiple team meetings would be demanding in terms of time allocation.

Hackman (2002) posits that teams with multiple work groups are at risk of ‘underboundedness’ because their work involves engaging with a variety of other individuals and groups. This is reflected in primary healthcare team structures where many professions are involved in service provision for patients, but as individual patients’ needs change so will the professions involved which means team boundaries often need to be more fluid and flexible. van Weel (1994) states that as primary healthcare is orientated to local communities and circumstances, this dictates who will be suitable partners in the team. While Hackman (2002) refers to this as a risk that can threaten team stability (Lemieux-Charles & Mc Guire (2006), this level of flexibility is necessary in terms of providing patient-centred care and may act as an unavoidable barrier (Bleakley, 2013). The potential situation therefore is one of multiple meetings across multiple sites coalesced with meeting times which conflict with work schedules and a lack of time to attend which is unsustainable. Yet structured team meetings are promoted as a key element by the HSE and currently are the only measure of team function.
5.11.3 Education & Training

“Modules of joint training and education of primary care professionals will be developed….modules of interdisciplinary training between different disciplines at postgraduate level will be developed nationally so as to enhance teamwork, leadership and other competencies”

Action 15: Requirements for Implementation (Part 3), Primary Care Strategy (DoHC, 2001(b))

Many different health professions come together to work within the primary healthcare setting, and are trained in varying health disciplines, each with their own particular focus. Primary care, primary health care, selective and comprehensive primary care are all used to describe the setting and its functions. It is suggested that this creates ambiguity in terms of definition (Cueto, 2004; Keleher, 2001). Keleher (2001) clearly delineates primary care from primary healthcare and suggests that the latter requires an appreciation of all members of interprofessional teams involved being necessary so ‘practitioners may know what each of them can bring to the shared work of creating health for all people’ (pg.61). The movement towards primary healthcare has created new ways of working in many countries, requiring changes in practice (O’Neill & Cowman, 2008) and therefore should also be reflected in education and training to achieve practice change and development.

5.11.4 Primary Healthcare Specific Education

The results revealed that professionals who had worked in primary healthcare settings abroad were more likely to report having received specific primary care education more frequently that those who did not work abroad. This suggests that educational opportunities within the Irish context are less accessible or less attractive to practitioners. A report by Finucane & Kellett, (2007) states that only 2% of medical education takes place in the primary healthcare setting in Ireland, which may influence how professionals in training not only conceptualise primary healthcare as an approach, but its importance and value as a setting for practice and learning. While the Primary Care Strategy (DoHC, 2001(b)) was seen as an opportunity to plan for community nursing practice, a lack of planning for integration and professional development has led to haphazard expansion of
nursing services (Government of Ireland, 1998, Institute of Community Health Nursing, 2007). If, as the Primary Care Strategy envisaged, that 90-95% of all health and social care needs could be dealt with within the primary healthcare setting, providing specific education in relation to this setting should be a priority at undergraduate, post graduate and continuing education level.

The findings revealed that 58% of respondents reported not having received any education specific to primary healthcare. However analysis did not reveal any difference in collaborative behaviour scores for those who reported having received education specific to primary healthcare. Yet the components of such educational programmes those respondents had undertaken is unknown and may be very varied, therefore their possible effect cannot be measured accurately in this case.

**5.11.5 Training & Interprofessional Education (IPE)**

Research in practice settings reveal teamworking has a positive effect on patient care, innovative working technique introduction and higher levels of self-reported well-being by staff (Zwarenstein et al., 2005; Borrill et al., 2001; Campbell, 2001, Ahlmen, 1988). However effective teamwork rarely happens where there is no collaboration (Oandasan et al, 2006). Therefore educating health professionals to work as part of a team should remain a focus in both academic and clinical settings. Only 20% of the participants in this study report having received interprofessional teamwork training with 81% reporting inadequate levels of training provision. Analysis revealed a small correlation between training and collaborative behaviour, however when considered with other variables, training does not remain a significant predictor for collaborative behaviour. Education and training was clearly outlined as a Primary Care Strategy priority yet only 17% report that IPE does take place in their work setting, 48% report that no IPE is in place and 35% do not know if IPE is available. This highlights the dearth of education and training opportunities that currently exist. However it is suggested that when, who and how to educate does require further research (Hall & Weaver, 2001).

Teamwork and interprofessional practice and learning are recognised as significant factors to improved patient care, outcomes and safety (Weaver et al., 2014; Hood et al., 2014; Contratti et al., 2012; Sargeant, 2008, Zwarenstein et al., 2005). New working hours directives in the US, EU and Canada limiting the number of hours
health professionals can work have created a renewed focus on how teamwork can compensate in these situations (Reeves et al., 2010). Furthermore professional bodies stress the need for collaboration and teamwork (An Bord Altranais agus Cnámhseachais na hÉireann, 2013; College of Nurses Ontario, 2011; Irish Medical Council, 2007; General Medical Council, 2001). Internationally primary healthcare policy direction strongly advocates a teamwork approach to care provision within this particular setting (DoH, 2012; DoHA, 2010; Bourgeault & Mulvale, 2006; First Ministers of Canada, 2003; DoHC, 2001(b)).

Teamwork requires communication links with other professions that are not comparable with the clinician/patient relationship and require new competences and therefore appropriate training if they are to develop (Reeves et al., 2010; Greiner & Knobel, 2003; Boaden & Leaviss, 2000). IPE occurs when members of two or more health and social care professionals engage in interactive learning activities to improve collaboration and provides more effective and comprehensive care to patients (Heath et al., 2015; Thannhauser et al., 2010; Reeves et al., 2010; Horsburgh et al., 2001; Hall & Weaver, 2001). To ensure effective teamwork individuals need a range of collaborative attributes: attitudes, knowledge and skills (Reeves et al., 2009; Barr et al., 2005). Yet it appears that the health profession education sector has not moved from the traditional discipline-based educational models and interprofessional education remains insufficiently taught (Perron et al., 2014). Research in this area suggests that this is complicated by a lack of common terminology between professions (D’Amour & Oandasan, 2004 (cited by Jansen, 2008)); Weaver, 2008; Hannson et al., 2008; Joyce & Casey, 2004; Greiner & Knobel, 2003; Hojat et al., 1999), insufficient evidence to inform team-based learning strategies (Curran et al. 2010; Reeves et al., 2008, Mc Pherson et al. 2001; Hall & Weaver, 2001), logistical issues (Bridges et al., 2011; Horsburgh et al., 2001) and unknown financial implications (Cloonan et al., 1999) which could negatively impact on educational institutions promoting such learning models and team structures in practice (Jansen, 2008).

However there appears to be little in the healthcare literature which discusses the outcomes of learning in an interprofessional setting (Clements et al., 2007). Hall & Weaver (2001) state that their review of the research literature revealed reports related to satisfaction or perceived levels of knowledge gain from IPE but with no
control or comparison group. The majority of IPE evaluation studies reviewed as part of this project are comparable to these findings, most were qualitative in nature or relied on quantitative analysis of self-reported outcomes post participation in IPE programmes (Bridges et al., 2014; Chatalalsingh & Reeves, 2014; Cameron et al., 2013; Lingard et al., 2004; Larivaara & Taanila, 2004). Lemieux-Charles & MacGuire (2006) suggests much of the research focuses on team function rather than team effectiveness. This relates to the systematic review by Reeves et al. (2008) which suggested that IPE evaluation was of poor quality and should only be implemented within the context of rigorous evaluation. Yet in response to criticism of the continued attention given to this method of working and the lack of data in terms of outcomes, they state that ‘the absence of evidence of effect is not evidence of absence of effect’. However, our understanding of the key components of IPE and its effectiveness remain limited (Reeves et al., 2013).

Zwarenstein et al. (2005) suggests that the effects of undergraduate IPE are unknown, but that at postgraduate level IPE has a positive effect on the delivery of care. However they state that generally evidence is lacking and is particularly weak in the primary care area. In Ireland, University College Cork has introduced a community-based programme for medical students which focuses on teamwork. An evaluation of this innovative programme identified that students gained an improved appreciation of the skills of other health professionals and an understanding of the need for good communication in practice (Kelly et al., 2013). Other IPE programmes have shown potential (Heath et al., 2015, Fouche et al., 2013; Selle et al., 2008; Bleakley et al., 2006; Larivaara & Taanila, 2004).

5.11.6 Resources

“Key areas to be addressed to ensure that teams are effective are, access to information, clearly defined roles……important components of successful shared care include agreed objectives and locally developed written guidelines”

Overview of the Published Literature, Primary Care Strategy (DoHC, 2001(b))

D’Amour & Oandasan (2005) present a framework for IPE and practice; they outline over three levels the determinants and processes for IPE (practice, organisation, systems). It is of interest that they note within this model the influence of organisational factors such as resources and learning contexts and the need to
formalised structures (information exchange, protocols, and procedures) to clarify expectations. Reporting on the availability of team resources (e.g. team guidelines, clear role descriptions, specific tasks & responsibilities etc.), 32% of respondents reported these resources were available to them, while 34% said no resources were available and 34% were not aware of the presence or absence of teamwork resources. This is similar to other findings in this study with lower levels of specific primary healthcare education reported by those who have not worked abroad. The Irish system appears to offer less educational and team support opportunities. A dearth of processes to teach collaboration will create barriers for team building (Soklaridis et al., 2007). A study by Paquette-Brown et al. (2014) highlights the resources perceived to be most effective in improving patient care in primary healthcare teams which included off-site learning/classroom sessions, workplace information technology support and practice coaching.

5.11.7 Information Technology & Communication

“An improved information and communications infrastructure will be provided for primary care teams……key to this will be the development of a single electronic health care record”

Action 8: Requirements for Implementation (Part 3), Primary Care Strategy (DoHC, 2001(b))

Information technology (IT) is considered essential to the development and delivery of health services because care is shared within multi-professional teams in both hospitals and the community (Paquette-Brown et al., 2014; Alpay & Russell, 2002). Information sharing has been identified as critical for teamworking (Harris et al., 2010; Maslin-Prothero, 2010; Grumbach & Bodenheimer, 2004; West & Poulton, 1997). This sharing can occur in many ways (e.g. shared notes, e-records, scheduled team updates). IT can offer interprofessional practitioner’s additional means to support their work. Weaver (2008) in discussing antecedents which may influence teamworking highlights the importance of electronic networking and provides for the extension of the network of possible team members. In terms of patient records the use of shared case notes used by all professions involved proved particularly helpful (Molyneux, 2001). Sicotte et al.
(2002) found that the use of a single tool to collect clinical data enhanced the intensity of interprofessional collaboration, while Lowe & O’Hara (2000) identified that use of separate records was both inefficient and represented lost interprofessional learning opportunities. Reeves & Freeth (2003) suggest that IT can act as a conduit for communication between practitioners.

Communication is highlighted at critical element for teamworking (Fox & Reeves, 2015; Suter et al., 2009; Weaver, 2008; Sargeant, 2008; Borrill et al., 2001). Poor information transfer and discontinuity of care have been found to lower the quality of care at follow-up (Kripalani et al., 2007; Bleakley et al., 2006). In this study communication structures were identified in terms of disseminating team decisions regarding patient care, use of shared care plans and the modes of communication.

The findings revealed that elements of team communication in percentage terms are at a low level with 61% of participants reporting that decisions in terms of patient care are not always communicated to all team members and use of shared care plans was 15%. Communication by email was 6%, while written communications accounted for the majority of referrals (58%). Yet analysis also revealed a positive relationship in that where participants reported that decisions made regarding patient care were disseminated to all team members this was associated with higher collaborative behaviour scores.

Nonetheless, others have outlined concerns associated with IT systems (Hartswood et al., 2008; Anderson et al., 2008; Murray et al., 2008; Scott et al., 2005). A study by Marshall and Olphert (2009) highlighted how primary healthcare staff expressed dissatisfaction with the use of email as the main mode of communication. Jansen et al. (2010) examined the ‘disconnects’ which impacts on collaboration across policy, practice and research within the public health domain and concluded that face to face encounters are the most efficient way to transfer knowledge, achieve higher quality and acknowledge mutual dependence. Drinka & Clarke (2000) suggest that informal meetings and telephone conversations are important tools for communication. The findings revealed that when referring patients to other services, communication by telephone and during formal team meetings were reported at 19% and 2% respectively. As the findings indicated a paucity of co-located primary care professionals, the opportunities for face-to-face communications are few and provide understanding in the modes of
communication use. However as the survey did not attempt to measure the levels of IT infrastructure available the barriers to its use as a mode of communications is unknown. However Davey et al. (2005) sought to track the impact of co-location on interprofessional working and found that while co-location may alter direct contact between professionals it did not alter the overall mode of communication, or the professions who initiate contact. This indicates that while overall infrastructures are very important, an emphasis on team processes is needed (Reeves et al., 2010; Johnson et al., 2003; Sicotte et al., 2002; Poulton & West, 1999).

Much of the literature in this area relates to primary healthcare in terms of general practice settings (Davis et al., 2006; Schoen et al., 2006; Mitchell & Sullivan, 2001). The Primary Care Strategy clearly references the needs to develop IT structures to facilitate teamworking across the professions (DoHC, 2001(b)), however no literature was identified that dealt with the specific context of providing an IT system that is acceptable and accessible to all team members and that is feasible in a primary health care system that has both private and public service components within a defined team. IT is seen as an enabling factor but not a replacement for face-to-face contact. This study reveals the presence of low levels of communication in terms of the use of communication tools such as a standardised care record (37%) and record sharing (15%) in practice. Almost 40% do not attend team meetings and while barriers to team meeting attendance are outlined, the findings in this phase of the study do not discern what other influences may be present in relation to this lack of information sharing. Willumsen (2008) suggests that collaboration is achieved through a balance of differentiation, the unique contribution of different professionals and the unified, integrative efforts on both interpersonal and organisational levels. While the Primary Care Strategy does outline a need for adequate information and communication technology, it does also refer to being dependent on the ‘ability and willingness of all parties to utilise available technology’ (pg. 32).
5.11.8 Leadership

“As the GP is the common link in all primary care teams he or she may assume a leadership role within the group. However, any member can lead in circumstances where his or her skills are more relevant”.

Appendix 2, Primary Care Strategy (DoHC, 2001(b)).

The role of team leader is identified as a key element for effective teamworking (Reeves 2015; Sims et al., 2015; Choi & Pak, 2007; Clements et al., 2007; Lemieux-Charles & McGuire, 2006; Borrill et al., 2001). Sims et al. (2015) suggests that doctors assume the leadership role and may be annoyed if they are not. Interestingly they suggest that other team members that ascribe to a hierarchical team model expect doctors to lead and are frustrated when they do not undertake such a role. However, Murray et al. (2008) suggests there are challenges in identifying a leader and ensuring they have the competencies to lead. Opie (1997) cites Senge (1990) who suggests the leaders’ role is not to set directions but to develop a shared vision, to identify and challenge mental maps and to develop and sustain more analytical thinking. Drinka & Clarke (2000) outline two leadership models. In a structural model the leaders’ role and function is assigned and the power is unevenly distributed whereas leadership in a humanistic model calls for a shared, empowering, participatory approach and is much more consistent with interprofessional leadership. This model corresponds with the literature that suggests that as patients’ needs change so does the expertise required and therefore the lead role should shift to the profession most suited to deal with that aspect of care (Reeves et al., 2010; Drinka & Clarke, 2000; Opie, 1997).

There are two aspects to leadership, in terms of motivating and sustaining team members to develop a shared vision and challenge uniprofessional thinking. Clements et al. (2007) refer to these as ‘champions’ who drive change in management processes. The second aspect is related to practice and the appropriate leader to deal with current patient needs as discussed. Øvretveit (1997) suggests that interprofessional teams are working groups with a collective purpose. To pursue their collective purpose teams require leaders. The findings reveal that 55% of participants reported the presence of team leaders and within that 69% reported
that the leadership role was rotated. However the presence of a team leader did not influence the level of collaborative behaviour as measured in this study.

5.11.9 Other Supports

“Appropriate administrative arrangements will be put in place to support primary care at local level”.

Action 13: Requirements for Implementation, Primary Care Strategy (DoHC, 2001(b))

While clerical support was found to be positively related to collaborative behaviour, the presence of other factors such as team leader, use of a formalised care record, shared records, separate case meetings and patient and family level meetings did not impact on collaborative behaviour overall. This differs from the Sicotte et al. (2002) study which found that the use of a single tool to collect clinical data was positively related to the intensity of collaboration.

5.12 Economics

It was envisaged that implementing the Primary Care Strategy in Ireland would require a €615 million investment, of which €50 million has being provided for additional staffing with a further €20 funding provided for 2012 (HSE, 2012(c)). Clearly this figure is drastically lower than the investment envisaged, offering insight into funding for primary healthcare development and a background context relating to the perceived lack of organisation level determinants for interprofessional teamwork reported by respondents.

Internationally there has been a severe economic crisis with many countries like Ireland in recession. Major budgetary adjustments have been implemented. The Organisation for Economic Cooperation and Development (OECD, 2012) report that while in Ireland the health spend grew on average by 6.5% in the years 2000-2009, it was cut by 7.9% in the year 2010 and further reduced in 2011 as part of Government-wide efforts to reduce large budgetary deficits. Most of the reductions have been achieved through cuts in wages and fees paid to professionals and through reductions in the number of health workers (OECD, 2014). As the average team membership in this study was reported to be 3 years, it would indicate that many teams were in their infancy as the crisis took hold, professionals may perceive
rightly or wrongly, that they have shouldered most of the burden which would impact on their perceptions of and willingness to cooperate with the implementation of new work practices such as teamworking. While some aspects of financing have more recently been beyond the control of the HSE, Hackman (1998) states that when the benefits of teamwork are sought ‘on the cheap’; the demise of team performance is inevitable. The findings of this study reveal significant under resourcing in terms of organisational supports for teamwork since the strategy introduction in 2001, predating the economic crisis.

5.13 Integrated Service Areas

Significant differences were revealed between ISA’s in relation to levels of membership, designated team leaders, clinical team meeting attendance, levels of meetings, levels of interprofessional training reported, use of formalised care plans and professional sharing of such plans. Participants in Area A consistently reported statistically significant higher levels of these organisational supports for teamwork. However analysis revealed that there were no significant differences in reported collaborative behaviour between the ISA’s despite the reported presence of higher levels of suggested team function enablers in the workplace. However when considered in the context of the very low levels of other supports and resources across the setting, it may be that the quantity and quality of what was provided was inadequate to made a positive impact. It was envisaged that as primary healthcare teams moved from a uniprofessional to a interprofessional model of teamwork that this would develop the capacity of services leading to the provision of a more comprehensive range of services in communities and allowing team members to spend more time on areas such as preventative work and create a more even distribution of workload between team members (DoHC, 2001(b)). However there appears to have been little change to established practice across the settings surveyed with the findings revealing reported low levels of new innovations in practice (21%).

5.14 Summary & Conclusion

Research and development in health care has brought benefits to advancing knowledge, care and patient outcomes. However, this can result in greater specialisation and fragmentation in the delivery of care. Furthermore each
professional field is governed by a scope of practice which impacts on the range and delivery of services. From a clinical perspective interprofessional collaboration involves not only sharing care activities but sharing information and decisions in developing activities that professionals are typically trained to so within their own fields (Sicotte et al., 2002). This is challenging in terms of supporting and resourcing interprofessional teams. Rarely can a silo-like model of working be innately cohesive or integrated (D’Amour & Oandasan, 2005, Hall, 2005; West & Poulton, 1999) and continue to challenge collaborative teamworking in practice. Schofield & Amodeo (1999) cite Vinokur-Kaplan (1995) who found that enabling conditions do predict teams’ ability to meet standards, teams’ cohesiveness, members’ well-being, with cohesiveness and standards predictive of overall team effectiveness.

Johnson et al. (2003) stress the importance of examining interprofessional and other attitudinal barriers as well as structural ones. The findings in this study revealed despite significant differences in terms of team supports and resources across the ISA’s, collaborative behaviour scores were similar. As statistically significant professional differences were revealed between variables it may be that within discipline experiences rather than resources, service area or other workplace contexts is more significant in terms of collaborative behaviour. Grumbach & Bodenheimer (2004) state the greatest challenges for health care teams are human relationships and personalities. The experiences and expectations within the setting also impact on team function. The findings of the quantitative phase of this study suggest that while input factors are of influence, it is process factors that are most powerful. What motivates or deters participation needs to be of focus.

The findings in phase one reflect the influence of the input/process factors on levels of collaborative behaviour (output) as measured and reveal the powerful presence of what Sicotte et al. (2002) refer to as professional and interprofessional logics which impacted on the levels of collaborative behaviour reported when analysed by profession. While factors such as gender diversity, team membership, training and clinical team meetings play a role in the levels of collaborative behaviour, the analysis process has revealed that conducting analysis by profession revealed greater differences in collaboration than the organisational infrastructure, yet the literature reveals that the focus in interprofessional research has focused more on
team structure rather than process in terms of facilitating teamworking. San Martin-Rodriguez et al. (2005) state that teamwork is essentially an interpersonal process and it requires willingness and skills to be successful. However, as organisational supports were present at such low levels and were unevenly distributed across the ISA’s which participated in this study, detecting significant positive affect may be mitigated. Overall the patterns of findings are of concern with some professions appearing to find teamwork more challenging than others. The complete lack of apparent investment in appropriate infrastructure and teamwork processes to promote, support and sustain interprofessional teams is worrying being that active engagement in teamwork still remains a central objective for the current HSE’s National Service Plan for 2015 (HSE, 2014) with strengthening primary healthcare teams and network services asserted to be a priority.

“The primary care team is the central point for service delivery which actively engages to address the medical and social care needs of the population”

(HSE, 2014) (pg. 28)
Chapter Six: Phase Two Results

6.1 Introduction
The aim of phase two was to further explore teamwork in the primary healthcare setting as experienced by the professionals using a qualitative method. The perceived barriers to and enablers of teamwork were also explored. Participant reflections on teamwork included how they perceived it to be defined in practice, its introduction and implementation by the HSE within the contexts of the primary healthcare system and structures currently in place.

6.2 Participant Profile
There were 20 female interviewees and 6 male interviewees. The majority of participants were female, all the professions and the three ISAs that agreed to participate in the study were represented. The professionals served both rural and urban populations with 5 professionals based in densely populated metropolitan areas. This geographical spread was sought in order to capture the widest range of experiences within the diverse primary care practice settings which exist currently. However the areas are anonymised as areas A, B, C to protect participants being identified. Table 6-1 below outlines the participant profile:

<table>
<thead>
<tr>
<th>Gender</th>
<th>Profession</th>
<th>ISA Representation</th>
<th>Geography</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td>City Centre/Rural/Urban Populations</td>
</tr>
<tr>
<td>6</td>
<td>Female</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>GP</td>
<td>A,B,C</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>PN</td>
<td>A,B,C</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>PHN</td>
<td>A,B,C</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>PHYSIO</td>
<td>A,B,C</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>OT</td>
<td>A,B,C</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>SLT</td>
<td>A,B,C</td>
<td></td>
</tr>
</tbody>
</table>

Table 6-1: Participant Profile
6.3 Results of Template Analysis

Crabtree and Miller (1999) suggest that the initial broad coded segments are advantageous, being longer and preserving broad contexts, allowing access to more text for interpretation with a given search. The list of codes is modified through successive readings of the texts until as full a description of the data as possible is reached, without reaching the state at which description is so finely detailed that any attempt to draw together an interpretation becomes impossible (King et al., 2002).

Research projects inexorably face external constraints which mean there is not unlimited time to produce the perfect template, however King (2012) suggests knowing that no sections of text remain uncoded is a good indication that the final template created has legitimacy. It has been highlighted that the development of the template in this study resulted in four revised themes emerging from the data set with none of the a priori themes in the initial template specified in the revised themes which form the final template. However all of the issues and concerns highlighted within the preliminary themes were cross-checked with the revised themes and sub themes developed and are accounted for within the final template, therefore no data remained uncoded. The a priori themes were relevant but rather than being explored abstractly were instead explored within the reality of the diverse professional positions and experiences within the Irish primary healthcare system context which emerged as most significant in terms of offering the richest insight into the topic area being considered. The final template is presented in Table 6-2 overleaf with four hierarchical themes and sub-themes identified during the development of the template outlined:
<table>
<thead>
<tr>
<th>Revised Themes</th>
<th>Sub-Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Conflict &amp; Consensus</strong></td>
<td><strong>Conflict</strong>&lt;br&gt;- Professional &amp; Interprofessional Logic&lt;br&gt;- Ideological Disparity&lt;br&gt;&lt;br&gt;<strong>Consensus</strong>&lt;br&gt;- Complex Cases&lt;br&gt;- Benefits&lt;br&gt;- A Process</td>
</tr>
<tr>
<td><strong>2. Them &amp; Us</strong></td>
<td>- Practitioners’ v. Organisation&lt;br&gt;- Clinical Autonomy &amp; Power&lt;br&gt;- Accountability &amp; Responsibility</td>
</tr>
<tr>
<td><strong>3. Implementation Paradox</strong></td>
<td>- Financing an Unidisciplinary Focus&lt;br&gt;- Colocation, Solution or Setback?&lt;br&gt;- Geographical Anomalies&lt;br&gt;- The Imposition of Formal Team Meetings&lt;br&gt;- Communication Infrastructure&lt;br&gt;- Outcomes</td>
</tr>
<tr>
<td><strong>4. Resourced to Fail</strong></td>
<td>- Deficient Infrastructure&lt;br&gt;- The Education &amp; Training Lacuna&lt;br&gt;- Prerequisites for Teamwork</td>
</tr>
</tbody>
</table>

Table 6-2: Final Template
6.4 Conflict & Consensus

Primary healthcare team is a relatively new concept within the Irish healthcare context and follows an international trend in healthcare reform. In 2001 the Irish Government published a strategy document outlining the direction envisaged for primary healthcare which made teamwork a central component of how it would be operationalised. Health professionals were assigned to teams by the HSE, team meetings were introduced with attendance and co-operation of all professions assumed. This came after decades of silo-working with strong disciplinary boundaries and a well-established model of primary care within the Irish system made up of two separate components, general practice and community care. All professionals that were interviewed referred frequently to conflicting factors in relation to teams being able to function as single entities as envisaged by the HSE, yet also described situations where the professions worked in a collaborative manner illustrating the presence of contradictory and co-operational aspects relating to teamwork within the same setting.

6.5 Conflict

The first major theme from the qualitative analysis relates to what Sicotte et al. (2002) refer to as conflicting stimuli, where professional logic that is based on an individual service provider model and one to one patient-professional relationship is directly confronted by the interprofessional logic that pursues care sharing activities. They suggest that professional attitudes, beliefs and values are still disparate and professional relationships appear to be based more on disciplinary parallelism. They suggest that this exacerbates the juxtaposition of practices rather than promoting interprofessional collaboration focused on the client’s needs. Interprofessional logic is represented by shared group beliefs and understandings which enhances the occurrence of work group collaboration. The sub-themes identified are (1) Professional and Interprofessional Logic (2) Ideological Disparity.

6.5.1 Professional & Interprofessional Logic

All of the participants expressed a view on teamwork. Their attitudes and willingness to engage in teamwork reflected the concept of conflicting logics. The disciplines could be clearly discerned, with GP’s attitudes and beliefs reflecting a
professional logic and the NMHP’s voicing and describing support and belief in an interprofessional logic. Many of the interviewees acknowledged there were strong professional boundaries and that there were fears and resistance to changing the way they practiced revealing a tension between two conflicting stimuli or logics.

“I think everybody is frightened of losing their little bit of independence…..they’re frightened because we’ve been fragmented for so long. The district nurses are out there you know the G.P’s are here. I mean I’ve hears stories about G.P’s in the old days refusing to let the palliative care team come in, in case they take over you know.”

(GP 3)

“There still is a strong delineation between the different professions, it’s true.”

(OT 3)

However the GP’s were more vehemently opposed to the model of teamwork introduced and more forthright in their views, referring to a perceived senior status of GP’s within the primary healthcare team structure and team processes. They regarded their position to be one of leadership and responsibility over the primary healthcare team yet conversely expressed a wish to remain independent and detached from the same team. This may aid understanding in terms of GP’s reluctance to accept a work model that is underpinned by a sharing care rather than delegation of tasks.

“That’s the way I’ve always worked you know, I respect nurses, health visitors, all the rest of them but I’m judge”.

(GP 3)

“G.P’s tend to consult, tend to act as consultants in the team rather than as members of the team”

(GP 4)
“At the end of the day they’re HSE employees, they’re there to do what their bosses tell them, so I think there wasn’t enough -G.P.’s didn’t take it (the team) over if you like, it was never run by G.P.’s and I think maybe we needed to do that.”

(GP 6)

The strength of their conviction and their ability to impair the implementation of the current teamworking model is revealed by GP (8) who acknowledged: “I think GP’s have been a hindrance to it and I’d say that honestly...we’re probably the greatest hindrance to it you know...because obviously I think it can work but it wouldn’t work as well without input from the GP’s.”

Where teamworking was perceived as a progressive work practice positive responses were predominantly from the NMHPs. Some GP’s expressed a level of positivity but this reflected an aspirational rather than a qualified belief in teamworking with GP (2) referring to it as a ‘lovely idea’. In contrast the NMHPs articulated a strong belief in the interprofessional teamwork concept. Their responses were more frequently affirmative, which illustrated agreement with an interprofessional logic or reasoning and a belief that IPTW was a logical basis for delivering a better quality of patient care and improving professional experiences in the workplace. Practice Nurses also reported positive experiences which illustrated their belief in interprofessional teamwork from within a general practice setting.

“The idea of it on paper is so amazing but it’s not really happening at all.”

(GP 5)

“I think one of the things I did see working well there was people were communicating and using their joint voices, mmm to mmm get resources for the patients.”

(PN 2)

“I think working in a team definitely makes life a lot easier professionally.”

(PHYSIO 2)
Understanding how such disparate views were established and maintained may be elucidated by how the professionals reflected on their disciplinary education and training. This is also referred to as professional socialisation and its effects can profoundly undermine teamwork (Reeves et al., 2010). GP’s spoke of IPTW as a concept coming too late for them, that younger GP’s were trained differently but that they were not willing or able to change how they had worked for many years, with GP (3) stating that “Doctors are not used to working, especially in general practice, we’re not used to working within those confines”. In contrast to this the NMHP’s spoke of teamworking being part of their undergraduate training and that they were prepared in college to work in this manner. Many nurses articulated a particularly strong belief in teamwork with one nurse referring to teamwork being part of their ‘psyche’.

6.5.2 Ideological Disparity

Participants spoke about the conceptual divide between general practice and primary healthcare. They stated that there was a difference in the perceived ethos and beliefs which underpinned these two areas and that this was a fundamental impediment in terms of gaining agreement relating to a model of care for the team. The disparity generated difficulties for GP’s and NMHP’s in terms of working together within the same team.

“Primary care is already here it’s just they can’t see it. I mean the structure is there but it’s just they’re trying to bend us into something they think is primary care, but we’ve been running primary care for years and we know how it works.”

(GP 3)

“You know whether it be clinical time or financial they (GPs) weren’t getting back what they perceived the whole ethos of primary care to be and what we (non –GP professions) felt it could become”

(OT 2)

There is an assumption that General Practice is the central tenet in the Irish primary healthcare system and primary healthcare teamwork function as outlined in the Primary Care Strategy (DoHC, 2001). GP’s placed general practice central to the primary healthcare team success and reported that teamwork structures and
processes should be organised to reflect how general practice was structured and managed in order to enable their participation. The importance of general practice in primary healthcare could be discerned across the professions.

“Well of course you have to have GP’s on board”

(GP 1)

“I would prefer that, rather than the fragmented HSE that everybody, as it is in the UK, the GP surgery is the hub ad everything moves out but people are feeding back into there, I think there is no central hub in primary care here.”

(PN 3)

“I do think the GPs do need to be involved otherwise it’s just the HSE staff doing what they were doing anyway.”

(SLT 1)

Yet from the NMHP’s perspective the issue was not one of dominant centrality to the team but full professional participation within the team, that as all the other members were already involved or at least not actively opposing teamworking, GP’s were seen the missing link to advance teamwork between the professions as articulated by OT (2) “I think it was very important to have feedback from the GP and vice versa.” This again reflects a fundamental difference in logic, one which advocates for a dominant disciplinary position defining team function while the other perceives equal, reciprocal professional interactions between the disciplines as defining team function. PN (1) articulates this position stating, “I suppose effort from everyone involved and at the end of the day that the patient doesn’t suffer because of a lack of service from people not pulling their weight.” The disparity has been realised in practice in the form of a resistance to the teamwork model introduced by the lack of participation described by the interviewees.

“No, no it’s not really satisfactory at all. The primary care team is crazily dysfunctional and just isn’t delivering what it set out to do.”

(GP 4)
“There’s no point of having six GPs in town and only two going (to team meetings) you know, you’re either in or you’re out.”

(PHN 1)

This disparity was reflected in the level of interprofessional interactions with a discernible general practice verses HSE divide as PN (2) described “It’s the divide, general practice to HSE that doesn’t work so well but it works on an individual level, do you see what I mean?” This observation also reveals that on a one to one basis professionals engaged with each other across such division. GP (4) describes a similar sentiment, “There is a level of trust interprofessionally among the professions for one another, on a, on a personal basis but a total absence of it with regard to the process, the team and the service.” There was no reference to the presence of more advanced interprofessional team processes with two PHN’s illustrating a limit to the level of interprofessional engagement that does not go beyond the point of collaborating or co-ordinating patient care, rather maintaining silo-based work models from where professions interact but in an unstructured, informal manner.

“We work well together, very loosely in a team. We communicate and we’re contactable.”

(PHN 3)

“We all know each other in this area, we all know who we are working with so yeah, and we’d work together. There wouldn’t be a problem with liaising or talking on the phone if there was a problem and yeah I mean if the physio or the OT is involved, or if the palliative care is involved then we’ll work with them. So yeah I suppose it works on that level but that’d be it.”

(PHN 4)

However the one to one interactions more frequently involved only the NMHPs as SLT (1) suggested “You might find that you are linking in with the occupational therapist or the physio or the nurse”. When asked to describe the current IPTW
reality in just three words participants used the words ‘No GP’, ‘Boundaries’ and ‘Limited’ which supports the divisive aspects of teamwork portrayed above.

6.6 Consensus

While the disparity has been outlined, the presence of conflicting stimuli suggests that a contrasting position was also discernible. Consensus was revealed as the participants did refer to teamworking in practice, also articulating that in some situations professional interactions were more intense across the professions. The participants clearly outlined where they thought IPTW functioned best in primary healthcare. Importantly this highlights that where professionals discerned there to be a benefit for the patients and professionals involved, professionals willingly engaged in the process. The sub-themes identified are (1) Complex Cases (2) Benefits (3) A Process.

6.6.1 Complex Cases

All of the participants referred to IPTW positively with the caveat ‘when appropriate’. The overwhelming majority described ‘when appropriate’ as being in a situation where the professionals deem the problems faced by the patient to be more serious, difficult and often where issues of concern have remained resistant to uniprofessional efforts to realise a solution. These were referred to by the overwhelming majority of interviewees as difficult or complex cases.

“When you have a difficult patient….and it’s a difficult case and maybe you’re not sure which avenue to go down.”

(GP 5)

“Especially things like complex cases. As an individual professional you wouldn’t be able to manage all aspects of that patients care, like they’ve multiple social needs and that would be huge in this area.”

(PHN 2)

6.6.2 Benefits

All of the professionals referred to the patient and professional benefits of teamwork as patient needs can be multifaceted and require the expertise of more than one profession with SLT (1) stating that “It made a difference to the decision
making that I implemented.” Professionally teamwork was considered to contribute to better interprofessional working relationships which provided mutual support and reduced professional isolation with professionals referring to the setting as one where many professionals work alone frequently and are ‘sole traders’ (OT 2).

“Feeling supported mmm although especially in the community there would be, lone working would be a big element.”

(PHN 2)

“Oh a personal level when you’re talking to somebody it’s much easier to say ‘well look I’m not sure, I’m not sure what to do with this’...you feel a bit more secure in your decision going forward, that you know you’ve got a bit of feedback and a bit of advice and you can make the right decision.”

(SLT 4)

None of the GP’s referred to this issue, instead they reported being used to making decisions independently and having a team of their own in general practice, such as medical colleagues, nursing and secretarial staff. Even as a single-handed practitioner GP’s reported having their own ‘team’ at work which may eliminate or reduce feelings of professional isolation in practice. The perceived benefits that this GP-team brought were similar in terms of support, feedback and social interactions.

“Well you see we have a teamwork in place within our own practice you see and that works because we’re a small practice and obviously we see each other every day so that, that works.”

(GP 6)

Other smaller sub-teams also formed and disbanded depending on client needs and were considered to be beneficial for patients and professionals with SLT (1) describing such teams as being patient-centred “Look at what the client needs and what’s the biggest need of the client at a particular time and whichever team members needs to be involved to meet that need, to enable that need to be met”. 
Interestingly the PHN was a consistent member of these small, flexible and informal teams. While all of the participants articulated that teamwork encouraged good working relationships, it was notable that such teams frequently involved the PHN’s and this appeared to increase professional interactions over time. When asked to define IPTW in three words many participants across the professions chose the words ‘public health nurse’. This revealed that not only where professionals engage regularly may help strengthen working relationships but also highlights the possible influence that the strong belief in teamworking expressed by nurses had, by sustaining their willingness to invest professionally and engage regularly in teamworking.

“But we’re really lucky here because we have a wonderful relationship with the public health nurses and always have and we would daily be engaged with them.”

(GP 1)

“I suppose the public health nurse is the cornerstone that, or you know they are out there in the community and they have the link to here easy and they know the patient almost as well or better than you, they see them regularly as well.”

(PN 1)

“I get referrals from the public health nurses and they’re the ones, they’re great for referrals.”

(SLT 3)

All of the participants perceived that teamwork was beneficial but differences were revealed in terms of the type of team that was associated with such benefits and the different benefits perceived to be of value by the professions.

6.6.3 A Process

What is clear is that both the levels of conflict or consensus are established over time. Professional socialisation is determined through years of education and training, depends on the value attributed to engaging in teamwork while partaking in such education and the strength of the interactions with one’s peers and more senior members of a chosen profession (Reeves et al. 2010). While in practice how teamwork is experienced over time influences engagement, sustaining or
diminishing professional interest to establish IPTW in practice. It appears significant time would need to be allocated for professionals to address the conflicting issues and progress areas where consensus is found. Below the participating OT and GP illustrate very different outcomes within the same system which may reflect the impact of the professionalisation process and subsequent professional values (logic) developed which appear to highlight very different practice-based experiences.

“I look at the positives being that you develop new skills and you look at working in a more innovative way. Your thought processes get challenged which is always good and keeps you energised.”

(OT 2)

“I’ve just given up after investing an awful lot of personal time and effort in setting it up, putting it there in the first place”.

(GP 4)

The words used to define primary healthcare teamwork are consistent with both conflict and consensus with the contrasting experiences illustrated by the participants, and are a reflection of the influence and presence of opposing logics, ‘against my better will’ and ‘completely unenthusiastic’ to ‘good for patient’ and ‘really working’.

6.7 Them & Us

San Martin-Rodriguez et al. (2005) state that a constructive organisational setting is seen as a critical component for successful interprofessional teams and while they also refer to interactional determinants such as trust, mutual respect and communication, these relate mainly to interactions among team members. However in this study the majority of participants reported good individual-level relationships, it was the relationship between the organisation (HSE) and the professions which appeared to be severely strained. The majority of references to management were negative and may reflect health professionals concerns in relation to what Koppel (2003) describes as the ‘harsher edge’ of organisational support (cited by Reeves et al., 2010).
The second major theme identified was the adversarial type relationships depicted by the professions. It is so named to reflect the frequency with which professionals referred generally to the HSE management as ‘they’ or ‘them’ in a scathing and pejorative manner. Firstly there was a difficult and tense relationship portrayed between the health professions and the HSE. However the GP’s described a much stronger sense of animosity and resentment towards what they perceived as an attempt by the HSE to manage, control and direct general practice. Secondly hierarchical-type relationships were depicted within the team in terms of GP and NMHP relationships relating to accountability and responsibility within a collective team structure as opposed to the more traditional established disciplinary-type structures. The sub-themes identified are (1) Practitioners’ v. Organisation (2) Clinical Autonomy & Power (3) Accountability & Responsibility.

6.7.1 Practitioners’ v. Organisation

While NMHP’s did articulate some concerns regarding the level of HSE management of team, the majority of NMHPs were not opposed to teamworking as introduced by the HSE but articulated difficulties with some aspects which were comparable with their GP colleagues. Interviewees perceived the transition from silo to team-based working was ill-conceived and forced with a lack of consultation with the practitioners who were expected to adjust and adapt established professional practice. Many of the interviewees reported that they were not listened to, that teamwork was forced upon them and without the necessary resources was ‘a paper exercise’ (OT 2). This appears to have generated a high level of scepticism on the part of the professionals referring to the whole process as ‘window dressing’ (GP1) with the focus on teamwork for HSE managers a ‘ticking the box exercise type of thing’ (PHYSIO 2) rather than any meaningful engagement for change on the part of the organisation.

Difficulties were reported in relation to the organisation charged with managing the health service. Poor interpersonal relationships between the practitioners and the HSE managers were highlighted. The participants expressed a strong sense of cynicism and mistrust towards the HSE and being forced in a direction they did not want to go.
“I really suspect they are career people and they want to go places and they are going to railroad a half dozen GP’s or half the primary care systems and they’re going to re-establish them or demolish them as the case may be and they’ll get their way……I just don’t trust them and the GP’s in X (named a specific area)...they hate (emphasised) everyone coming from the HSE.”

(GP 2)

“There’s an implication that we weren’t doing this before by foisting primary care teams on us”

(SLT 1)

Many participants reported that non-clinicians lacked enough understanding of the front-line needs in day-to-day practice with GP (1) highlighting, “Respite beds are not available as they are not profitable so they would rather have them empty, the HSE managers are just bookkeepers, they have no interest or idea about good healthcare.”

6.7.2 Clinical Autonomy & Power

However while the majority of professionals expressed a level of negativity, all of the GPs interviewed reported a vehement distrust of the HSE and felt their motivation to pursue a primary healthcare teamwork model was ultimately to gain control over general practice and threatened GP’s clinical autonomy and independent contractor status.

“It was totally dominated by their (HSE) thinking….you could see every GP in the room going –oh no not again, here we go again….. ‘well you have to’ we were told, ‘you have to have lay people, and you will have to encourage the community to come on board and the community would have a say in it’ and with that I think it fell to pieces…. We just called a line over there being non-medical people involved in discussions and deciding how to work a project or bring it forward and expand it into a community.”

(GP 2)
“I mean it’s, you have to discover how the Civil Service run stuff. We get snowed under with paper work. The only place medicine is working is General Practice, because a lot of them don’t bloody run it and they’re trying to run it”

(GP 3)

“We feel, we resent the HSE telling us what to do….the disingenuousness of some of the stuff that’s being put there nationally about GP’s salaries and how we’re doing this and that and I suppose there isn’t trust. For a partnership to work there has to be trust and mutual respect and we felt that was lacking right from the beginning”

(GP 6)

“Well it seems to be the way it’s going that there’s an agenda to push teamwork. I suppose we feel its control in that it’s controlling what we’re doing….. I mean I might be coming across as being overly cynical but that’s my honest experience…I’m just telling you what I feel based on our model here which I’d say is not the best model for primary care team across the country.”

(GP 8)

Words frequently used by GP’s to define interprofessional teamwork in a negative manner were ‘management’, ‘political’, ‘bureaucracy’ and ‘agenda’, reflecting the deep divide which appears to have developed between the GP’s and the HSE.

This is supported by the practice nurses observations from within the general practice setting of the relationship between GP’s and the HSE with PN (2) reporting that “At this stage it’s not just geographical or a physical divide, there’s actually a history, there is a discord there from the GP’s point of view with the HSE so it’s actually a negativity of mind that is putting the shutters down from their point of view and stopping proactive communication. They have no notion at all of deliberately talking to anybody in the HSE….. The GPs are genuinely very, very (emphasised) annoyed with the HSE, they don’t, anything that comes out with a HSE label on it, it’s like a red rag to a bull.”
“Because they’re private practitioners they (GP’s) don’t want to lose the power.”

(PN 3)

Power was also highlighted in relation to the PN role in IPTW. They felt as they were employed by GP’s, if their employer was team-averse it made it impossible for them to participate as PN (2) outlined, “Because they (GP’s) haven’t engaged with it, it’s been difficult for us to get engaged with it because as practice nurses we are obviously employed by the GP and so they have a good say about how we spend our time.”

However one GP provided a very different aspect to the tensions expressed and spoke of the very challenging work that faced health professionals, expounding the enormous sense of contempt which was directed at the organisation (HSE) relating to what he perceived as an excessive focus of organisational activities at the cost to the sometimes brutal frontline realities faced as a GP which were perceived to merit no attention.

“Have you been to a suicide? Do you know what happens when you cut someone down?...I’ve done 12 in the last 18 months....You can picture someone with a gunshot behind his ear... it’s not nice work but none of these goody middle class f***ing eejits have ever seen this but they’ll form a committee...”

(GP 3)

While OT (2) pointed out that sometimes choices were easily made because they were so stark, and used the example of whether to focus on a team-related activity or to visit a terminally ill patient “…you’d be thinking God, I’ve got to stress over how I am going to get funding for x,y or z, this person is dying....nobody is participating in team initiatives.”

These traumatic accounts provided a unique and valuable insight into another aspect of why health professionals are resolute with regard to retaining their clinical autonomy. Professional independence appeared to be of great importance in terms of being able to make what they perceived to be the right decision from a healthcare profession perspective in relation to their patients because they appeared to suggest they don’t trust the organisation to do so.
6.7.3 Accountability & Responsibility

While participants reported they worked well with each other across the established primary healthcare structures (General Practice and HSE Community Care), being part of a collective primary healthcare team raised a very significant high level of concern for GP’s. They were very perturbed with what they perceived to be an ambiguity in terms of a shared care team model which did not absolutely define who bore the responsibility for team decisions and who was ultimately responsible for the patient. They saw the NMHP’s as a resource to refer patients to, and within that context they perceived that NMHPs bore the responsibility of their own actions. However within a primary healthcare team context their perception appeared to alter, they articulated that if GPs were involved in such a team they would be ultimately responsible for the patient and therefore the NMHP’s should be accountable to them.

“I would define it as a medium where all the appropriate professionals meet to discuss a problem, either a common problem or one of their own problems to find out how we can sort it out full stop. Bearing in mind that the patients name is on the medical card with my name on it, I’m in charge.”

(GP 3)

“The other professionals seem to say ‘No, I have no duty to them’. Well why not? They live in your catchment, they’re seeking your services, why do you say you have no duty to them?

(GP 4)

GP’s were not critical of NMHP’s per se but in this new collective team context it appeared to recreate to some extent the same adversarial position they held vis-à-vis the HSE. However this situation may have been needlessly exacerbated by the complete lack of clarity regarding professional roles within such teams as outlined GP (7) “I suppose I tend to, that’s why I come back to the roles, you know what is our role in it (team), who’s, who’s making the decisions, who’s implementing them at the end of the day, who has responsibility, clinical responsibility for them when something goes wrong, when a multidisciplinary team decision is made, who
carries the can if they come suing, it’ll be us that they come after you know, so those kind of things I don’t think have being fleshed out properly.”

None of the NMHPs referred to this issue in terms of a hierarchy of accountability, but instead articulated a general perception that the responsibility was shared, with the team offering support or security in terms of collective decision making or as some NMHP’s suggested a sharing of the burden of care and offering reassurance when dealing with very complex cases.

“If you have a complex case, it’s a safety net you could say ‘well I discussed it at the PCT and everyone thought this’ or whatever.” (PHN 3)

It appears the organisation has not offered any clarity or reassurance in relation to this matter for GP’s.

6.8 Implementation Paradox

The third hierarchical theme related to the implementation process. A process which resulted in the development and introduction of designated primary healthcare teams with the assignment of primary healthcare professional to such teams by the HSE. Implementation seeks to promote and embed new activities in practice. It is the process of translating policy into practice. Eccles and Mittman (2006) highlight the importance of understanding the influences on healthcare professionals and organisational behaviour when assessing outcomes and of the need to appreciate contextual issues that would allow for a better interpretation of results. The participants reported on many issues relating the implementation process and combined with their rich descriptions of the perceived differing forms of teamwork help towards understanding the ‘results’ of that process. Their accounts illuminate factors that have influenced their understanding of, attitude towards and participation in teamwork as envisaged by the HSE. The sub-themes identified are (1) Financing a Unidisciplinary Focus (2) Colocation, Solution or Setback (3) Geographical Anomalies (4) The Imposition of Formal Team Meetings (5) Communication Infrastructure (6) Outcomes.

Introducing new models of practice must be supported by existing or adjusted structures to accommodate and facilitate new work practices or may require new
structures. Participants identified the current structures were not conducive to teamwork as GP (4) suggested, “*The structure that’s there at the moment doesn’t facilitate people to work together.*” It appeared that implementation may have relied on mapping a new shared model of working onto existing silo-based structures that focused on the individual or discipline rather than healthcare teams and patients.

### 6.8.1 Financing a Unidisciplinary Focus

As a discipline GP’s were more focused on and concerned with the condition of their general practice business and wanted to protect and maintain their current independent status within the primary healthcare system.

> *Why should I operate at a loss? This is a business.*

(GP 3)

> *‘Time is money’.*

GP (4)

> *‘We’re not employees, we’re self-employed …then you have the pharmacists they’re business people too….so maybe if the HSE were more cognisant of where we’re at, then we might be more approachable about it you know.’*

(GP 8)

Yet their independence appeared to create a perceived inability to change how they work as they have invested personally in their practice as GP (2) described “*When you buy into a practice, build a new practice, you create a practice and get young girls working for you and all that. And then you are completely inflexible, you’re stuck in that rut and you have to stay with it.*”

Many NMHP’s articulated their views on the presence of both self-employed-employee arrangements within the same system and the negative impact they perceived it had on the levels of interprofessional teamwork achievable.
“The problem is really that you have GP’s working as a business really, the rest of us working with the HSE.”

(PHN 4)

“I think they’ve no real vested interest in coming to a primary care team, when they could be seeing patients that would be you know paying for their services. But I think most of the people we would see would have medical cards or GP visiting cards, so they’re not people that are paying”

(OT 1)

The financing structures within the primary healthcare structures appear to have remained unchanged with individuals reimbursed in terms of being a salaried employee or paid by contractual arrangements negotiated on behalf of the GP’s.

Furthermore for GP’s their business comprise of both public patients (GMS) and private patients (fee-per-visit) and the fact that their private patients would not benefit from the services of the primary care team was viewed in very negative terms.

“We sign up for a primary care team on the basis of need not for medical care patients, it’s something I feel very strongly about.”

(GP 4)

“It’s the primary care team but it’s for GMS, it’s not for all my patients”

(GP 7)

This was confirmed by other professions as an issue with PHN (1) stating that “It’s getting tighter now with public health nurses seeing people without medical cards.” This reflects a disparity between the primary healthcare vision outlined in the Primary Care Strategy of a universally accessible healthcare system ‘available to all people regardless of who they are, where they live, what their income is or what health and social care problem they have’ (DoHC, 2001) and the reality of an
unchanged mixed funding mechanisms that continues to underpin primary healthcare in Ireland.

None of the participants referred to the possibility of team reimbursement structures or monetary team incentives. All of the GP’s referred to the need to be incentivised to participate in teamwork activities.

“You could take some time out if there was some sort of payment for going to them (meetings) really….I think you have to compensated for the time you spend at these things. It sounds so awful and I’d love if we were in a primary care environment where we didn’t have to think about that at all and all your focus could be just on patient care but that’s not the reality of it here right now you know, so if its, if you’re compensated for it then you don’t mind either finding the time to do extra or else you can get somebody in to do an extra session so that it’s not a loss to the practice.”

(GP 5)

“We need funding for attending meetings, you know, that there would be something to make it attractive to become involved in these meetings.”

(GP 7)

Interestingly GP (3) outlined that monetary incentives were an aspect to the type of payment system they were accustomed to “We get paid for doing extra things…one yearly fee but these are extras and they help bring it up.”

The NMHP’s also perceived that financial incentives had a role to play in relation to increasing GP’s willingness to be involved in teamworking structures.

They don’t commit to it because they don’t get paid to commit to it.”

(PN 2)

“They need to incentivise them just to get them going. Something simple like you get an extra bonus at the end of the year for participating in primary care.”

(PHN 1)
Therefore while the structural contexts continue to focus on and reimburse profession-based activities, disciplines will most likely continue to prioritise their own professional agendas. The impact is illustrated not just across the health professions but also between PCDOs and clinical managers in the HSE, where their priorities appear not to be congruent. This was illustrated by the participants who revealed a level of mixed messages they received which emanated from within the difference disciplines within the HSE. The PCDO is a general management role to support primary healthcare professional to progress their interprofessional teamworking activities and the primary healthcare strategy objectives. Participants described working situations where their clinical line manager would advise and direct them, yet also refer to PCDOs whose requests appeared not to correlate with that of the former. This highlights possible competing agendas within the HSE in relation to implementing primary healthcare team activities and disciplinary priorities.

“You’re told not to be engaging in initiatives because you didn’t have the actual time.”

(OT 2)

“There are primary care team meetings that I would be invited to but you know, I suppose, I’m instructed not to go to them.”

(SLT 2)

“The manager used to be there ticking the box exercise type of thing, a thing to fill nationally and yeah was really pushing the clinical meetings.”

(PHYSIO 2)

“We were told we had to have meetings.”

(PHYSIO 3)

It is not surprising that professionals then may feel more aligned to their own discipline rather than team when there is an inconsistency in terms of implementing team initiatives.
“I feel part of a physio team. I don’t feel part of a primary care team.”

PHYSIO (3)

“It’s the lack of ownership of the problem is the thing. The priorities tend to, items tend to be prioritised by the needs of the individual professionals, their group rather than the needs of the team or the needs of the patient.”

(GP 4)

“You know the HSE do their thing, the PHN’s do their thing, there’s no centralisation of it.”

(PN 2)

6.8.2 Colocation: Solution or Setback?

All of the participants reported on various aspects of the physical structures within primary healthcare and it appeared that there is little consistency in relation to the accommodation provided for teams. Many of the NMHP’s interviewed were collocated together in traditional health centres but the professions present varied greatly. Only two NMHP’s interviewed were part of a team where the whole team was co-located in a designated primary healthcare centre. Two GP’s worked from HSE provided health centres where some other NMHP professions were based, while the remaining GP’s worked from their privately owned general practice centres. There has been very little progress made towards facilitating a shared team model in terms of collocating professionals or updating the current cramped spaces described by the interviewees and provided by the HSE. Where professionals were collocated they reported this facilitated greater team member interactions and appeared to enhance better working relationships.

“I think the fact that we’re physically very close together here, it’s very easy to just go and grab somebody and discuss a case with them.”

(OT 1)

It also appeared to have facilitated professionals to learn more about each other, in an informal environment based on social interactions, enabled by shared communal areas as reported by PHYSIO (1) “Having a cup of coffee with the GP, becoming
familiar with them, getting to know them, learning about their role and they’ve certainly learned about my role. I’ve started getting more referrals based on them realising, learning what I do.” These social interactions reduced the fear or reluctance that was reported by PHYSIO (2) “Like we have coffee and lunch together…do you know if I was to pick up the phone I’d be kind of nervous. There’d nearly be barriers there…so if you know a person socially it’s definitely a lot easier professionally.”

It is interesting to note that GP’s had a very different perception of colocation. They valued the idea that new primary healthcare centres would create greater access to services and diagnostic facilities for them and their patients but very few made any reference to it enabling sharing patient care or increasing their ability to participate in teamwork. They also articulated a fear that the location of these centres could ruin their businesses and said they would not move which highlighting a tension between the old and proposed new structures and a failure to consider the potential resistance to such changes.

“For primary care centres with everything you know, even a lab and x-ray facilities because I mean that how it is elsewhere in the continent you know.”

(GP 1)

“But we’re all frightened of losing out, of our patients will go running off some other place, of no money.”

(GP 3)

“It was quite obvious from day one we’re not moving into X, we would lose all our patients if we moved to X, they just wouldn’t travel you know, some would but it would decimate us, but nobody thought out those kind of things.”

(GP 7)

6.8.3 Geographical Anomalies

Geographical contexts revealed that professionals employed by the HSE had set boundaries or geographical areas to cover and cared for patients only within those defined areas. Conversely patients can choose where to attend a GP as there is no universal patient registration, but their ability to access a primary healthcare team
and the services therein are linked to their geographical address, so they can only attend the team associated with that area. This means that general practices are involved with myriad teams, while the HSE employed practitioners may need to liaise with many different general practices depending on their patients GP preference which led to confusion, frustration and a general sense of disarray in terms of being a primary healthcare team as expressed by the participants.

“Well some of our patients would be in the X area, some would be in the X area and some of them would be in the X area and then we’d have patients from different parts of the city so it doesn’t fit. It should be going by practice rather than by where the patients are. I don’t know which primary care team to contact, it’s all very fragmented”

(GP 6)

“You might have one or two people that you might want to refer but it’s to two or three different teams, so it’s just the practicalities of it.”

(PN 3)

“I’m on 15 teams…some teams I’m closely connected with especially the ones that are close to where I’m based but there may be teams I am on that are 15 kilometres away, that I may not have a lot of clients in that areas so I don’t always get to go to those teams...”

(SLT 4)

It is unsurprising that ‘chaotic’ was a word used by interviewees to define interprofessional teamwork.

6.8.4 The Imposition of Formal Team Meetings

It was envisaged that all primary healthcare teams would hold frequent clinical team meetings as part of the HSE development plan for primary healthcare team processes nationally. Many HSE documents refer to the development of primary healthcare teams in terms of implementing ‘clinical team meetings’ (HSE, 2006;
Joyce & Casey, 2004) and the HSE have issued guidelines in keeping with this objective (Farrell et al., 2008).

All of the participants reported on primary healthcare team meetings, it was a topic which interviewees reported fervently on. A significant majority suggested that professional engagement with the team meeting process was fraught. The type of meeting was outlined in two ways, firstly a meeting process which was associated with the official or formal team meetings as implemented by the HSE which appeared to focus on its structure (e.g. meeting rules, official documentation) rather than purpose.

“Then it got very woolly because you couldn’t talk about a client unless you got their permission so that was defeating the object and it all can to a sliding halt.”

(PN 4)

“It was twice a month and there was a lot of paperwork involved.”

(OT 2)

“It was ‘happening’ but it wasn’t relevant to what we do on the ground.”

(PHYSIO 2)

Informal meetings appear to be the type of meeting structure that primary healthcare professionals were familiar with and more importantly were perceived as useful in that healthcare setting.

“We just come in and we go around the table, this person just said and usually then a cross discussion starts. There is no agenda…our clinical meeting are so good and they happen every two weeks… they’re short and because they are to the point they’re productive.

(GP 1)

“But we meet informally a lot….a lot and we do joint visits together.”

(OT 3)
“You know everybody was linking in anyway….basically the same people who were already there doing the same thing, they were just told to have a ‘meeting’ about it.”

(SLT 1)

The informality not only applied to sit-down meetings but a more fluid, flexible ad-hoc informality where professionals opportunistically discussed issues with their colleagues as described by OT (2), “We constantly meet each other in the corridors and discuss things.”

It appears that they continue to meet in an informal manner as their experiences of the HSE meeting format led to the belief they were unconstructive, with meetings seen as repetitive, creating duplication of paperwork and discussions completed elsewhere in practice in real time. Meeting agendas often didn’t capture current concerns and thus became irrelevant adding to the perception of their futility.

“The only thing about PCT meetings might be that we would already have discussed Rita so and so who had deteriorated and needed a hoist and she needed a rollator from the physio and we would already have discussed having stuff done and dusted and all would have gone in and done it and then it would come up on the PCT agenda to be discussed formally.”

(OT 3)

“It’s just a meeting every month but we, we have our, we wouldn’t be waiting for a meeting to discuss problems. We’d be doing it anyway prior to a meeting but normally at the meeting it would be resolved and you’d be saying well this is what I did now.”

(PHN 3)

These larger type formal meetings raised concerns regarding patient confidentiality for some interviewees and appeared to contribute further to the existing tensions between the health professions and HSE managers. They did not want HSE managers to be present at meetings as OT (2) outlined “There was huge tension about a non-clinical person being in the room.” However rather than generating a review of the process it appears that the clinical meeting process continued and the
professionals articulated a level of resentment as they perceive they are not being listened to and expected to attend meetings with no clarity of purpose leading to a perception that the meeting were more a management exercise than a real attempt at progressing teamwork in primary healthcare.

“It was never you know, it was, it never came from the bottom up. I don’t feel we were engaged with it.”

(GP 6)

“I think the person co-ordinating it perhaps didn’t have a lot of background knowledge or educational backup in terms of how to facilitate primary care meetings, how to I suppose get the best out of people, how to support people in a meaningful, constructive way.”

(OT 2)

Furthermore the current geographical anomalies outlined previously contributed to the turmoil as professionals described going to meetings where they may not be familiar with many of the patients being discussed. This also added further to the concern regarding confidentiality and their perception that such meetings were not an effective use of professional time.

“This kind of model of discussing cases, large numbers of people discussing something relevant to a few people, the whole thing of confidentiality, we all live in X. We’re all professionals of course, we’re not going to go out and talk about it but I don’t need to know about you, I shouldn’t know and I would hate if it was my mother being discussed.”

(GP 6)

“I have a primary care team meeting tomorrow. There are four clients on the list. I only know one of them, the other three I’ve never met.”

(OT 1)
GP’s were unique in this process as they began to refuse to attend such meetings. Only one GP interviewed engaged regularly at team meetings. They articulated absolute distain for theses primary healthcare team meetings as currently structured. There also appeared to be a political aspect in terms of their current contracts with the HSE and their relationship with the non-clinical management of primary healthcare.

“No, they folded because of the political issues with the GMS contract in the way the HSE are approaching (pause), you know there’s been a net 30-40% cut and the work that we do for meetings is in our own time. It was HSE driven so we had to put the foot down.”

(GP 8)

“GP’s are renegotiating their contracts at the moment and there has to be a positive outcome.”

(GP 1)

“I’m not going to meetings run by a civil servant who want me to get up and describe what I do.”

(GP 3)

It is interesting to note where professionals were unable to opt out they sought to adapt the formal meetings that continued to be enforced as OT (3) outlined “We just do the clinical thing every time and then it would tend to be then, there would be a tendency afterwards if someone wanted to talk to the social worker about something at the break or we’d wait until afterwards, keep the time for the whole team to a minimum. Or we’d use it in a way you know to get everyone together and communicating then separately.”

6.8.5 Communication Infrastructure

Participants outlined that communication was fundamental to teamwork. Meeting colleagues was outlined as necessary in some cases but the reality of the structural
contexts within primary healthcare revealed that participants regard the need for more advanced IT infrastructure as critical in order to progress teamwork.

“Communication is the key, communication is the big one.”

(GP 3)

“Clear communication...that makes a huge difference because you can email someone and have an answer in minutes.”

(PHN 1)

However the participants perceive that the communication infrastructure has not changed to enable a shared model of care, and outlined difficulties in accessing what might be considered as basic communication tools. It appears that facilitating better communication across profession, practice and geographical divides while being identified as a priority (DoHC, 2001) remains unfulfilled in terms of implementation.

“Communication within the team is very poor, we don’t have any easy mechanism for communication.....the lack of shared records means that you don’t know what other people are doing in the care of the patient.”

(GP 4)

“I was probably here 2 or 3 years before I got a computer. We got the computer but there was a member of staff here before me for 30 years and had been asking for a computer for ten years. If we compared it to the private sector, to business you know everything is email.....and we didn’t have a direct phone line, I’d say after a year we got a direct phone line.”

(PHYSIO 2)

One GP outlined that providing appropriate IT infrastructure was possible as it has being implemented, however he emphasised that this had not been a HSE-led project which appears to further illustrate the lack of confidence professionals appear to have in the HSE in terms of managing primary healthcare, “A central
shared record, log on and look into it. A secure area. We’ve seen electronic communication work very well with Healthlink and Healthlink was developed by the Department of Health, not the HSE (emphasised), the Department of Health. It’s been funded, the funding has continued and it’s nearly transformed our communication with the hospital. That’s the electronic communication system that’s secure, approved by Data Protection and everybody else ok, so it is possible to do it….One last statement, improve communication systems, if there’s one thing you know to emphasise is the need for improved day to day communication about events and about patients.”

(GP 4)

6.8.6 Outcomes

The outcomes or results of the implementation process appear to reveal poor progress in terms of progressing teamwork. Instead the ‘forced’ meetings, a perceived lack of regard for the interprofessional interactions in place and discounting the influence of the well-established traditional primary healthcare system components (general practice and community care-based NMHPs) appear to have had the opposite effect than what was intended. Rather than unifying the professions, the implementation process outlined by the participants has paradoxically created further division and animosity towards the organisation which previously acknowledged the need for the ‘commitment and support of the various professional providers and other staff in order to ensure that the development and change envisaged is successfully progresses on a partnership level’ (DoHC, 2001(b)). Rather than progress, professionals have regressed as PHN (4) suggests “We’re gone back to how we were before all this primary care thing happened.”

The majority of participants outlined a belief that the implementation process was unsuccessful and lacked any meaningful determination to support a new model of primary healthcare. The three word descriptions of primary healthcare teamwork articulated by the interviewees reflect this process as experienced by them, ‘atrocious infrastructure’, ‘underfunded’, ‘non-vision’ and ‘poorly thought out.’

“A PCT is almost because there’s going to be a couple of years before they can be seen in the hospital, be it waiting lists or they’re being dumped out of the hospital
and all services have been cut and people tend to scrabble and get anything for
patients and I think that’s not so nice as well for the disparity—it’s just ‘anything is
better than nothing’ attitude.”

(PN 3)

Another interesting outcome is that throughout the interview process a significant
majority of NMHP’s were positive about the potential for and their experiences of
teamwork and while SLT’s were also positive they highlighted a perceived
anomaly in that they all questioned whether a primary healthcare team was the
appropriate placement for SLT’s due to their predominantly paediatric focused
caseloads. They articulated that the focus currently within the teams was adult-
based with chronic or complex conditions. It highlighted an apparent lack of
awareness of primary healthcare profession workloads and planning for new team
processes.

“X would not be unusual, there would be other counties where they would definitely
have more of an adult service and I think that really has a big impact on our ability
to be involved in primary care.”

(SLT 1)

“Teachers and Education are a huge part of my team..... to me it (speech &
language therapy) would be far better placed within Education more like the
models they have in America you know where the speech therapist is based in the
schools.”

(SLT 2)

The fact that SLT’s question their position is reasonable due to their experiences of
an adult-based focus within the primary healthcare teams, however this uncertainty
may not have being helped by what appears to be organisational ambiguity as to
whether speech and language therapy is best placed within primary healthcare and
how this was dealt with by the HSE as articulated by SLT (3), “Well the model has
changed I mean from our perspective, a speech and language therapy perspective they said we were on the team, we were on the core team and then they took us off the core team and put us on whatever the, the network. So we were on the core team and taken off the core team and to be honest there again we were on it, I don’t know are we still, are we supposed to be on it? They don’t even know where to put us.”

Participants reported overwhelmingly on the absence of any clear team goals or objectives and appear not to have being supported in any meaningful way to identify with a team rather than their own profession. As seen in hierarchical theme one (conflict and consensus) the lack of clarity relating to roles and responsibilities within a collective team may also therefore negatively impact on their ability to visualise and realise team level goals and objectives.

“Clear role definition. Goals and objectives would be another important issue which should be clearly defined. I think everybody should know their role and their responsibilities within it (team).”

(GP 7)

None of the participants reported being aware of any specific team level goals, however some participants did describe broad general goals relating to provision of good quality healthcare generally but in very vague terms.

“I don’t know. It may have but they’re not familiar to me…..I haven’t got a document that has goals and objectives of the X primary care team available to us anywhere.”

(GP 4)

“I suppose in an informal way we do, you know, to sort out a situation in the community…. I think the common goal is for delivering care, good quality care and holistic care to the client.”

(PHN 2)

Many participants questioned the viability of the teamwork model for the primary healthcare setting, not only illustrated a divisive aspect concerning general practice and the other primary care services but a healthcare system and policy direction in
which teamworking as envisaged has struggled to become embedded in practice. In terms of the organisation charged with implementing a model of teamwork into practice, the participants articulated a lack of consultation, a lack of understanding, mixed support from managers and no evaluation of the levels of teamworking and shared care achieved thus far, as SLT (1) asks, “You have to look at it. Is it working in this format? Is there a better way to do teamwork? Is there a better way of facilitating teamworking rather than primary care teams?”

It appears that the enhancement of interprofessional primary healthcare teamworking as a central objective of the Primary Care Strategy may have being lost in translation and exhausted any goodwill or support for enhancing teamwork that may have existed in that process.

“It has created a lot of resistance and burned a certain amount of goodwill as well.”

(PN 3)

“We’re kind of thrown in at the deep end, I don’t think everybody has, anybody has a real idea as to what, what we’re supposed to do. You know we’ve all seen the videos at this stage of what is a primary care team. But you know it’s all great, it looks good but it doesn’t, it just, there’s something there that isn’t, it isn’t translating from that video, it’s not translating into reality so and that’s my opinion.”

(SLT 3)

Primary healthcare teamwork was referred to as ‘unsuccessful’, ‘disjointed’, ‘aspirational’, ‘limited’, ‘boundaries’, ‘poor leadership’, ‘pathetic’ and ‘poorly thought out’. These appear to reflect outcomes of the implementation process as articulated by many practitioners. Yet others did refer to positively to the process where collocation was delivered such as ‘location’ and ‘same building’.

6.9 Resourced to Fail

Over the past seven years (2008-2015) Ireland like many other nations has had to deal with the financial impact of a global recession and many cutbacks across the overall healthcare system have been experienced. Conversely, the Irish Primary
Care Strategy (DoHC, 2001(b)) was introduced in an era of unprecedented prosperity and generous budgetary policies yet a significant majority of participants described a lack of resources for teamwork over this period of time. The fourth theme, illustrates the significant underfunding and failure to invest in many aspects of the Irish primary healthcare system as perceived by the interviewees. One GP (4) refers to the resources promised verses the reality of resources delivered as being ‘sold a pup’. In this study the focus is more specifically the failure to provide resources that could support and enhance and sustain interprofessional teamwork. While this theme reflects aspects of the implementation process it illuminates the more subtle impacts for day to day interprofessional teamwork in practice. The sub-themes identified are (1) Deficient Infrastructure (2) The Education and Training Lacuna (3) Prerequisites for Teamwork.

6.9.1 Deficient Infrastructure

Co-location of teams was a key aspect of the Primary Care Strategy to promote teamwork. Yet very few interviewees reported being part of a co-located team in practice which revealed a lack of provision of purpose built primary healthcare centres as outlined in the strategy (DoHC, 2001(b)). Poor accommodation, lack of staff, clinical space and funding for equipment were frequently described.

“Well like facilities are the first thing, we don’t have adequate facilities.”

(GP 8)

“Well the funding for equipment is a huge hindrance for us because we have people that are sitting in a drawer with ‘pending’ written on them. They are just waiting for equipment which we can’t buy because we don’t have the money.”

(OT 1)

“We’ve the lowest number of physio to patients but we have way less infrastructure, we’ve no admin support. We’re trying to get equipment for each physio but storage space…..we don’t have any rehab space and we’ve struggled with the classes we were doing because that was taken, sold and so we don’t have that space anymore.”

(PHYSIO 3)
IT infrastructure is under-resourced with GP (7) outlining a lack of available investment for IT systems in general practice, “Every single bit of IT in this room is paid for by us and maintained by us. We get nothing. They want to send you stuff down by email all the time and they want to send all the lab work and that’s fine, it’s great, its good stuff but it’s us that pays for it.”

While HSE employees articulated similar problems with PHN (1) stating that, “Some (PHN’s) are still requesting IT over the years, they are requesting and requesting and it’s still not come.”

6.9.2 The Education & Training Lacuna

While there is an evidence base which advocates the use of teamwork models it appeared that participants were not provided with any learning resources, education or training relating to teamwork. GP’s suggested that an evidence-base may encourage their participation.

“I think it would help GP’s to get more involved if there was hard evidence that it made a difference to outcomes.”

(GP 4)

“Looking at outcomes, see that it was actually doing something and it wasn’t just like talk for the sake of talk and the patient would benefit from it as well.”

(GP 7)

While NMHP’s reported a vague or limited knowledge of any empirical evidence, their belief in teamwork appeared to be sustained by their positive experiences in practice.

“There is a lot of evidence in research and literature with regard to teamwork but I know from what I’ve experienced on the ground, absolutely.”

(PHN 2)

“Whether there’s evidence or not I don’t know, but I have seen it work efficiently and effectively and now that’s what motivates me.”

(SLT 3)
A complete lack of training for teamwork and interprofessional education models were reported. Reporting also illuminated the further preservation of silo-based structures as where education was outlined it was described as being by discipline rather than interprofessional.

“No, not at all.”

(GP 7).

“No mmm we had a talk alright from one of the Primary Care Development Officers at the beginning mmm as to how to maybe set to up and things like that, that might have been just once. But no official training, no.”

(PHN 1)

“You know there’s very little in terms of training like apart from things that are legally required like Children’s First and Fire Safety training…..if we were doing training it would be for our own department.”

(OT 3)

The importance of providing educational and training resources for GP’s was exemplified by GP (2), “The GP’s were all older and we were just not into it (teamwork). It came too late for us and we’re set in our ways. I’d love to change my ways but I can’t. Now the younger GP’s coming out are brought up in a different manner altogether, they are more into primary care once they go on the GP training scheme, they would be way different to us.” It also illustrates the sizable challenge of introducing primary healthcare teamwork and embedding it in practice that appears to have being grossly underestimated by the HSE. It has resulted in the GP’s disengaging from a process that appears to have stagnated.

“So forget primary care I’ll do it on my own”

(GP 2)

“You know we had meetings for about 2 years, meetings about meetings.”

(PHN 4)
The very human aspect of being under-resourced as described by participants is outlined below, the impact not only for them as professionals but their patients is illustrated. It appears to have direct consequences for the quality of the services that patients receive and increases the stress-related experiences of the primary healthcare professionals who continue to provide a level of service in such conditions.

“Things are really stretched. It’s really awful telling an 80 year old they can’t have a toilet seat, to go to Argos and buy one. They are only €8.50. It’s awful. We have stopped getting things in stock. Equipment is a real issue for us……we’re cleaning down wheel commodes ourselves now. Our recycle system is gone to pot now, it’s not working. We used to have a good cleaning company doing it but it, now it’s all centralised……There is a huge amount of stress in this building, I think most people deal with it by withdrawing into their offices. It makes things difficult.”

(OT 3)

“People need to feel a bit more, where as they felt they don’t care about us.”

(SLT 1)

6.9.3 Prerequisites for Teamwork

Some participants made references to teamworking in the acute sector, the perception being that it worked better in that area. It may be the situation that it is better resourced as PHYSIO (2) highlighted a disparity in terms of resourcing in the acute and community sectors. In her area there are 1.5 staff members to deal with an average of 80 to 100 referral per month with no clerical support, while in the closest regional hospital there are 4 to 5 full time staff members to deal with 100 referrals per month, with full time clerical support in place. This illuminates a potential imbalance in terms of the value placed on resourcing acute service provision over primary care service provision which may be felt by primary healthcare professions.

Participants articulated a need for professionals to see that there were both professional and patient benefits to be garnered from the process. All the participants are very aware of the challenges for interprofessional teamwork in
primary healthcare, yet are acutely aware that without the appropriate resources it will remain a vision rather than a viable option.

GP (5) outlined some prerequisite resources essential for primary care teamwork, “If I was to be part of a team it would have to be a team that was properly set up, that was actually resourced, that had the staff assigned to it, not a physio for 5,000 other people. There would have to resources that the people going to those meetings aren’t losing income, aren’t increasing their workload by going to it and then not getting anything out of it in terms of patient, which is what is happening now.”

“People need to see benefits. That might sound very materialistic but even the little things of getting an extra bit of room (clinical space).”

(SLT 1)

GP’s did outline their grievances in terms of their private patients currently being unable to access primary healthcare services. This issue also needs to be considered as a prerequisite not only from a general practice perspective but as a genuine reflection of the ethos underpinning primary healthcare which is based on equity and social justice.

With regard to the issue of under-resourcing interviewees referred to primary healthcare teamwork as ‘under-resourced’, ‘underfunded’, ‘understaffed’, ‘frustrating’ and ‘failure’ which highlight the enormous challenge for team members and an environment where the risks for failure were not pre-empted or planned for appropriately.
Chapter Seven: Phase Two Discussion

7.1 Introduction

Phase two of the study was designed to complement and ‘build on’ the findings in phase one (Creswell, 2009), to enhance understanding of the levels of teamworking currently experienced by health professionals assigned to primary healthcare teams in Ireland. The aim was to gain more detailed information from frontline practitioners about their experiences and perceptions of teamwork within the Irish context. While phase one identified professional differences in perceived levels of teamwork quantitatively, it was not possible to explore the perceptions and rationales which determined those results. Phase two examined the personal experiences across the professions and explored not only key factors identified in phase one but created the potential to also illuminate other factors not identified in phase one. This phase identified what factors and conditions influenced their perceived levels of participation or disengagement from team processes and why. It also illustrated profession-specific issues with regard to teamworking within the Irish primary healthcare system.

Sibthorpe & Gardner (2007) suggest that to correctly evaluate overall performance in primary healthcare, the systems must ‘make sense to providers at the coalface’ (pg. 96). Therefore the aim was to explore the perceptions and experiences of IPTW in primary healthcare professionals working primary healthcare in Ireland, to find out if it makes sense for these professionals. The objectives were to:

- Explore their understanding of teamwork.
- Explore their perceptions of current levels of teamwork and teamworking generally.
- Explore different perspectives of IPTW
- Explore the facilitators and barriers to IPTW.

The four hierarchical themes identified in phase two of this study are discussed and links to the extant literature are made.
7.2 Conflict

7.2.1 Professional & Interprofessional Logic

Medical dominance in healthcare has been debated over many decades. It is suggested that medicine controls what happens in the health division of labour because of its self-regulatory status, governing not only content and terms and conditions for medics, but also exerting control over other occupations in the division of labour and over patients. While increased occupational differentiation and specialisation in healthcare professions overtime has resulted in challenges to medical dominance there is uncertainty in relation to the extent of such occupations to influence a decline of such dominance (Cott 1997; Friedson, 1970). More recently Hoskins (2011) deliberates that medical professionals see the interprofessional agenda as a means to produce and equip cheaper generic healthcare and de-professionalise medicine. The contemporary healthcare team is seen as a factor which challenges medical authority as it seeks to draw together a group of specialised health professions to deliver care collectively.

However such challenges often remain unspoken, hidden and therefore unaddressed, making them an impervious barrier (Hall, 2005; Mur-Veeman et al., 2001). Value systems affect teamwork and interprofessional interactions can be subject to ‘sabotage’ (McCallin, 2001). Within this study participants clearly demonstrated their position in terms of their underlying logics or perceptions towards IPTW. GP’s were opposed to or had great difficulty with IPTW as it is currently envisaged and consciously refused to engage in primary healthcare team initiatives. As a group they were much more entrenched in their opposition to teamwork and while the NMHP’s acknowledged that there were difficulties both practical and ideological, they were not opposed in principle.

Internationally defining primary healthcare function has created division between those who see it as being another name for general practice and those who refer to primary healthcare as a much broader concept, where health is defined using a biopsychosocial model and sees a greater role for other healthcare professionals as essential in terms of delivering care to those in need. Others go further to describe primary healthcare as a moral notion, concerned with issues such as social justice and funding priorities (extra-professional values) and autonomy and authority
(professional values) (Cueto, 2004; Keleher, 2001; Barnard, 1987). This lack of agreement may act as a barrier in terms of a collective team vision. In this study the division was clearly illustrated with GP’s articulating that general practice was primary healthcare and while acknowledging the contribution of other professions they felt that they do not work within those ‘teams’ but instead refer patients to the services provided by those professions as needed. One GP referred to all the professions outside of general practice as the ‘secondary’ team. The majority of the NMHPs sought greater collaboration with general practice and were supportive of a broader primary healthcare ethos to underpin how they should work together. One therapist argued that the difficulty lay in the difference of what GP’s perceived the whole ethos of primary healthcare to be and what the other professions felt it could become. This appears to have resulted in two distinct elements of primary healthcare being present in the Irish context, in the form of general practice v. HSE healthcare services, both have ‘teams’ functioning in the primary healthcare setting which appears to limit and promote interprofessional interactions simultaneously. Other research has shown divisive boundaries exist between primary healthcare teams and general practice (Boudioni et al., 2007).

7.2.2 Ideological Disparity
Disparate training followed by socialisation into distinct professionals groups hampers the ability of different professionals to work together (Nisbet et al., 2015; Price et al., 2014; Bélanger & Rodríguez, 2008). Hall and Weaver (2001) state that there is a lack of undergraduate IPE and where it is provided the majority of participants are from the allied health professions. This supports findings in this study where the NMHP’s suggested interprofessional training was part of their training and shaped how they think about their work, while GP’s reported that they could not change their ways and that the doctors undertaking the current general practice programme were more focused on primary healthcare and teamwork but they were not used to working in such teams and that it would be too difficult to change. Temkin-Greener (1983) suggests that medical staff are reluctant to engage with teamwork as they view it as a nursing concept. Reforms that promote and provide IPE and learning opportunities can help to deal with the professional insecurities than traditionally exist in primary healthcare practice (Weaver et al., 2014, Hood et al., 2014; Elston & Holloway, 2001). While this highlights the
deeply rooted traditional values and roles that can prevail, it also highlights the potential in adjusting undergraduate and post graduate training programmes to include IPE modules for the healthcare professions.

Because General Practice is seen as central to the model of teamwork envisaged in the Primary Care Strategy (DoHC, 2001(b)) a significant majority of those interviewed perceived that general practitioners must be active members of the primary healthcare team. GP’s also perceived their input was necessary but in a more supervisory or managerial capacity. They referred to having overall responsibility for patient care and therefore perceived they should be involved in how teams are determined, their structure and function, although currently their interprofessional actions were described as referring to other primary healthcare based services or discussing patient care when contacted. These interactions were transient and irregular. Hackman (1998) suggests that if the team is loosely connected it will cease to function and to reap the benefits of teamwork they must interact as a unit. The levels of participation described by the interviewees were mainly between HSE-based team members, the NMHP’s all reported that they perceived that full team participation would enhance teamwork, a sentiment which was not shared by the majority of GPs. In reality interactions with GP’s were limited and the introduction of primary health care teams did not result in any significant change to the levels of interactions already being undertaken by the professions. In this study only one GP regularly attended team meetings. One other GP reported attending infrequently, when requested and only if it involved one of his/her patients. Phone contact was normally initiated by the NMHP team members. This reflects findings of a review of collaborative practice in primary healthcare by Schadewaldt et al. (2013) which found that nurses reported that collaboration was one-sided and consultations with medical practitioners were initiated by nurses.

Two UK based studies document the successful transition to interprofessional teamwork however they were based on non-medical health profession-led teams. Members highlighted the equality of working relationships and the full participation of team members as redefining how they moved to teamwork in practice, with community services using this model reporting significantly lowered costs of the cost per contact (Molyneux, 2001; Lowe & O’Hara, 2000). While Grumbach and Bodenheimer (2004) concur that alternative models can reduce
costs, they also highlight that the fact of non-physician clinicians seeing less patients per hour who work fewer hours per week than primary care physicians is not always factored in the evaluation process.

Participation is seen as a key enabler for teamwork (Greenfield et al., 2013; Borrill et al., 2000). Drawing on the qualitative findings in this study the majority of participating GP’s are now all actively disengaged from the primary healthcare teams and are adamant they will not participate in any team process as currently configured. They did emphasise that they continue to work on a one to one basis with other professionals where appropriate. Where participation was low the team members struggled or eventually failed to interact regularly ceasing to function as a team but where professionals were active participants, albeit in smaller NMHP sub-teams these teams were effective and collaboration was sustained. It may be that the model of teamwork envisaged in Ireland is one which should be revisited to evaluate its feasibility and the potential of possible alternative team models explored.

The conflict theme identified relates to Social Identity Theory (Turner and Tajfel, 1986) which seeks to understand intergroup discrimination and the conditions that would lead a group members to discriminate in favour of the group they are aligned to (in group) against another group (out group). The findings in this study reveal clear tensions with the GP group (in group) as they exhibit a level of hostility towards the primary healthcare team identity (out group). They identify with a General Practice ‘group’ and perceived the general practice team to be the legitimate team/group providing community-based healthcare and the primary healthcare team/group as a secondary non-medical team, thus differentiating their group clearly from another.

7.3 Consensus

7.3.1 Complex Cases

There was agreement that when appropriate an IPTW model was effective. Based on their experiences they articulated that IPTW was useful where multiple professionals needed to be involved simultaneously in the case of a patient and or family to deal with complex and challenging issues. Across the professions many participants spoke of situations where in order to be able move forward with an
aspect of care you needed the input of another profession in order to do so. This is reflective of what is referred to as one of the defining features of IPTW, ‘task interdependence’ (Thylefors et al., 2005; Grumbach & Bodenheimer, 2004; Donaldson, 2001) where team effectiveness relies on the co-ordinated participation and interactions of the team members. Brault et al. (2014) found that clinically complex situations created greater opportunity for professionals to interact. Drinka and Clarke (2000) suggest that teamwork occurs when professionals are not just team members but team players, a developmental process which requires the active engagement of the individual and whole team. This highlights that performance, one of two overarching perspectives on teamwork, team characteristics (inputs/context/structures) and team performance (processes) (Reeves et al., 2010; Lemieux-Charles & McGuire, 2006; Gõni, 1999), is of significance. Participants perceived that for identified complex cases it is worth engaging in IPTW activities, sharing care through interdependent actions in response to complex needs. Thus regardless of the levels of team characteristics present, participants engaged in teamwork to resolve complex cases because in their experiences in these specific cases, it was beneficial to do so. These findings reflect research in this area where team processes appear to be more influential in terms of motivating IPTW engagement (Poulton & West, 1999).

Theoretically this relates to both Contingency Theory (Gladstein, 1984) and Realistic Conflict Theory (Brown et al., 1986). Firstly, in terms of Contingency Theory the nature of the work impacted on team effectiveness, with the professions engaging more frequently to resolve what they perceived to be difficult or complex patient-related issues. Their shared understanding of the patient need as complex and a shared sense of urgency appeared to create greater clarity and a team goal to provide for such patients collectively. Secondly, they perceived that the broader primary healthcare team in these situations was more effective and efficient and all the professions engaged. This relates to Realist Conflict Theory which posits that where groups are cooperatively interdependent conflict is reduced, improving interprofessional relations.

Conceptually, this level of interprofessional engagement in complex cases relates to Reeves et al. (2010) team typology where for the professionals in this study, the perceived high levels of interdependence and shared responsibility resulted in more
focused interaction and teamwork as described within the typology. However, complexity of need can complicate teamwork as greater accommodation of specialist care providers may need to be incorporated into the team, altering traditional patterns of care (Reeves et al., 2010). This aspect to complex cases was not conveyed in this study, instead the participants outlined that when a case was identified as being complex it appeared to create the right conditions (sense of urgency, unpredictability and complexity) and team members endeavoured to perform as interprofessional team players.

7.3.2 Benefits
Benefits were discerned from working in an interprofessional team in terms of better patient care and outcomes, improving professional-work experiences and creating greater efficiencies for the organisational overall. West et al. (2012) found that team members reported higher levels of well-being and lower levels of stress than ‘pseudo’ team members. Many of the benefits outlined by the participants reinforce those identified in the literature and research conducted in this topic area. For patients the benefits were perceived to be garnered where a collective team process provided a multiplicity of professional expertise with which to view, plan and care for patients providing a more holistic view of the patient underpinned by a broader definition of health (Harris et al., 2010; Shaw et al., 2008; Kelleher, 2001). Professionally, this process warranted greater communication and increased interactions (Clements et al., 2007; Cook et al., 2001). Sharing knowledge, learning and the burden of care (Hansson et al., 2008; Shaw et al., 2008), was of particular benefit when dealing with complex cases (Choi & Pak, 2006) and helped to build better working relationships between the professions, breaking down professional barriers (Cook et al., 2001; Molyneux, 2001) and for some participants brought role clarity where time and space had been invested in early team development (Harris et al., 2010; Suter et al., 2009). While all of the professionals were positive about the benefits for patients and professionals the GPs were less enthusiastic in their assessment of the benefits of IPTW. This situation is comparable to other studies where regardless of the benefits they identified, there was a level of ambiguity in terms of their feelings towards being an equal member of a team (Hansson et al., 2008; Cook et al., 2001), which may reflect the strength of professional socialisation as outlined previously. NMHP’s saw a significant benefit to the
participation of the GP’s in the primary healthcare team, many perceived this to be essential to being able to plan holistically for the patient, with some suggesting that GP’s were key informants and without their full participation this model of teamwork added little advancement to the established professional interactions in practice currently in Ireland. GPs did see their involvement as a benefit to the IPTW process but their involvement was described in a consultative rather than participatory manner, attributing the benefits to be gained more to others rather than to themselves. This is comparable to findings in a study by Schadewaldt et al. (2013) where doctors identified working together as ‘providing advice’ while nurse practitioners referred to it as ‘reciprocal discussions’.

IPTW must be perceived to benefit the patient and the professional. Within this study the majority of the participants also outlined some negative experiences of teamworking. This has impacted on their willingness to engage as members of a primary healthcare team as defined by the HSE. One GP spoke of his own enthusiasm for teamwork initially and that of two other GP colleagues in the area stating they engaged with the process over a two to three year period but that the process failed to deliver any change. All the GPs described the process as drawn out, politically motivated and that over time they could not discern any benefits for them, their patients or their practice. The findings in this phase of the study reveal that the GPs interviewed are now all actively disengaged and are adamant they will not participate in any team process as currently configured, continuing instead to work with other professionals where they deemed it appropriate. While many NMHP’s reported negative experiences, their reaction to such experiences was different. The negative impact was lessened by their positive experiences. They reported benefits of and belief in the potential for teamwork regardless of current working conditions. They described positive practical experiences, of more holistic care planning for patients, a reduction in social isolation and shared learning opportunities for the professions. Some also referred to the safety and reassurance of ‘team’ decision-making and having others to discuss difficult cases with. This is commensurate with the literature where NMHP’s report greater benefits of teamwork, place value in the opportunity to partake in shared learning and teamworking more frequently (Schadewaldt et al., 2013; Pullon et al., 2009; Cook et al., 2001; Lowe & O’Hara, 2000; Yarborough et al., 2000). This belief in and
openness to teamwork fosters collaborative practice (San Martín-Rodríguez et al., 2005). In Ireland as primary healthcare is currently structured in exchange for GP participation in IPTW there must also be a perceived benefit for general practice as independently run businesses, or at a minimum that GPs do not to feel threatened by changes to practice. These findings are comparable with previous studies (Pullon et al., 2009; Mur-Veeman et al., 2001) and highlight the very different professional attitudes to and experiences of teamwork ongoing in practice.

Miller et al. (2008) state that the importance of nurses engaging collaboratively with other professionals in order to provide high quality patient care is recognised internationally. Their study revealed that nurses were very influenced by emotion in their interprofessional work and were less likely to engage in collaborative working because of the negative emotions they experienced. Other studies suggest that nurses have difficulty establishing themselves as equal members of a team (Jones, 2006; Atwal & Caldwell, 2006; Long et al., 2003; MurVeeman et al., 2001). These findings are not supported in this study where despite challenging conditions nurses remained engaged and positive in relation to teamwork. Reeves et al. (2010) suggest that individuals can become attached to the team they work in. Nurses described their natural affinity to teamwork, and a belief that teamwork was better for the patient and for health professions, regardless of the current levels achieved. A study across 89 nursing teams by Ortega et al. (2012) showed that team belief enables team learning and team performance. In a study by O’Neill and Cowman (2008) both PHN’s and PN’s identified themselves as communicators and co-ordinators across services based on their local knowledge, while Woods and Magyary (2010) suggest that nursing has an important role to play in interprofessional initiatives. Furthermore many other NMHP colleagues referred to the PHN as a facilitator within the team. The levels of contact with PHN’s was greater than with other team members, describing the PHN as a more frequent referrer, providing a greater level of information and feedback than other members. MurVeeman et al. (2001) suggest that nurses are the link between different agencies and professions while Grumbach & Bodenheimer (2004) suggest nurses have better communication skills that physicians. In this primary healthcare setting nurses are seen to enable teamwork. As nurses identify themselves as good communicators and co-ordinators of services in the community their potential as a medium to
promote teamwork should be explored further. It is notable that the Irish Medical Organisation and Irish College of General Practitioners when outlining their vision for general practice identify the GP, PN and PHN as the core team (IMO & ICGP, 2001).

Some participants made general vague references that teamwork is of benefit to the organisation in terms of efficiencies. Schofield and Amodeo (1999) define team effectiveness in terms of outcomes for patient (quality of care, patient satisfaction), personnel (training, job satisfaction) and organisation (cost-effectiveness). However many of the instruments designed to measure outcomes are not validated or evaluated in healthcare settings (Lemieux-Charles & McGuire, 2006; Dowling et al., 2004). Yet some studies have found that where teams are effective, efficiencies are produced with patient outcomes improved when cared for by a team (Weaver et al., 2014; Khan et al., 2008; Campbell et al., 2001), professionals report higher levels of well-being and job satisfaction (Borrill et al., 2001) and costs to the organisation were lowered (Roblin et al., 2004; Lowe & O’Hara, 2000).

7.3.3 A Process

When asked to define IPTW participants made very broad statements, generally referring to collaboration, working together or working with other professionals for the good of the patient. They spoke of the ‘ideal’ or ‘in theory’ but also referred to the intensity or level of IPTW, with the majority of professionals using the word ‘appropriate’. Participants appeared to have a perspective of IPTW that directly linked the intensity of the interactions with patient needs, rather than any particular team typology. As discussed in the literature review many typologies of team are available (Weaver, 2008; Choi & Pak, 2006; Drinka & Clarke, 2000), but it is suggested that conceptually these place teams on a continuum of inferior to superior teams (Reeves et al., 2010). None of the participants referred to any typologies instead interprofessional teamworking was perceived as something that reflected patients’ needs and invariably changed as a patients’ condition progressed or regressed. While there are internal (e.g. profession) and external (e.g. organisation) elements that are determining factors of team effectiveness and performance (Clements et al., 2007; San Martin-Rodriguez et al., 2005; Borrill et al., 2001; Hackman, 1998) the task (identified patient need) appears to influence the level of teamwork engaged in by the professions in this study and is comparable with other
research (Sicotte et al., 2002) and is identified in the teamwork literature (Lemieux-Charles & McGuire, 2006; D’Amour & Oandasan, 2005).

Sibthorpe and Gardner (2007) present a conceptual framework for performance assessment in primary healthcare and they clearly differentiate between what they refer to as the different processes of care to be received in primary healthcare (sick care, health promotion, disease prevention, advocacy and community development). While the focus of that framework is not teamwork-performance clearly identifying the possible levels of task complexity (care required) is useful as outcomes related to the effectiveness and the appropriateness of the health system response. Teamwork could be considered one such response. The primary healthcare setting is unique, the services it offers are different to that of the acute sector and therefore in terms of how these services should be delivered by professionals and received by patients’ needs to be considered. This was well illustrated by some participants, referring to complex cases or palliative care patients who were perceived to need greater collaborative effort across the disciplines. For SLTs their work with children intensified their involvement not only within the healthcare team but across organisational boundaries collaborating with professionals in the educational sector. While other members described more routine patient needs which they perceived necessitated less intense interaction or no teamwork. These needs were easily and more appropriately resolved by one or two disciplines. This reflects a continuum in terms of IPTW intensity with none of these being incorrect, inferior or superior; instead they merely reflect that there are differing forms of IPTW employed to deliver services specific to primary healthcare to meet a variety of identified needs and is reflective of the team typology developed by Reeves et al. (2010) and used in this study (please refer to Figure 2.2). Yet some participants appeared to be basing their definition of IPTW on the work experience in the acute sector. These experiences appeared to negatively influence their perception and experience of being part of a team within the primary healthcare setting. It may be an unfair comparison as the services provided and needs identified may not necessitate the same intensity of teamwork response.

Theoretically these findings relate to Contingency Theory (Donaldson, 2001; Gladstein, 1984) and conceptually to the contingency approach offered by Reeves
et al. (2010) framework, reflecting their definition of an adaptive team process, changing in response to the varying needs of the patient. During the interview process team processes varied in terms of team configuration and were largely influenced by the long established professional and organisational structures within which they trained and worked, with a GP team and HSE team rather than a collective primary healthcare team being the perceived reality. However it could be suggested that these are essentially the resulting configurations of adaptive interprofessional primary healthcare teams working as capably as they can within the context of the current healthcare system which supports them. While the intensity of teamwork depends on the perceived levels of predictability, urgency and complexity of a patients’ condition, in primary healthcare the majority of patient care can be planned for or anticipated, are more moderate in nature and where the focus includes preventative, curative and rehabilitative care. Therefore in this setting teamwork may be more appropriately less intense and more loosely structured (Reeves et al., 2010) which will be reflected in the team processes. This was clearly articulated by one PHN who perceived that they ‘worked well together but loosely as a team’.

The literature does suggest that the level of team stability impacts on team development but that staff turnover and transfers are part of the reality within healthcare (Drinka & Clarke, 2000). The interviewees implicitly described a level of instability but also of adaptability and an awareness of the need for more flexibility in teamwork structures and processes. This was demonstrated in the smaller ad-hoc teams that interviewees most frequently described in the workplace which they found to be effective and efficient. As outlined, knotworking is referred to as the movement of tying, untying and retrying separate threads of activity. Bleakley (2013) refers to a ‘new liquid era of healthcare’ where teams are often formed from pools of health professionals and demands more fluid team processes, where stability is replaced by adaptability and teamworking replaced by knotworking. Furthermore he suggests that while teamwork seeks to reduce complexity and uncertainty through protocols and guidelines, knotworking reflects the potential levels of uncertainty of teamwork in healthcare settings. Interviewees may not have referred explicitly to a new era of contemporary healthcare but they articulated how they worked adaptively to resolve complex cases, working across
multiple teams and carrying heavier caseloads. However Bleakley (2013) states that it is not suggested that knotworking is desirable but instead is a reflection of the liquid work modes that characterise the contemporary healthcare reality for practitioners.

There were many descriptions of team, a primary healthcare team, a GP team and smaller flexible, fluid teams where NMHP’s would work together to plan and implement joint patient care plans. These small teams were often two to three professionals, all HSE-based collaborating together in what they described as ‘joint working’. It is interesting to note that while the NMHP’s outlined working in smaller teams they did not appear to value this teamwork highly but instead saw it as no change from what they were doing before the Primary Care Strategy was introduced, whereas GP participation was now perceived as a defining feature of a functioning primary healthcare team. This reflects the working context as the HSE definition of a primary healthcare team in Ireland is only defined as operational if both NMHP’s and at least one GP are attending clinical team meetings. Unfortunately this appears to have created the perception that other forms of interprofessional working are not as relevant or of equal value. Rather than viewing teamwork as only one of a number of modes of interprofessional working, the HSE’s more descriptive, rigid definition has had a negative impact. Participants in this phase of the study viewed as failure, interprofessional working that did not achieve team meetings with GP in attendance.

7.4 Them & Us

7.4.1 Practitioners’ v. Organisation

As the results reveal, this theme highlights unease within professional relationships and how this may influence teamwork. Firstly the relationship between the practitioners and the statutory structures is permeated by damaging levels of cynicism and mistrust and secondly how the positive individual one to one professional relationships are impacted when framed within a collective team structure, which has no governance framework or operating policy. Organisational support is seen as essential for teamwork (Heath et al., 2015; Nisbet et al., 2015, West & Lyubivnikova, 2013) and the findings in this study reveal a perceived lack of organisational supports in terms of team structure and processes. This has had a
negative impact on the willingness and ability of the majority of participants to engage with HSE-led teamwork initiatives or processes. Ironically the findings of this study reveal that the group of practitioners (GPs) who are most alienated and opposed to teamwork are those who the HSE see as a central tenet for the implementation of their vision for primary healthcare (DoHC, 2001(b)). The GP’s describe a vehement dislike for and opposition to what one GP describes as the ‘bureaucracy’ and ‘civil servant’ approach to managing primary healthcare. Professionals who do not see a need for change may direct their dissatisfaction or frustration towards the governing bodies (Elston & Holloway, 2001). Xyrichis & Lowton (2008) finds that organisational support has a key role in team function. They suggest that a perceived lack of support encourages apathetic behaviour in team members in terms of their view of the wider organisation. This study differs in that participants did not demonstrate a level of apathy or disinterest but instead articulated mild to intense levels of active antagonism, cynicism and distrust towards the wider organisation, the HSE. Much of the literature outlines a need for trust between the professionals within teams (Bélanger & Rodríguez, 2008; Clements et al., 2007; San-Martín-Rodríguez et al., 2005), however there appears to be less focus on the need for trust between the professions and the organisation specifically in the healthcare team literature. Jansen (2008) refers to a decrease in management trust following workforce adjustments and a perceived lack of consultation or uncertainty for the future, which is comparable with the findings in this study. Not only can mistrust between management and staff significantly hinder teamwork, Williams & Laungani (1999) also suggest that use of teams is inadvisable in such circumstances.

The impact of executive leader behaviour (organisational) and the need for trust in the leader is addressed by Cohen and Bailey (1997) who outline that leader behaviour significantly affects team members’ attachment to the team, levels of trust and decision-making processes. The findings in this study suggest that a significant breach of trust is perceived, resulting in the loss of goodwill towards the organisation on the part of many professionals. Leader behaviour has as Cohen and Bailey (1997) suggest considerable ramifications in ongoing work contexts. D’Amour and Oandasan (2005) suggest that it is important to realise that collaboration exists not only within a team but also in the context of a larger
organisational setting which exercises considerable influence on teams. In the context of this study the influence appears to have being largely a negative one.

7.4.2 Clinical Autonomy & Power

Reeves et al., (2010) cites Koppel (2003) who found the primary healthcare team professionals were concerned that managers were trying to control how they worked and therefore restrict their autonomy. The findings in this study are similar, with the GP’s voicing such concerns. Many GP’s felt it was not how they wanted to work or a direction they wanted to take, with one GP describing teamwork as ‘being dominated by their way of thinking’ and ‘dragging me along in some other direction that I didn’t want to go’. The NMHP’s also view HSE management to lack understanding of frontline issues. A subset of these NMHP’s felt this was due to administrative rather than clinical experience on the part of managers, with therapists referring to their experiences of HSE-led teamworking being reduced to a ‘tick box exercise’. This compares with concerns voiced regarding the non-clinical backgrounds of managers outlined in Warne et al. (2007). However NMHP’s level of antagonism towards the HSE was less intense and they continue to exhibit a belief in teamworking as one nurse suggested ‘if it was done properly’.

Participants made no reference to changes in terms of management structures. The literature does outline a need for change at this level within organisations to truly enable teamwork in practice (West & Lyubovnikova, 2013; Weaver, 2008; San-Martín-Rodríguez et al., 2005). Johnson et al. (2003) noted that health management style tends to be centralised and hierarchical and suggests elaborate planning may be used as a way to delay actual joint working. Hackman (1988) refers to the ‘Corporate Obstacle’ (pg. 259) where organisations rely on rhetoric and team training taking the easier option which does not require behaviour change within the echelons of management itself and it is often at this level where reform is most protracted. A lack of team-based support structures suggest that team members may still primarily look to their discipline in terms of how they engage within the team. Some participants referred to the priorities of their line managers and how discipline-specific demands were managed. The outcome resulted in therapists having to work across different teams regularly, moving to provide services where it was deemed to be needed the most to address waiting lists and thus it was difficult to integrate into any one team. The Irish primary healthcare service is currently
organised by discipline and Clements et al. (2007) note that very rarely do teams exist that incorporate different professions. Lancaster et al. (2015) suggest the healthcare system structures can limit professional collaboration. Where organisational management level change was introduced in a primary healthcare directorate to reflect patient groups rather than the professions a successful transition to interprofessional teamworking in practice was demonstrated (Lowe & O’Hara, 2000).

Participatory safety (Williams & Laungani, 1999; Poulton & West, 1993) within team processes is important. Team members need to feel assured that information can be shared confidentially. Some NMHP’s referred positively to the team meetings as providing a safe forum in which you could discuss challenging cases or issues. It was positively described as a safety net and providing reassurance for these professionals. Trust and respect between team members was articulated as a defining feature of IPTW. This is clearly outlined in the literature as key to sustaining teamwork (Schadewaldt et al., 2013; San-Martín-Rodríguez et al., 2005; Dowling et al., 2004). The findings in this study are comparable with professionals reporting that trust and respect defined IPTW, describing good relationships with colleagues in practice and that they trusted and respected each other enough to share information working together where needed.

While GP’s spoke of discussing difficulties in benign terms such as ‘nice’ and ‘good’, they did not refer to team meetings as providing assurance in practice. In this study GP’s spoke of being used to unilateral decision-making in relation to how they run their practice and care for their patients and referring cases to NMHP’s and perceived the primary healthcare team largely as a resource rather than a consultative entity. A study by Leipzig et al. (2002) outlines that 80% of postgraduate medical students felt that they had a right to unilaterally change team patient care plans and to have greater influence in team decision-making, while only 40% of NMHP post graduate students agreed with this viewpoint. This is comparable to this study where NMHP’s saw team meetings as an opportunity for sharing information and care planning.

Yet a sub group of participants did not feel it was appropriate to discuss any patient issues at primary healthcare team meetings. There was particular reference to the
presence of HSE managers at these meetings which in one case was only resolved when agreement was reached that managers would not attend any clinical discussions, joining meetings only when such discussions were complete. Others described not sharing, waiting until the meeting was over and then approaching individual team members as needed, again reflecting the lack of collaborative activity noted in a study by Lewin & Reeves (2011) of team meeting processes. Participants adapted how they shared information, limiting the sharing to those they deemed appropriate or resisted the team meeting as a forum to exchange information. Leggat (2007) suggests there is a critical need for clinical and managerial leaders to foster work environments that increase psychological safety, which is likely to improve teamwork outcomes, yet the findings in this study suggest that some professionals do not experience such safety in the workplace. This highlights another aspect to the level of mistrust revealed in this study that prevails within some teams and between team members and management. However it also reflects what is referred to a ‘tactical communication’ where team members consciously control the amount or type of communication they share with others in order to achieve outcomes that are to their own advantage or what they perceive to be their patients advantage (Hewitt et al. (2015). Richardson and Asthana (2006) suggest uneasiness over sharing information may be grounded in the protection and preservation of professional boundaries rather than a genuine concern for patient privacy. It may also be reflective of a level of discomfort moving from professional comfort zones, where traditionally more one-to-one interactions take place between professionals or professional and patient.

7.4.3 Accountability & Responsibility

It has being suggested that other healthcare professionals, in particular nursing, have used the teamwork concept to achieve equality with medicine, while medicines assent to teamwork is rather as a means to maintain control over the health professions (Cott, 1997; Temkin-Greener 1983). While GP’s acknowledged the contributions of other health professionals they were very concerned as to what they perceived to be an ambiguity concerning who was actually in charge of the team and bore primary legal responsibility for patient care. Similarly other studies have found that GPs express concerns about accountability and legal responsibility for other team members’ actions (Schadewaldt et al., 2013; Irvine et al., 2002;
Richards et al., 2000) with Leipzig et al. (2002) referring to it as the ‘Achilles Heel’ hindering shared decision making. This is comparable with findings in this study as the majority of GP’s articulated concern in this area with one GP clearly articulating that his name was on the medical card and he was ‘judge’. Temkin-Greener (1983) suggests that medicine may be agreeable to the concept of teamwork if given ‘unconditional captaincy’ (pg. 648) of the team. While this could be considered in theoretical terms (Tajfel & Turner, 1986; Brown et al., 1986), the current workplace reality in healthcare for healthcare professionals is also a highly litigious one. Clements et al. (2007) state that much work does need to be done to clarify the accountability of non-physician team members in performing shared tasks. Overall GP’s did perceive that general practice should have a central and defining role in how primary healthcare teams should function and wanted clarity in terms of who was ultimately responsible for decisions relating to patient care within a primary healthcare team context. Interestingly the one GP who fully participated in teamwork, albeit an adapted model which the team felt worked best for them, made no reference to a concern in terms of being in charge or his role within the team. He had experienced and reported tangible benefits from teamworking and therefore this may have negated any legal concerns he may have had. As one occupational therapist suggested, ‘having a go’ at teamwork may help to take the fear out of it. None of the NMHPs directly referred to teamworking as a means to gain equality or control over another professional group. It may be that for this group it was not an issue or they were reluctant to speak of personal or professional ambitions, thus in this study it potentially remains part of the unspoken, hidden and unaddressed professional values factor (Hall, 2005; Mur-Veeman et al., 2001). It may also be that such inequities are accepted as they are so deeply embedded. Studies have shown that NMHP’s do not always regard themselves as equal members of a team and are reluctant to voice their opinion (O’Neill & Cowman, 2008; Atwal & Caldwell, 2006) while Jones (2006) highlights where NMHP’s can be seen as uncompromising as they try to defend their position in a team situation. Leiba (1994) suggest that doctors should not be seen as a barrier to effective interprofessional teamworking, that the higher status given to doctors is often reinforced by other health professional themselves either through defensiveness or
subordination. Sims et al. (2015(a)) suggest that where other team members subscribe to a hierarchical team model they expect doctors to be leaders and can be unsatisfied when this does not happen. This is imitated in this phase of the study where the GP’s contribution was highly valued and seen as a very significant factor for teamwork to be effective. The other professions were anxious to see GP’s involved with one therapist suggesting they (non-medics) may benefit more from GP involvement than the GP’s would from them, while another therapist referred to the ‘weight’ GPs involvement could bring to the team, an legitimacy of sorts which would provide more reassurance for patients. Implicit in this is the perception that their professional status is viewed by themselves and others as lesser than that of their medical colleagues. Davies (2000) suggests there remains a weight of professional traditions to overcome.

Practice Nurses like the other NMHP’s were not opposed to teamwork but were affected by their employment status, in that as their employers were generally opposed to the HSE teamwork model, they perceived this to limit their ability to participate. All the participating practice nurses made some reference to who paid their wages. They all reported their employment status to be a barrier. While practice nurses are employed by GP’s, their positions are grant aided by the General Medical Services Payments Board. Each practice nurse position attracts a grant of between €34-41,000 per annum depending on nursing experience, which amounts to between €57-71 million per year for the 1,800 practice nurses employed in Ireland (IPNA, 2015(b), HSE, 2008). This group of nurses are highly qualified with a reported 51% dual qualified, 88% have post-registration education, 211 are clinical nurse specialists, 2 are registered advanced nurse specialist and 22 nurses hold nurse prescriber qualifications. The potential impact is more than just economic as the findings of the study indicate they do not currently participate in primary healthcare teams. Their clinical expertise and potential contribution to team processes are lost. This highlights a disconnect between subsidies provided towards funding professional posts and implementing health care policy such as the Primary Care Strategy which envisaged practice nurses as having a role to play within broader primary healthcare teams. Their ability to participate or assume other responsibilities within the team is diminished by their employment status, yet the organisation that provides grant aid in terms of these positions does not appear
to have addressed this anomaly. It highlights another aspect to the uneasy relationships that appear to exist within the setting.

Role clarity is seen as critical for teamwork (Sims et al. 2015 (b), Perron et al., 2014; Choi & Pak, 2007; Xyrichis & Ream, 2007; Øvretveit, 1997), with understanding and appreciating professional roles suggested as a prerequisite for collaboration (Suter et al., 2009). Grumbach and Bodenheimer (2004) refer to it as knowing which clinical and administrative tasks team members are responsible for. The findings revealed that while teamwork brought many professions together there was a concern about a lack of role clarity. There were several dimensions to role clarity. Many NMHP’s described how in their experience other professionals lacked awareness of their role—both the range of skills offered and conversely the boundaries or limitations professional scopes of practice placed on them (Reeves et al., 2010; Maslin-Prothero & Bennion, 2010; Clement et al., 2007). Where participants outlined the presence of role clarity they described an increase in and the appropriateness of referrals received from other team members. It could be suggested that patients therefore also benefit in this instance (Arskey et al., 2007). Some participants referred to ‘everyone pulling their weight’, that unless roles are clearly defined some members try to use the team as a medium in which to delegate or an opportunity to curtail their own professional effort, in this instance role clarity was seen as a means to minimise such actions. Field and West (1995) describe this as ‘social loafing and free riding’ but suggest it may also reflect where professionals are angry and resentful about not being valued or included in the team. For GP’s participating in this study role clarity was firmly associated with who bore ultimate responsibility for team decisions. Rämgård et al. (2015) found that where team members were unsure about ‘who should do what’ they initially used legislation to clarify who was formally responsible. Clarity in terms of accountability and liability for shared decision making is required (Schadewaldt et al., 2013; Clements et al., 2007; Dowling et al., 2004). While GP’s articulated awareness of interprofessional teamwork conceptually they appeared to struggle with the aspect of traditional hierarchical structures being challenged. The is comparable with a study by Hannson et al. (2008) who found while doctors spoke knowledgably of teamwork, there was considerable ambivalence regarding a shift from their traditional role.
Clarity in terms of a team role was seen to define IPTW, yet many interviewees across the professions described a lack of a collective team purpose in practice. They perceived that there should be a collective or overarching team role but were uncertain as to what that was or should be. Drinka and Clarke (2000) suggests that a precise course of action for a team is very difficult to decipher because it is not only the scientific or technical aspect of profession, but the more artistic dimensions that deal with value dilemmas and conflicts where competing values led in different directions and undoubtedly impede teamwork. A review of primary healthcare teams in Ireland revealed that where teams did not have an agreed vision, they were struggling to function, while teams that had spent sufficient time on initial team building and established a vision had progressed further (Joyce & Casey, 2004). The findings in this study revealed that none of the practitioners had experience of what is referred to as team building processes. It is suggested that these activities help teams to develop a shared identity and purpose. However such interventions can be poorly designed and fail to address many of the value-based issues that impede teamwork in this area (Reeves et al., 2010). There appears to be many differing priorities in terms of role clarity illuminating further the differing professional values that exist and can create major conflict (Suter et al., 2009).

Adversarial and conflicting professional positions appear to be a distinct feature within the primary healthcare setting in Ireland. Using Path Dependency Theory Crampton et al. (2005) conclude that ‘history matters’ and that past decisions and historical conditions exert an influence over current decision-making parameters and in the context of primary healthcare policy these historical conditions act as barriers, which may limit the range of policy options available. In an extensive historical review of the Irish health system Barrington (2000) suggests that in Ireland an early form of primary healthcare was based on the old dispensary system inherited from the British (Poor Relief Act (Ireland), 1851) yet in the newly formed Irish Republic all subsequent attempts at reforming the system were met with great resistance over the first half of the 20th century, the status quo was maintained and this influence laid the foundation for how the Irish primary healthcare system continues to function today. Little appears to have changed to support and progress towards a more contemporary primary healthcare teamwork model. Atwal &
Caldwell (2006) suggest that healthcare policy might be associated with aggravating rather than encouraging interprofessional collaboration.

7.5 Implementation Paradox

It has being suggested that organisational level resistance has resulted in the failure to develop and implement team structures (Jansen, 2008). The conceptual framework for understanding IPTW proposed by Reeves at al. (2010) explores organisational influence for teamwork and suggests that a lack of connection to the host organisation creates challenges for teamwork, while Weaver (2008) concedes that building an interprofessional team and to work in a collaborative manner may take more time and resources than a unidisciplinary approach. The findings reveal that there are clear disconnects, between the primary healthcare teams put in place and the organisational structures which exist to support such teams. While the HSE in principle support primary healthcare teams, the findings in this study identify organisational barriers that illustrate the presence of conflicting aggravating factors which impact negatively on teamwork. Implementation processes are intended to support and embed new activities in practice, therefore understanding the implementation process provides understanding in terms of the result, in this instance primary healthcare teamwork (Eccles & Mittman, 2006).

7.5.1 Financing a Unidisciplinary Focus

Currently primary community and continuing care services in Ireland are financed separately (Burke, 2009). However Weaver (2008) suggests that achieving funding for teams where no one ‘owns’ the team activities may be difficult to attain. The findings revealed that professionals reported conflicting requests from managers, where the prioritisation of teamwork was not consistently applied and instead promoted a discipline rather than team focus. Other literature suggests than funding teams rather than disciplines could improve effectiveness (West & Poulton, 1997), yet Shaw et al. (2005) found that contractual arrangements alone do not determine team effectiveness. Xyrichis & Lowton (2008) suggest there is a dearth of research exploring organisational issues in relation to team reimbursements and reappraisal systems. There are no such systems currently in place Ireland with resistance to any change reported in other jurisdictions (Jansen, 2008).
GPs were primarily focused on monetary incentives, their priority was to maintain a viable business as well as care for their patients. The HSE primary healthcare reimbursement service provides GP’s with a capitation fee based on age, gender and distance from practice. The HSE has a statutory obligation to make available general practice medical and surgical services. These services are provided under the Choice of Doctor Scheme and known as the GMS contract. The vast majority of doctors are paid an annual capitation fee for each eligible person based on their demographic (age and gender) and geographic (distance to the GP surgery) profile. There are extra payments for special type consultations practice, special items of service provided and a fee-per-item agreement as well as reimbursement for participating in the national programmes such as the primary childhood immunisation or cervical screening programme for example (ICGP, 2015; Practice Manager, 2015, HSE 2008). It is not surprising therefore as GP’s are accustomed to such payments to provide special services and consultations or to partake in national programmes that they believe they should also be reimbursed for participating in primary healthcare team processes as this is the organisational culture they are accustomed to. They expressed much concern over cuts to the GMS budget which appeared to reinforce their opposition to any new model of primary healthcare and their commitment to the general practice model. This reflects the Realist Conflict Theory position which posits that where groups are competing for limited valued resources ‘in group’ solidarity and cohesiveness increases, while maximising intergroup tensions (Reeves et al., 2010; Brown et al., 1986). Harris et al. (2010) found that GP’s who participated in a teamwork intervention project reported there was little incentives to change their ‘culture’ of working independently and that priorities of general practice staff tended to be inward focused. The findings in this study are similar as both GP’s and NMHP’s suggest monetary incentives will be necessary to gain GP participation in primary healthcare teams. While NMHP’s were more focused on non-monetary incentives such as staffing, equipment and facilities, this may be because they are salaried employees and are not accustomed to monetary incentivised schemes within their professions. A study by Boudioni et al., (2007) found that across the professions salaried staff in the primary healthcare setting were more willing to participate in team level interactions, which reflect the position of the NMHPs in this study.
Yet it is suggested that traditional fee-for-service payments impede movement towards collaborative models (Reeves et al, 2010; Clements et al., 2007), thus creating a ‘fee-to-participate’ payment may be a retrograde action. There does not appear to be any funding allocated or reimbursement for collaborative practice in the HSE, rather the focus is on discipline-based service provision and reimbursement models. Studies have identified that one of the determinants of successful collaboration is where the focus is on funding broader primary healthcare team services rather than the more traditional model of professional compensation, however they concede that this may be very difficult to attain (Taplin et al., 2013; Jansen, 2008; San Martin- Rodríguez et al., 2005). No team or service level incentive was identified as an enabler for teamwork by any of the interviewees in this study. All other NMHP’s are paid employees of the HSE or privately employed by the GP.

Tussing and Wren (2006) state that GP’s and NMHP’s must work together in partnership and that incentives could be considered where professions demonstrated a readiness to integration into primary healthcare teams amongst other issues as the basis for awarded funding to local primary healthcare groups. Murphy (1998) suggests that the GMS system provides little incentive to promote health, utilise preventative health strategies, while private practice may emphasise patient turn-over and medical procedures rather than evidence-based medicine. The public and private mix of patients was seen as a barrier for teamwork in this study for both GP’s and NMHP’s, as NMHP’s are not required to provide their services to non-GMS patients (the Mother and Infant Care Scheme provided by the PHN service being the only exception). This was a source of great irritation to the GP’s and added to the resistance and opposition to teamwork as currently structured. There does not appear to be a uniform approach to this issue in practice with individual NMHP’s providing services or not, at their own discretion. However the Department of Health and Children (DoHC, 2015) have published their health priorities for the years 2015- 2017 which includes extending the categories of patients who will be eligible for universal healthcare to increase the level of full access to all primary healthcare-based services as currently only GMS card holders and the over 70’s qualify. The Department of Health and Children are presently engaged in a process to extend this service to the under 6’s, as of June 15th 2015.
all children under 6 years of age are eligible and parents may register their child/children for this new scheme which is due to commence in July.

Ruane (2010) states while that primary healthcare policy promotes the use of community-based teams to deliver care there is no governance or funding system in place to develop the primary and community care systems needed to meet this important demand, while (D’Amour et al., 2005) suggest that collaborative processes should be developed with two purposes in mind, to serve both client and professional needs. MurVeeeman et al. (2001) state that all care givers will always agree that the quality of patient care is most important but the reality is different. Denying professional self-interest is nonsensical and that managers need to seek a balance between professional altruism and the reality of professional self-interest. This reflects findings in this study where all the professionals referred to teamwork as providing a better more patient-focused service, yet they also outlined the need for incentives for teamworking in practice. Interestingly MurVeeeman et al. (2001) suggest when managers speak openly about such self-interest and acknowledge and respect this position, trust will be enhanced. It is a noteworthy suggestion when the findings of this study reveal high levels of distrust currently exist between the professions and management. At a strategic level it is suggested that divergent organisational agendas undermine the potential of turning teamwork into an operational reality (Cameron et al., 2013). The current HSE funding structures facilitate environments that are resolutely anti-primary healthcare teamwork.

7.5.2 Co-location: Solution or Setback?

Co-location is seen as a key enabler for teamwork within this study. It was identified as an enabler based on experience and where professionals were not collocated many interviewees referred to it as the ‘ideal’ situation to enable teamwork. The majority of the HSE-employed NMHPs are collocated, yet few are collocated with GP team members. They reported that being collocated was enabling for teamwork, allowing greater access to colleagues, increasing informal and flexible meeting opportunities, providing a greater social integration which improved their working relationships and built trust. This is reflective of the literature in this area (Kaehne & Catherall, 2012; Taplin et al., 2013; Rodriguez & Pozzebon, 2010; Oandasan et al., 2009; Choi & Pak, 2007; San Martín-Rodriguez et al., 2005; Cook et al., 2001; West & Poulton, 1997). Many participants reported
that co-location increased the levels and quality of communications which is comparable with other studies which reported increased information transactions (Cook et al., 2001) and improved communication (Molyneux, 2001). However a study by Davey et al. (2005) found that co-location of healthcare professionals did not alter the overall style of communications nor its direction.

None of the GP’s interviewed were practising from a collocated primary healthcare centre, two were based in a health centre where some NMHPs were present, while the remaining six GP’s were practising from privately owned accommodation with secretarial and practice nurse support present. While they acknowledged co-location as a potential enabler for teamwork, it appears to be a theoretical rather than a practice related perception. Their considerations concerning co-location did not relate to enabling teamworking in practice but referred to the potential to create greater access to other services. A study by Murray et al. (2008) reveals that while GPs acknowledge group practice as important and report not being satisfied with current arrangements they have not changed and are not planning to change the structure of their own practice, while few reported the value of a collaborative team model to improve patient care as being a function of co-location. Instead their focus related to greater access to colleagues, NMHP and administrative support, expertise and expense sharing. This reflects the position of GP’s in this study where the value of co-location related to gaining greater access to services and resources. Furthermore a study by Farrell et al. (2001) outlines that medical practitioners score high on prominence and task orientation but relatively low on sociability, while the other professionals are less task-orientated and more sociable. This reflects findings in this study where NMHP’s placed greater emphasis on the sociability aspect of co-location, reducing professional fears, building better working relationships from increased contact and informal interactions which resulted from sharing a work space over time. It is interesting to note that where teams survive to develop over time, interpersonal behaviour variance lessens and sociability increases (Farrell et al., 2001).

There is a sub-set within the GP group who view new collocated space planned by the HSE in the form of primary healthcare centres as a barrier. They felt the geographical locations proposed may harm their general practice businesses, they feared that their patients may not perceive a new location to be as convenient and
move to another practice which would be damage their business. Therefore they stated they would not be willing to move into such premises, while another GP referred to such shared spaces as an organisational need to have ‘numbers over doors’ rather than a valid use of finite resources. The Primary Care Strategy (DoHC, 2001(b)) did refer to ‘active enrolment’ of patients with a primary healthcare team and registration with a specific GP within the team which may have alleviated some of the fears of losing clients and thus income to other practices, however this has never being realised in practice. This highlights how a lack of policy implementation can impact on achieving team-related outcomes.

7.5.3 Geographical Anomalies
Assigning NMHP’s to primary healthcare teams is based on HSE defined populations in a geographical area rather than by general practice population. This was seen to be a barrier for teamworking across the professions. The study revealed a situation where GP’s could find themselves being assigned to 5-6 team concurrently and the NMHP’s described having to work across and engage with multiple general practices. One SLT described being assigned to fifteen teams concurrently. It was not seen as practicable to engage in any meaningful way with multiple teams. One therapist said ‘it was like trying to spread yourself too thin’. The GPs concurred with this view, highlighting the confusion for many GPs who did not know what teams they were supposed to be assigned to. In Ireland a person does not have to register with a specific general practice in their area, rather they can attend any GP of their choice. Yet the HSE stipulate that patients receive HSE-provided primary healthcare services linked to one’s postal address. One practice nurse describes a common situation where patients may have moved county but still return to see the family GP they attended as a child. GPs in this study were adamant that organisational change should link primary healthcare teams with general practice populations, with the majority of NMHP’s also recognising that serving dissimilar populations within a team was a significant barrier for teamwork. However unlike their GP colleagues they did not endorse any specific organisational change. Their concern centred on being assigned to multiply team concurrently and the change they sought was simply be assigned only to one team. Burke & O’Neill (2010) found that community based nurses did not want to change their geographical remit and that it would be difficult for them to provide care
exclusively to clients of GPs attached to the team. While Clarke (2004) suggests that if PHN’s were to be attached to GP services their unique community-focused knowledge would be at risk of being dominated by a biomedical model of care. Yet it is difficult to see how the organisation can expect to implement teamwork in an environment where two separate groups of health professionals function and serve vastly different population profiles. This obstacle has also been recognised by the Commission on Nursing (Government of Ireland, 1998).

7.5.4 The Imposition of Formal Team Meetings

Team meetings are seen as a contributing factor in facilitating and maintaining interprofessional teamworking (Brown et al., 2010; Sergeant et al., 2008; San-Martín-Rodríguez et al., 2005; Borrill et al., 2001). In Perron et al. (2014) primary healthcare professionals identified the establishment of team meetings as a priority for information exchange. While many NMHP’s in this study articulated support for team meetings, the current formal structure of team meetings were problematic. Within the Irish context team meetings were a key feature of the HSE implementation of the Primary Care Strategy. Chapter 43 of the Comptroller and Auditor Generals’ Report (C&AG, 2010) makes specific reference to team meetings in Section 43.26, stating that ‘A PCT is considered to be operational when it is holding clinical team meetings’, with ‘all core members expected to attend each meeting with at least one representative from each participating general practice’ (Section 43.28). Yet it also revealed that 76% of teams were meeting monthly or less frequently. The HSE state that they hope to improve the effectiveness and frequency of clinical team meetings (HSE 2012 (c)). National key performance indicators for teams are the number of meetings, professions in attendance, number of patients discussed, and the number of patient care plans developed which are recorded monthly as a measure of team function (O’Connor, 2012). Lemieux-Charles & McGuire (2006) states that there is no conclusive evidence relating to the contribution team meetings in terms of team effectiveness. As team meeting attendance is currently the only measure of team function it is not surprising that the professions closely associated primary healthcare teamwork with the team meeting process, thus the success or failure of these team meetings have contributed to their assessment of team success or failure.
The finding of this study suggest that team meetings as envisaged and implemented by the HSE are actively resisted, locally adapted or redundant which would partly reflect the Comptroller and Auditor Generals’ Report (C& AG, 2010) with the reported frequency of and professional representation at team meeting being much lower than desired by the HSE (HSE, 2012 (c)). A study by Warne et al. (2007) found that there was a technical approach to organisational change processes rather than a focus on the social process. This is comparable to this study where the implementation of formal team meetings was seen as critical to the success of achieving effective service redesign rather than the people involved who have to use it. A significant number of the interviewees spoke of a lack of clarity relating to team meetings and meeting purpose. It was perceived that these type of meetings were a specious attempt to establish ‘teams’ but with little or no substance to the meeting process. This is similar to a study by Lewin and Reeves (2011) which found that planned team meetings appeared to demonstrate team visibility but included little functional collaborative activities; furthermore professionals regularly did not attend these meetings and cited poor attendance by doctors as limiting the perceived value of these meetings. This reflects the findings in this study where a lack of GP engagement with the team meeting process created the same perception. NMHP’s referred to no changes to established practice or the levels of teamworking already in place, albeit the added time and effort required attending these formal meetings.

The formalised nature of the meeting structure was viewed as unconstructive and many resisted use of the meeting protocols, documents and guidelines provided by the HSE (HSE, 2008b; Farrell et al, 2008; HSE, 2006). This is contrary to findings by Sicotte et al. (2002) who found that some level of administrative formalisation improved collaboration. D’Amour and Oandasan (2005) refer to formalisation as structuring clinical care in a more systematic way, clarifying expectations, supporting collaboration and enhancing patient outcomes. None of the participants referred to any formalised supports in terms of clinical care only prescriptive documentation to be used to record team meetings, yet a significant majority of those interviewed described a lack of clarity as to the purpose of these formal meetings. The levels of formalisation put in place appears not to have offered any clarity or direction to team members to support or enhance teamwork in practice.
This is reflective of the key performance indicators currently in place which are concerned with measuring team information rather than function (O’Connor, 2012).

Bélanger and Rodríguez (2008) refer to the need for local organisational structures to reflect practice requirements and therefore guidelines should be flexible and locally customised. As a study of national level change in the NHS reveals that nationally enacted change may not be made with sufficient forethought or sensitivity to local contexts (Marshall & Olphert, 2009). Participants in this study articulated that these meetings did not reflect local needs and were inflexible. Some described how in practice they adapted the meeting structure to work more effectively for them in which meetings were described as informative, informal, flexible and brief. While it could be suggested that the use of such adjectives lack what Drinka & Clarke (2000) suggest there is a need for ‘reflective time’ to reflect on team function rather than simply engaging in clinical, goal-directed or problem solving behaviour these meeting-type characteristics were positively perceived. While team level reflection is seen to positively contribute to team processes, this mechanism is essentially self-reported with no evidence of the impact on patient outcomes evident (Sims et al., 2015 (a)). However only one GP was part of this adaptive process, all of the other GPs did not participate. While GP’s as a profession were the most vehemently opposed to primary healthcare team meetings Grumbach and Bodenheimer (2004) suggest the mental exhaustion that many clinicians experience as a result of ineffective systems decreases the possibility of cooperation in the development of primary healthcare. While no GP in this study referred explicitly to this, they described increasing levels of paperwork and long working days in practice.

All of the participants were anxious to record that there was too much focus on the formal team meetings process in terms of defining IPTW in Ireland and that they continue to work in an interprofessional manner outside of formal structured meetings, meeting informally and in a more opportunistic way depending on what needed to be dealt with in any given day. This is contrary to much of the literature that refer to regular team meetings (Brown, 2010; Sargeant et al., 2008; Grumbach & Bodenheimer, 2004) and formalisation whether this is relating to clinical and administrative protocols or examining team function (San Martín-Rodríguez, 2005;
Drinka & Clarke, 2000; Hackman, 1998). However it could be suggested that the difficulty is not with formalisation but rather experiencing inept formalisation. Professional experiences of the current level of governance structures appear to have generated the perception that there is a lack of flexibility and consideration given to local contexts, professional issues and patient needs. However Jones (2006) suggests that standardisation can also be resisted to protect professional autonomy.

7.5.5 Communication Infrastructure

Current IT structures were seen to be a very significant barrier for teamwork. It is identified as one of a range of communication mechanisms which facilitates teamworking (Paquette-Warren et al., 2014; Hubbard et al., 2005; Grumbach & Bodenheimer, 2004; Brown et al., 2003). Within general practice GP’s outlined how their IT systems worked, facilitating communication with hospital laboratories for example and with other professionals within the practice, with all patients’ notes shared and easily accessible. However these systems are not integrated with any IT structures used by the HSE-based primary healthcare teams. A lack of an integrated IT system was seen as a major barrier for communications between team members. There are no shared patient files, communication between GP’s and the NMHP’s rely heavily on written referrals with some phone contact and very little face to face communications. This makes communication a time consuming exercise so time-poor practitioners were more inclined to consult with each other less when making decisions related to patient care, with one therapist indicating that it was easier to ‘beaver away on my own’.

As the primary healthcare teams are currently configured primary healthcare professionals are spread across multiple sites and reflect a more virtual type team. Adequate IT provision can offer what Reeves and Freeth (2003) describe as an ‘electronic bridge’ to ensure practitioners can communicate effectively and more easily. All of the participants felt that this was an organisational support issue that needed to be addressed. One GP discountennanced any argument about cyber security describing a very successful secure IT system called ‘Healthlink’ that has transformed their ability to communicate with the acute setting. This practitioner also placed great emphasis on it not being HSE-led but Department of Health implemented and maintained, again highlighting the lack of confidence some
professionals have in the HSE as a credible entity. IT systems are seen as one tool which can enhance teamwork (Reeves et al., 2010; Harris et al., 2010) however studies have also show that they can be problematic (Scott et al., 2005; Hartswood et al., 2003), therefore such systems must be well planned, needs driven and alleviate rather than create further barriers for teams in terms of being able to use the software straightforwardly. While it is clear that geographical and communication boundaries create barriers for teamworking (Maslin-Prothero & Bennion, 2010; Drinka & Clarke, 2000) poor information transfer is shown to lower the quality of care and increase adverse follow-up management and clinical outcomes for patients (Kripalani et al., 2007). However it remains to be seen if such IT infrastructure would be the solution in the Irish setting where two services have very well-established separate histories of practice and are underpinned by divergent ethe.

The literature suggests that communication between team members is critical and reflects study findings that effective communication enables teams to work collaboratively (Hewitt et al. 2015; Cameron et al., 2013; San Martín-Rogriguez et al., 2005; McCallin, 2001; Hall & Weaver, 2001). However the focus of all the participants in this study was on mode and matter, with few if any references to communication skills, effort or commitment to communicate by the professions involved. Reeves et al. (2010) notes that open and free flowing communication between team members is important but that effective communication is difficult to achieve and can be obstructed due to interprofessional tensions. Communication at its most basic is a human endeavour, it is considered a collaborative skill, and to develop such skills health professions need to spend time together, to learn and to work together in meaningful ways (Hall, 2005), build trust and allow ideas and debate to be debated (Hewitt et al., 2015).

7.5.6 Outcomes
This study sought to explore the current levels of IPTW. Sicotte et al. (2002) suggest there is a need to better understand interprofessional collaboration as an outcome in and of itself. The literature clearly outlines factors essential for progressing teamwork models. The implementation process appears to have had a negative effect on teamwork with resentment towards the restrictive and much formalised approach to some team processes yet also portrayed a lax
implementation process which lacked definition in terms of a collective team vision, clarity of team roles and goals and objectives or financial investment in team accommodation. The lack of any comprehensive evaluation has resulted in the unique position articulated by SLT’s, which has fostered professional uncertainty, has therefore remained unappreciated.

None of the participants could provide any specific clear team goals or objectives but instead made very broad references to all working together for the patient. Interviewees reported that as team members the teams never had any collective goals or objectives yet the ability of a team to develop common goals and objectives are identified as a key factor for teamworking (Sims et al., 2015a), Reeves et al., 2010; San Martín-Rodriguez et al., 2005; Borrill et al., 2001) without which a team will fail to function. (Hackman, 1998). In terms of teamwork as an outcome, the findings suggest there are low level of team function as envisaged by the HSE but also illustrates the varying forms and intensity of teamwork that are present due to the tenacity of the professional rather than any supportive implementation process.

The provision of purpose built primary healthcare centres and co-location of primary healthcare teams remains elusive, funding for such dedicated facilities has not being provided for adequately and fell dramatically between 2011-2013 from 17.5 million euro to less than 1 million euro (Medical Independent, 2013; Burke, 2009; Tussing & Wren, 2006). The need to build capacity in terms of information and communication technology is outlined as essential in the Primary Care Strategy (DOHC, 2001(b)) and is reiterated in the Strategic Framework for Health Service Reform 2012-2015 (DoHC, 2012) yet remains aspirational. Tussing and Wren (2006) suggest it is understandable why some observers would suggest the Government has abandoned its Primary Care Strategy. This is comparable with the findings in this study where many participants suggested that much of the efforts made by the HSE were ‘window dressing’ or ‘tick box’ exercises and lack any meaningful engagement with the professionals.

SLTs articulated that they are unsure of their membership of the primary healthcare team, stating that originally they were not included in the ‘core’ team but rather a ‘network’ profession that would work with more than one team to provide services (DoHC, 2001(b)). In the Strategic Framework for Health Service Reform 2012-
2015, this discipline is included in the core team (DoHC, 2012). Clear team roles are identified as an essential element for effective interprofessional team relations (Brault et al., 2014; Maslin-Prothero & Bennion, 2010) and avoiding professional boundary infringements. While the findings in this study suggest a clear need for role clarity the concern for SLT’s was not related to professional boundary infringement but uncertainty regarding their actual membership of the team. Their inclusion in this study’s definition of a primary healthcare team was based on communications with PCDOs who confirmed the speech and language therapy position within the core team, nonetheless it is interesting to note that the HSE website (HSE, 2015 (b)) do not list SLTs as part of the core primary healthcare team rather they are referred to as one of the other community based disciplines the team can link with. The participating SLTs all expressed doubt regarding their position and of being unsure if their profession was identified as being part of core primary healthcare teams and this impacted on their attitude and commitment to team processes. This illustrates not only the poor levels of communication between the professions and the organisation but also within levels of the organisation itself.

Many professionals questioned the viability of the teamwork model in place. This uncertainty is underpinned by their experiences of the implementation process and the reality of the unchanged primary healthcare and organisational structures. Hackman (1998) states that teams will not work without direction, structure and contextual supports. Kvarnström (2008) states that team members do not always perceive themselves as having the support of the organisation and highlights the importance of the implementation processes, yet concludes that managers who duly demand results from their interprofessional teams should also include an assessment of existing organisational conditions to enable organisational learning.

7.6 Resourced to Fail
If the full potential of teamwork is to be realised organisational supports and structures must actively support competent teamwork. Hackman (1998) outlines the form these supports should focus on as (i) team performance (ii) education and training (iii) information technology (iv) mundane material resources. These mundane resources are described as equipment, tools, space, money and staff, yet
it is acknowledged how challenging it can be for organisations to deliver what is required for teams to succeed.

7.6.1 Deficient Infrastructure
The findings outlined that many resources described as ordinary by Hackman (1998) appear to be lacking. The participants illustrated how this affected their ability to work and provide adequate services. The IT infrastructure was not always readily available despite repeated requests from team members. The impact on the quality of service provided to patients was illustrated with interviewees portraying situations of advising patients to buy very basic equipment as they could not provide the equipment or fund the purchase of essential items. The impact for staff was also clearly illuminated, where interviewees withdrew from team interactions and also perceived that they were undervalued and underappreciated by the organisation.

All of the GP’s and NMHP’s spoke of the impact of being under-resourced for teamworking in that it was not seen as a priority and that providing patient care was prioritised over partaking in any team-based initiatives in this situation. Clements et al. (2007) suggest that this context creates a pressure cooker environment where few people have the time, energy or will to experiment with new models of healthcare delivery. The detrimental effect for teamworking was described by one therapist as one where staff were coping with the pressure by withdrawing back into their offices. Teamwork needs to be well resourced (Reeves et al., 2010; Lemieux-Charles & McGuire, 2006; San Martín-Rodríguez et al., 2005). The current working environment appears to be teamwork adverse and was perceived across the professions as a major barrier for progressing teamwork.

7.6.2 The Training & Education Lacuna
Many professionals reported a need for interprofessional team learning opportunities in this study yet interprofessional teamwork is rarely a teaching focus (Hood et al., 2014; Leipzig et al., 2002). Very few interviewees reported any joint training, some spoke of ‘a talk’ when the teams were created about being part of a team, with two NMHP’s referring to a video that was used to show them how to be a team. While all of the participants reported a lack of education and training provision, it was the NMHP’s that articulated a need for IPE and training for teams.
GP’s were quite scathing where referring to IPE and training opportunities and outlined that they felt their own continuing professional development commitments catered sufficiently for their learning needs. They articulated a lack of interest in and poor perception of IPE processes. In this study only one GP referred to attending HSE provided team education and perceived it to be ‘weak’. This is consistent with the literature where even at undergraduate level medical students appear to value interprofessional education less than other health professionals (Hood et al., 2014; Curran et al., 2010; Yarborough et al., 2000). One innovative programme in Ireland that sees graduate-entry medical students take a two week primary healthcare team placement separate to a three week placement in general practice revealed these students reported gaining a better understanding of the functions of a primary healthcare team reducing inaccurate stereotyping of the other professions involved and increasing awareness of the importance of teamwork (Kelly et al., 2013). Zwarenstein et al. (2005) found that IPE was effective at post graduate level. It may be the within practice provision of IPE as part of continuing professional development may be of use for established practitioners.

Some of the NMHP’s reported IPE sessions which were helpful but the majority reported a total lack of either educational opportunities or training for teamwork. Where education was offered it was at disciplinary rather than team level. The importance of IPE for interprofessional teamwork is clearly articulated in the literature (Weaver et al., 2014; Harris et al., 2010; Zwarenstein et al., 2005) with D’Amour and Oandasan (2005) suggesting that stake holders must recognise the interdependence of interprofessional education and collaborative practice. However Reeves et al. (2013; 2008) report there is a need for more research to allow for rigorous conclusions to be reached supporting its effectiveness. Grumbach and Bodenheimer (2004) suggest that to build a team, not only training for the functions that each member routinely performs is needed but cross training to substitute for each other’s roles is needed. Shaw et al. (2008) suggest educating professionals’ needs to begin with viewing themselves as a contributor rather than an expert on the team.

In a study by Warne et al. (2007) they found that although 98% of survey respondents reported that education and learning should be shared by different professionals wherever possible, only 12% had actually participated. However the
levels of participation were attributed to poor organisational support as professionals felt they were not in a position to prioritise education and learning opportunities above high practice demands. Participants in this study reported increased workloads over time due to a lack of staff and higher demands in practice. This may have impacted on their perceptions of and participation in this area.

Moaveni et al. (2008) suggest minimal work has taken place to educate health professionals how to work in teams. The need for access to an evidence base on the potential of teamwork in practice has been highlighted previously with GP’s suggesting the provision of evidence of the benefits of team work could potentially increase participation in teamwork. Disparate training followed by socialisation into distinct professionals groups hampers the ability of different professionals to work together (Bélanger & Rodríguez, 2008). Hall and Weaver (2001) state that there is a lack of undergraduate IPE and where it is provided the majority of participants are from the allied health professions. This supports findings in this study where the NMHP’s suggested interprofessional training was part of their training and how they think about their work.

Reforms that promote and provide IPE and learning opportunities can help to deal with the professional insecurities than traditionally exist in primary healthcare (Elston & Holloway, 2001), while Field and West (1995) suggest that professionals need to develop the necessary skills to organise and run effective team meetings. In the context of the Irish primary healthcare setting meetings could also be a forum in which to provide professionals with access to the extant literature on interprofessional teamwork to promote learning, reflection and consideration of what teamwork could offer which appears to be absent in the current model. The findings reveal a complete lack of teamwork training and team building processes, with descriptions of teams that are struggling to function. If time was designated for team training, this could include training professionals to reflect on issues relating to team performance. Primary healthcare teams care in Ireland will need to be supported by the organisation and provided with protected learning time and expertise in order to repair, build and renew teams.
7.6.3 Prerequisites for Teamwork

The participants outlined elements that they perceive to be sine qua non for teamwork. These reflected professional, patient and general practice related issues. Professionals need to discern that there are benefits to participating in teamwork for themselves and their patients. The need to consider self-interest and altruistic motivation as has being outlined previously. The prerequisites articulated by participants were in keeping with the broader teamwork literature which refers to basic instruments to facilitate team function such as adequate staffing levels and physical space (Reeves et al., 2010; Oandasan et al., 2009; Weaver, 2008; San Martín-Rodríguez et al., 2005; Drinka & Clarke, 2000). While other issues relating to remuneration and how to facilitate GP’s who also practice privately are aspects unique to the Irish primary healthcare system are contentious and complex issues, they clearly need to be addressed if interprofessional primary healthcare teams are to remain a workable and realistic option. Furthermore the provision of primary healthcare services to a select group (GMS patients) and refusing access to others goes completely against the fundamental principles of primary healthcare provision (Cueto, 2004; Keleher, 2001, Starfield, 1998), a situation which requires Government-level intervention.

It is notable that leadership was not articulated as a prerequisite for teamwork. Leadership is considered a defining feature of teamwork locally in terms of team leaders and nationally in terms of organisational governance structures (Sims et al (a); Taplin et al., 2013; Reeves et al., 2010; San Martín-Rodríguez et al., 2005), yet very few of the interviewees prioritised this aspect of teamwork. GP’s did articulate they should having a leading role in deciding how the teams should function while two NMHP’s spoke of their position as team leaders which was described as an administrative role (e.g. organising meetings). Drinka and Clarke (2000) explore why team leadership in difficult suggesting that firstly health professionals are trained in autonomous function, where leadership is about exhibiting skills in one professional area and to address specific aspects of complex problems. Secondly when working environments are challenging and health care professionals become stressed they tend to lose sight of the need to work with other members of other disciplines and tend to retreat into autonomous modes of operation. This reflects the challenging workplace contexts that were described in detail, of professionals
frustrated and disappointed with the lack of resources, progress and investment in primary healthcare teams. Only one NMHP spoke of team leadership in terms of motivating or providing guidance to the team. This reflects the reality of teamwork currently where smaller flexible teams, change and reconfigure as required. These teams are inherently unstable and the leader is defined by the patients need at a specific time rather than a team entity. It may also reflect the levels of mistrust between practitioners and the organisation revealed and organisational leadership not valued or respected. Leadership was not identified as a defining feature of IPTW in this study, yet guidance was perceived to be required in terms of role clarity and team purpose. It may be that negative experiences of being managed, where participants articulated that teamwork was being forced on them and being led in a direction they did not want to go professionally, has instituted a rejection of current leadership structure in terms of primary healthcare teamwork. Sims et al. (2015 (a)) suggest that the main context influencing leadership was the professional hierarchy within healthcare. Thylefors et al. (2005) state that health professionals generally prefer non-directive leadership and suggest this method of leadership is adequate for interprofessional teams.

7.7 Summary & Conclusion

The findings of this study reveal participants struggle with interprofessional teamwork conceptually and in practice. The potential strength of the conflicts described by the participants appears to almost overpower where the professions have found common ground. The portrayal was of established professional boundaries, entrenched GP resistance and a lack of confidence in and mistrust of HSE management. The disabling nature of current support structures was illustrated by inept team processes, poor accommodation, depleted team complements, antiquated communication infrastructure, a dearth of education or training provision and in many cases a lack of very basic resources.

The impact for teamwork within the current reality of separate GP and HSE-based teams, differing conceptual models of primary healthcare and the public and private ‘mix’ of patients solicits reflection on the viability of the primary healthcare team vision within such conflicted unchanged contexts. Furthermore the organisation appeared to have assumed that primary healthcare professionals were
not teamworking. They failed to explore the levels and modes of collaboration that appear to be in place and are perceived to work as a starting point in terms of planning to enhance and support teams and sought instead to implement new team structures based on established silo structures. They also have failed to review and evaluate the levels of teamwork (as envisaged) achieved but instead have continued to apply the model arbitrarily.

In 2012, the Department of Health and Children (DoHC, 2012) outlined their vision for primary healthcare reform as one where, ‘the vision for primary care which the Government is committed to implementing is one where no one must pay fees for GP care, GP’s work in teams with other primary care professionals; the focus is on prevention of illness and structured care for people with chronic conditions, primary care teams work from dedicated facilities, and staffing and resourcing of primary care is allocated rationally to meet regularly assessed needs’ (pg. 30). Collaboration is made up of processes influenced by human relationships and organisational constraints (D’Amour & Oandasan, 2005), thus building new primary healthcare teams is a fragile and challenging process. The provision of policy directives are not enough to support effective team development (Rodríguez & Pozzebon, 2010).

It appears that much of this reform agenda for primary healthcare remains visionary. The literature in this area suggests that teams will continue to fail where existing structures and systems remain unchanged and where professionals continue to encounter team-unfriendly arrangements. The qualitative phase of this study explored interprofessional teamwork contexts from the practitioners perspective revealing very significant barriers, where enablers remain largely aspirational, team meetings under attended, communication limited and working contexts where those expected to engage and participate in primary healthcare teams perceive the organisational supports to be wholly inadequate. As it is currently configured it is not unreasonable to suggest that the viability of the current vision for primary healthcare teams in Ireland is at least questionable and at worst improbable.
Chapter Eight: General Discussion

8.1 Introduction

The impetus for this study was derived from a number of sources which highlight that while teamworking in primary healthcare remains a stated objective of successive Governments nationally and internationally, it appears to remain a persistent challenge. Both the national and international literature available provides evidence that supports this position. The difficulties are clearly discernible within the Irish context. The Comptroller and Auditors Generals report (C&AG, 2010) found that despite implementation, considerable work remains to be done in terms of establishing primary healthcare teams in Ireland, with the HSE (HSE, 2012 (c)) outlining that while progress has been made in relation to the number of teams created, they are not functioning to the level anticipated. They also refer to the need for more funding in order for teams to reach the levels of function envisaged. Tussing and Wren (2006) in a detailed examination of the Irish healthcare system concur, suggesting that Irish primary healthcare has been overlooked when the State considers reform and resources within the healthcare system. Burke (2009) provides a comprehensive exploration of healthcare in Ireland, and with specific reference to the primary healthcare setting and teams, outlines that while ten pilot primary healthcare teams were established in 2003, progress has been extremely slow or had not materialised at all in many parts of the country with non-medical health services remaining disconnected from GP services. To contextualise the issue further in terms of understanding the perceptions of current levels of function, within the public discourse successive Irish media reporting has also highlighted a level of unresolved tension in relation to primary healthcare teams and resource provision with headlines like ‘Is the emperor naked (are there really 222 primary care teams)?’ (Burke, 2010) ‘Primary care teams are dead’ (Irish Medical Times, 2011), ‘GPs refusing to join care teams’ (Irish Times, 2012a), ‘GPs pull out of primary care teams’ (Irish Times, 2012(b)), ‘Just what happened to plans for care centres?’ (Irish Times, 2012(c)). Clearly there are significant difficulties within the setting relating to interprofessional working in practice.
This study set out to answer the following questions:

- What are the current levels of interprofessional teamwork function within primary healthcare teams in Ireland?
- What are the facilitators and barriers to interprofessional teamwork for primary healthcare professionals in Ireland?

The aim was to do so by exploring the experiences and perceptions of primary healthcare professions of IPTW in practice, highlighting the facilitators and barriers therein. Through the use of quantitative and qualitative techniques, healthcare professionals were engaged, providing a unique insight into their experiences of the introduction and implementation of IPTW in the primary healthcare setting in Ireland, reflecting what Crabtree and Miller (1999) refer to as the ‘healers’ voyage’.

This chapter provides an overview of the study and key findings which are considered in terms of the methodological, theoretical, conceptual, empirical and policy literature which have shaped and continue to influence the Irish primary healthcare environment within which healthcare professionals practice. The findings in both phase one and two of this study provide evidence that the factors as depicted in Figure 2-4, are significant in relation to interprofessional working within the Irish context. These are considered in the following sections.

8.2 Connecting the Data: Phase 1 & 2

As outlined in chapter three a number of methodological issues have to be considered when conducting mixed method research. One aspect is the mixing of data. The level of mixing may be described as connected, integrated or embedded. This study connects the data sets. The point at which this occurs within a study may differ but must be part of the overall study design. In this study the points of mixing occurred at:

- The end of phase one when the findings in phase one informed the composition of the interview schedule used in phase two.
- The end of phase two where the findings of phase one and two are considered in terms of convergence or divergence of findings, to inform this general discussion (please see Appendix 11).
8.3 Theoretical

Theory has provided a critical contribution for this study in terms providing a lens with which to view teamwork within the Irish context, and the factors which may be of influence. It is important therefore to also explore the study results, reflect upon and consider convergent or divergent findings in relation to such theoretical deliberations.

Organisational Theory, in particular the research on work groups and self-managed teams has been used to identify salient factors associated with team performance (West & Lyubovnikova, 2013; Reeves et al., 2010; Sicotte et al., 2002). Much of this work originated in industry (Hackman, 1998) but is now widely used in healthcare (Lemieux-Charles & McGuire, 2006). Cohen and Bailey (1997) suggest a broad approach to team effectiveness to include the multiplicity of outcomes at several levels suggesting that environmental, design, internal and external processes and group psychosocial traits predict effectiveness outcomes. They conclude that groups need to be studied in context as they are embedded in larger social systems that influence how they behave and that research must examine behaviour at multiple levels. Several models of group effectiveness have emerged based on these theoretical contributions with West & Lyubovnikova (2013) suggesting that the most widely accepted framework for conceptualising teams is the input-process-outcome (IPO) model of team effectiveness (Cohen and Bailey, 1997). This model is reflected in the extant teamwork literature with many variations of the original IPO model emerging (Reeves et al., 2010; Lemieux-Charles, 2006, Sicotte et al., 2002) and reflects the multiplicity of factors considered in the Framework for Understanding IPTW (Figure 2-3) which was used to explore interprofessional working within the Irish context. The findings in phase one highlighted both low and inconsistent levels of organisational support within the primary healthcare setting. In phase one organisational inputs and processes were considered, yet only one was positively associated with higher collaborative behaviour scores (administrative support). Conversely in phase two participants clearly articulated not only did the lack organisational level support and resources have a negative impact on their capacity to practice but also on their ability and motivation to engage in teamwork. Other findings in phase one revealed that perceived benefits of teamwork was the strongest predictor of teamwork, this was
illuminated further in phase two where participants experiences led to the perception that there were little or no beneficial effects related to teamwork and therefore they were less motivated to engage currently. This suggests that organisational inputs and processes need not only to be sufficiently resourced but more focused in terms of understanding how best to support different team members and contexts and that such supports are perceived to be of benefit for patients and the professionals. The findings illuminate this issue clearly. In phase one SLTs reported lower collaborative behaviour scores and higher levels of reported non-team membership which were more comparable to their GP than NMHP colleagues. This was contextualised in phase two where the findings revealed they perceived there to be less benefits for them and their patients as their role within primary healthcare is currently paediatric-focused, while the focus currently of primary healthcare teams is principally adult-focused. This highlights the lack of understanding in terms of providing the organisational service supports needed. The Irish services is currently more focused on who is in the team (profession led orientation) rather than being needs focused (patient-group orientation). Earlier research findings in the UK primary healthcare services (Lowe and O’ Hara, 2000) found where restructuring of primary healthcare service management focused on patient groupings (e.g. elderly, adult, child services) rather than professional department, it enabled more successful interprofessional teamwork in practice. This is consistent with the theorists’ reflections of the importance of considering different levels of inputs and processes in terms of supporting team effectiveness.

Contingency Theory (Galbraith, 1973; Gladstein, 1984; Donaldson, 2001) considers team ‘task’ to be one of the influential teamwork factors in terms of how the task is perceived or categorised by team members and thus will vary team interactions. Task and Setting was one of the process factors considered to be of influence within this study’s framework (please see Fig. 2-4). Phase two revealed that where the ‘task’ was perceived to be ‘complex’, teamwork was perceived to be of use, with professionals completing joint visits, meeting and communicating more regularly. Donaldson (2001) in his considerations of Contingency Theory places emphasis on the level task interdependence. It is suggested that task interdependence is a defining feature of IPTW (Thylefors et al., 2005; Grumbach
& Bodenheimer, 2004). In phase two professionals not only outlined how collaborating with other healthcare professionals contributed to more effective care plans and patient outcomes, but recognised the effectiveness of their profession-specific contribution, was often determined by the expertise and input of the other professions involved.

Another aspect to consider in relation to Contingency Theory is context or the type of care or ‘tasks’ in the primary healthcare setting. Contingency Theory proposes ‘task’ as a moderator to the input-process-output model which posits that the very nature of the task will vary team effectiveness, suggesting that the less certain the task the less the work activities can be scheduled in advance, increasing ad hoc working arrangements, thus reducing team effectiveness. Participants identified greater teamworking with ‘complex patients’. They described the need for greater collaboration with colleagues to provide for the need of this patient group. They articulated a high level of task interdependence, recognising that the contribution of other team members often facilitated and enabled them to contribute more effectively to the care of the complex patient which does reflect this aspect of Contingency Theory (Donaldson, 2001).

However the findings also diverge from this theoretical position. Where there was less certainty projecting what these patients may need actually increased the professionals focus and planning in terms of providing appropriate care. Interactions were more frequent and organised and did not reflect ‘ad hoc’ type team interactions in this context as posited by Gladstein (1984). These findings differ from Contingency Theory in that the level of uncertainty and unpredictability increased interprofessional interactions and collaboration. This type of ‘task’ did not result in ad-lib working but a much more co-ordinated approach in this context. It appears that Contingency Theory does not capture or account for human compassion and empathy, what could be considered as the unique caring aspect to healthcare ‘tasks’, where each task can never be fully removed from the venerability or life course context of the individual who needs support or seeks healthcare services. Such situations evoked a very different reaction in terms of intensifying team functioning. Brault et al. (2014) suggest that clinically complex situations create greater opportunities for professionals to interact. Empathy is
thought to contribute to better teamwork, enhance communication and improve the quality of care delivered (Ku, 2016).

It does however reflect the contingency approach posited by Reeves et al. (2010) which suggests that teamwork in health and social care is much more nuanced and complex. Their typology of interprofessional teamwork captures varying forms of interprofessional working which can be considered appropriate depending on needs identified. This also reflects what the participants in phase two frequently referred to as ‘appropriate’ teamwork, they clearly identified with a contingency approach when considering ‘task’. Much of the care provided in this setting was described as routine (predictable), which did not require intense interprofessional interactions. Indeed many professionals provided services based on referrals, where face-to-face interactions were minimal suggesting a lower level of task interdependence in many cases. Effective care was provided but did not require an interprofessional team intervention.

The findings in phase one revealed an average collaborative behaviour score of 3.6, which may be considered disappointing (Sicotte et al., 2002 (pg. 997)). However based on a contingency approach the score average may simply reflect the uniqueness of the setting where a minority of patients are defined as complex and certainty of task did not decrease effectiveness in terms of positive outcomes but did reduce the need for more intensive team interactions. This was clearly discerned in phase two, while all four forms of interprofessional working as outlined in the typology were present in the working environment, ‘teamwork’ was perceived to be beneficial only in complex cases. There was consensus among the professions in this regard. Much more common were descriptions of collaboration and coordination, as defined in the typology. Many participants reported working in smaller sub-teams, two to three professionals engaging in joint visits to collaborate initially or calling informal impromptu meetings as needs arose. It could be regular or irregular in nature as it was totally dependent and driven by patient need. Networking was described where patient care did not require any interaction or follow-up with other team members, often the only communication being the initial referral to another NMHP and subsequent successful discharge notification from a service. All of the professions referred to the many patients that they saw that did
not require a team intervention, their need appropriately identified and cared for in a uniprofessional manner where no referral onwards to another service or level of teamwork was perceived to be necessary. They perceived that there was currently too much focus on formal meetings and complex cases (teamwork) with the other ‘looser forms’ (Reeves et al., 2010) of teamwork not acknowledged (collaboration, coordination, networking). While complex cases are important the majority of care-related issues were of a less complex nature, reflective of this specific healthcare setting.

Within the literature professional background and socialisation have been outlined as significant in terms of practitioner attitude and willingness to engage in teamwork structures. These closely guarded professional identities and ideologies can diminish enthusiasm for interprofessional working (Nisbet et al., 2015; Price et al., 2014; Bélanger & Rodriguez, 2008; Hudson, 2002). Social Identity Theory (Tajfel & Turner, 1986) suggests that social identity is derived primarily from group memberships. They posit there are three factors that may influence intergroup differentiation; that people are subjectively identified with their group, that the context should permit evaluative comparisons with the outgroup and the outgroup must be sufficiently comparable that the pressure for distinctiveness increases with comparability (Brown, 2000 (b)). Phase one and two findings reflect these factors in that GPs scores differed significantly on the majority of variables measured, which identified them as a group distinct from the other healthcare professionals. In phase two GPs acknowledged the valuable contribution of other healthcare professions in terms of realising patient goals, this enables a level of comparison in terms of evaluating profession-related contribution and impact upon patient care within the primary healthcare setting. However they also sought to clearly differentiate themselves and their practice from the broader primary healthcare team and the primary healthcare model as currently envisaged. They wished to remain independent of the HSE and retain their independent contractor status. They perceived themselves as consultants to rather than members of a primary healthcare team, explicating that general practice was essentially primary healthcare and that they referred patients to separate community-based HSE services (NMHPs). Their social identity was strongly associated with a general practitioner group and a general practice team rather that primary healthcare team.
and the model of primary healthcare proposed. They related ‘team’ with their own practice-based group (GP, PN and administrative support) and saw the primary healthcare team as an ancillary service to refer patients to. The findings of this study do reflect Social Identity Theory, the pressure for distinctiveness increased with the planned integration of general practice within the broader primary healthcare team model, suggesting a level of professional comparability which challenged distinct professional boundaries. GPs disengaged from the primary healthcare teams and team structures, thus distinguishing their service from other primary healthcare service providers. The NMHP group clearly experienced this division in practice and viewed it as a barrier to teamwork in the primary healthcare setting.

Realist Conflict Theory (Brown et al., 1986) posits that groups holding divergent objectives will have conflicting relationships and the conflict is a result of competition for limited and valued resources. The recent economic crisis in Ireland has intensified the potential for such conflicted relationships with unprecedented funding cuts to healthcare services. The objective of the organisational group (HSE) has been to provide healthcare services within the context of a vastly reduced budget while for healthcare professional groups, their focus has been to maintain both staffing, service levels and resources within the setting and preserve remuneration arrangements within their own professions. The findings in phase two revealed a level of consensus across the professionals in terms of a perceived need for better organisational supports and resources within the setting and a perceived lack of understanding on the part of the HSE in relation to the primary healthcare and how best to provide needs of patients therein. The primary healthcare setting is one of many healthcare settings competing for funding, the perceived lack of investment in primary healthcare combined with the severe reduction in funding to the primary healthcare sector have created a negative relationship between the health professions and the HSE. The reductions in financial supports were clearly objected to by all the healthcare professionals.

However the findings also highlighted where the different professionals were conflicted and expressed significant concern for resources within their own departments. GPs were conflicted on two levels, a perceived lack of resources for primary healthcare services and specific funding cuts to GP-specific contracted
services. They articulated their anger in relation to cuts in remuneration for general practice services provided which contributed significantly to the very poor relationship they described with HSE management and resulted in their disengagement from team processes. For SLTs they too were conflicted as they perceived there to be little resources for their patient cohort within the primary healthcare team structures and processes as currently configured. They perceived the HSE objectives for primary healthcare were divergent in terms of a lack of focus on paediatric speech and language service provision, the findings in phase one and two clearly illuminate their disengagement from team processes. Realist Conflict Theory (Brown et al., 1986) is reflected in the findings in this study where the relationships were conflicted on two levels, between the health professionals overall and the HSE as the professions sought to retain services and funding as a group for the primary healthcare setting and within discipline as they sought to maintain resources within their own areas.

From a historical perspective the findings reflect Path Dependency Theory (Liebowitz & Margolis, 1995) which outlines that to understand current healthcare contexts, historical decision making must be considered to understand current policy and practice positions. Barrington (2000) clearly outlines the concerns regarding a threat to the dominant position of a medical model within Irish healthcare in the early 20th century, the powerful allegiance formed by medics and the Catholic hierarchy. It sought not only to preserve the power of the church in Irish society but the dominant position of the GP and the preferred general practice model which allowed for patients to be distinguished by their ability (or not) to pay for services. Subsequent primary healthcare reforms were also rejected (Murray, 2006). Currently within the healthcare system there is continued opposition to general practice restructuring as envisaged by successive Irish Governments. Phase two revealed GPs genuine concerns for a poorly resourced primary healthcare setting but also their concerns over losing their independent status and dominant position within the team model envisaged by the HSE. They also voiced real anger towards the financial cuts in remuneration to GPs, this highlights the unique working context in Ireland where GPs are private business contractor’s supplying a service to the healthcare system. These contemporary concerns within general practice relating to preserving levels of autonomy and the independent contractor
status within this discipline are reflective of previous historic concerns and tensions. Overwhelmingly, GPs in this study perceived there to be no benefit to being a member of a primary healthcare team in Ireland. Price et al. (2015) state that both the historic and hierarchical structural arrangements among the health professions impacts negatively on professional, patient and organisational outcomes.

Other research suggests that regardless of benefits identified, GPs retain a level of ambiguity in terms of their position as an equal member of an interprofessional team (Hansson et al., 2008; Cook et al., 2001) and while this may reflect Social Identity Theory (Tajfel & Turner, 1986) it also reflects the unique Irish context of a historically powerful GP movement which sought to retain their model of care and independence from the state run services which endures today. The findings suggest that as currently structured within the Irish Primary Healthcare system, there may be more benefits professionally and personally for GPs to remain outside of team processes, such as protecting the ability to make decisions decisively and independently, preserving the general practice model within the setting and being able to remain detached from the team model currently in place due to their independent contractor status. Conversely, NMHPs were generally more willing to engage with current team processes. They clearly articulated that as employees of the HSE they were obliged to engage yet did outline their concerns with the current team model. They also perceived that the current general practice model did act as a barrier to teamwork. However one group of employees, the SLT group had greater difficulties with teamwork as previously discussed. The development and current configuration of the Irish primary healthcare service is reflective of Ireland’s historic deference to and relationship with religious power, authority and influence in terms of exerting influence over State policy and healthcare development over the last century. While contemporary healthcare policy does not reflect such a relationship current GP services and State provided community care service structures were shaped by it and remain separate entities. It is a distinction which has been both defended and challenged over the decades yet with minimal change observed (Barrington, 2000, DoHC, 2001; Mc Cluskey, 2006). Therefore while the contemporary context within which teams are embedded is important, the findings suggest the opposition to greater integration within primary healthcare in
Ireland has an important historical aspect in terms of understanding team function and suggests that history should be considered to aid understanding in this area, Path Dependency Theory (Liebowitz & Margolis, 1995) provides a lens with which to capture this aspect of team context.

8.4 Conceptual

Conceptually the definition of what primary healthcare represents remains contested (Blumental & Abrams, 2013; Cueto, 2004; Keleher, 2001). This study suggests that within the Irish setting such conceptual differences still exist. The findings in phase one highlighted statistically significant differences across many variables between the medical and non-medical professions surveyed. In phase two conceptual differences were illuminated, GPs perceived that general practice was primary healthcare and all other services were ancillary, whereas the NMHPs perceived primary healthcare to be a more holistic model where no profession dominated, rather all professions were perceived to have an equal role in terms of contributing to patient care. This has impacted on GP views in terms of the benefits of being involved within a broader team model. Phase two clearly showed their unwillingness to be involved in primary healthcare team activities. Conversely the NMHPs view the greater involvement of GPs within teams positively.

Conceptual frameworks to develop understanding in the field of teamwork are frequently depicted as IPO (input, process, output) models, which emerged from Organisational Theory as discussed previously. Reeves et al. (2010) present a conceptual framework of understanding interprofessional working (Figure. 2-1) which was adapted for this study in order to explore and develop greater understanding of the current levels of teamworking within the Irish primary healthcare setting context. The adapted framework used (please see Figure. 2-4) is an IPO model; with inputs (historical and contemporary perspectives, relational, organisational, contextual) and processual (process) factors considered in terms of influencing output, in this case the levels of interprofessional teamwork as measured in phase one and explored with professionals in phase two. In the conceptual model depicted in Corbin and Mittlemarks’ model (Corbin & Mittlemark, 2008) the construct ‘antagony’ was added in order to highlight the potential unwanted or disturbing outcomes where teamwork was introduced. The
findings in phase two revealed some disturbing outcomes in terms of the perceived lack of investment in teamwork which resulted in a significant level of anger towards the organisation and disengagement in team processes which are discussed further in the next section.

8.4.1 **Antagony Affect**

Professional attitudes to teamwork in healthcare not only shaped by professional socialisation, they are also affected by the implementation process within a setting over time. Professionals become deeply frustrated by perceived inadequacies in team processes. The implementation process within the Irish context was affected by professional attitudes and perceptions but also their experiences of teamwork processes. The implementation process led by the organisation had a paradoxical effect on the professionals they needed to engage. In phase two, participants described initially being optimistic about the Primary Care Strategy, however overtime and through years of perceived unfulfilled organisational level assurances, a hardening of attitudes emerged towards the primary healthcare team model, with an entrenchment of opposition developing for some. Many articulated feeling compelled or forced to be involved but having become resentful of an approach imposed with little enthusiasm for the process as it is currently structured and experienced within the setting. Persistent low levels of organisational support in terms of unchanged structures, funding and a perceived lack of understanding of the primary healthcare setting has negatively affected professional attitudes. This resulted in a high level of cynicism and mistrust which has severely damaged the relationships between the organisation and the professions. Johnson et al. (2003) stress the importance of understanding attitudinal barriers as well as structural ones, suggesting human relationships and personalities are among the most challenging for healthcare teams (Grumbach & Bodenheimer, 2004). The professionals perceived there to be a total lack of candidness at organisational level in terms of what was achievable. Trust between practitioners and HSE managers has being eroded over time due to their perceived ongoing negative experiences within the system and what many described as organisational ‘tick box’ exercises verses sincere engagement with service providers. The GP group were most critical of the teamworking model introduced and clearly articulated their now total opposition.
The findings provide support for the concept of ‘Antagony’ related to teamwork (Corbin & Mittlemark, 2008).

### 8.4.2 Potential Negative Health Impact

Interprofessional teamwork is associated with health benefits for staff in terms of reported health and wellbeing (Clements et al., 2007; Borrill et al., 2001) and greater job satisfaction (Xyrichis & Ream, 2007; Rafferty et al., 2001). Many professionals perceive there to be both professional and patient care-related benefits to teamwork, yet voice differing levels of concern regarding teamwork as currently structured. It is suggested that collaborative team practice is a vehicle for healthy working environments (Canadian Health Research Foundation, 2006). However this study revealed a cohort of primary healthcare professionals generally under pressure to provide often basic care, inadequately resourced, frustrated by the team processes in place and a lack of organisational-level change to support the model of teamwork introduced. The findings in this study echoed other research in this area, with goodwill of the frontline practitioners squandered for ‘want of better management’ (Irvine et al., 2002 (pg. 2002)) and staff feeling pressured due to unrealistic expectations in such team-adverse environments (Coxon, 2005) cited by Maslin-Prothero & Bennion (2010)). This study did not aim to explore the health impact of teamwork on staff but revealed a significant level of tension and stress associated with the teamwork model. It revealed team members managing heavy caseloads coupled with perceived unrealistic requests from management to partake in team-related activities with inadequate support or resources. They expressed disappointment and discontent with the implementation process thus far with responses ranging from a general sense of frustration and unhappiness to unforeseen levels of anger and vitriol regarding the introduction and implementation of primary healthcare teams.

The National Institute of Occupational Safety and Health (NIOSH) define occupational stress as ‘the harmful physical and emotional responses which occur when the requirements of the job do not match the capabilities, resources or needs of the workers’ (NIOSH, 2008). This study found that primary healthcare teamwork model introduced has evoked harmful emotional responses, which are related to the dearth of organisational resources and professional support mechanisms for
teamwork and while the potential impact for health and wellbeing of the professionals involved is of concern, its possible impact is currently unknown.

8.5 Empirical

While it is acknowledged that there is a lack of empirical evidence in relation to the factors thought to be of influence (Reeves et al., 2010; Lemieux-Charles & McGuire, 2006), the findings in phases one and two of this study provide evidence relating to factors of influence as regards interprofessional working within the Irish context. The findings reveal that such factors influence health professionals’ perceptions of interprofessional working and their perceived collaborative behaviour. The key factors are discussed further in the following sections.

8.5.1 Socialisation, Power & Hierarchy

While professionalisation has been considered from a theoretical perspective (Section 8.3) it is a very significant factor in terms of interpersonal relationships within healthcare teams and perceptions of professional roles. How the different healthcare professions are socialised and develop a professional identity impacts on how they perceive their professional status within a team structure and influences their views of their role within the team which challenges IPTW development (Nisbet et al., 2015; Khalili et al., 2014; Finn et al., 2010). Wilhelmsson et al. (2011) found that NMHPs report more positively on the topic of interprofessionality which reflects the phase two findings in this study when the overwhelming majority of GPs were very negative in relation to this issue as compared to their NMHP colleagues. In phase one perceived hierarchical differences between the professions was negatively associated with collaborative behaviour scores. In phase two GPs reported that they regularly refer patients to other services and health professionals, fulfilling what they perceived to be a consultative rather than membership role as regards the primary healthcare team. Within this context they perceived NMHPs to have an independent professional role, responsible for their own practice. However their perception of their role and that of the NMHPs role changed when they spoke of a GP role within a primary healthcare team. They reported significant concerns over what they perceived to be a lack of clarity relating to professional accountability and responsibility and reporting structures within teams. They perceived their position within a team in
terms of being not only being ultimately responsible for the patient but within a
team context perceived themselves to be also responsible for all other health
professionals’ decisions made regarding patient care.

The lack of clarity and hierarchy in terms of responsibility relating to who was
ultimately ‘in charge’ within the Irish team model was a very significant perceived
barrier for GP participation. However, NMHPs reported a perceived a lack of
knowledge regarding their role, expertise and skills by GPs and their ability to
contribute to patient care decisions. Sims et al. (2015 (a)) suggests that where roles
are blurred, professionals can feel threatened, create conflict and evoke feelings of
frustration, anxiety. Rämgård et al. (2015) found that during a process to develop
health and social care planning in collaboration, the underlying professional
cultures and values combined with a lack of knowledge regarding other
professions’ field of expertise was a barrier to their collaboration. Nisbet et al.
(2015) found that an underlying tension remains between medical and other
healthcare professions and until this is addressed the development of a team identity
is unlikely (McKay & Narasimhan, 2012). Specific to the primary healthcare
setting role clarity is problematic where work is often less structured and task
orientated (Brault et al. 2014; Perron et al., 2014; Al Sayah et al., 2014). The
seriousness of this factor if unaddressed is highlighted by Fox and Reeves (2015)
where health and social care professionals were found to have failed to
communicate effectively and to raise clinical concerns with one another due to
issues relating to status and power differences, which resulted in poor clinical
practice and patient deaths.

8.5.2 Team Governance Structures
As discussed a lack of clarity in terms of team roles was identified as a concern for
professionals in phase two. For GPs in this study a fear of litigation also
underpinned their concern over where ultimate responsibility lay in relation to care
decisions made at a team-level. Issues regarding medical dominance and medico-
legal considerations are identified as barriers for collaboration and considered to
hinder shared decision making (Schadewaldt et al., 2013; San Martín-Rodíguez et
al. 2005; Leipzig et al., 2002). The literature identifies that there is a real need for
clarity in this area (Clements et al., 2007) and that leadership and support at
organisational level in terms of clear governance structures and formalisation is
critical and helps to clarify expectations (D’Amour & Oandasan, 2005). This factor is a significant barrier for GPs and organisational supports to address this issue do not exist within the Irish primary healthcare setting currently. The absence of organisational management and governance structures have been highlighted (HSE, 2012 (c); C & AG, 2010). It is interesting to note the new National Service Plan for 2015 (HSE, 2014) outlines some organisational adjustment where the current 17 ISAs will merge into 9 Community Healthcare Organisations (CHO). There is a broad reference to implementing agreed governance structures but is vague on detailed accountability and reporting structures within new management structures and specifically the primary healthcare teams. Furthermore performance indicators are outlined within disciplines but no references to team-level performance indicators are included. It may be difficult for teams to progress where discipline rather than team activities are still prioritised. However it outlines a new initiative to employ GP ‘leads’ as part of the reform and while there is no detail provided as to what that role may entail, it may provide some clarity and assurance for GPs regarding their role and position within primary healthcare teams.

8.5.3 Team Composition

There appears to be no agreement on optimum team composition and diversity (Lemieux-Charles & McGuire, 2006), however West (2012) suggests composition should range between eight and twelve. The ‘core’ primary healthcare team as defined by the Primary Healthcare Strategy (DoHC, 2001) in terms of composition was six team members but also referred to other ‘network’ level professions which may be involved depending on need. In phase one where professionals reported multiple team memberships their collaborative behaviour scores as measured were not significantly different from those who reported single team membership. Yet the findings in phase two revealed that professionals perceived multiple team membership to be a barrier in terms of team engagement and participation. In relation to maintaining team composition the majority reported that team members were not being replaced and team composition was compromised. This was a considerable barrier to interprofessional working, where certain professions were absent from teams for long periods of time. This resulted in colleagues having to cross cover teams to provide specific services and was perceived as very stressful and time consuming due to the large geographical areas that had to be covered.
within a working day, especially in more rural locations. These findings point to a level of team instability which could be considered team adverse (Reeves et al., 2010; Drinka & Clarke, 2000). The impact of team instability was more severe in the Irish context due to the recent economic crisis which resulted in the introduction of a strict employment moratorium within the HSE which has been sustained over a long period of time. It led to a chronic level of instability within the teams which has impacted directly on how professionals have to manage and maintain bigger caseloads reducing their time to focus on other team-level processes.

8.5.4 Benefits & Beliefs

Interprofessional working is beneficial for patients, the professions and organisation involved (Weaver et al., 2014; West et al. 2012; Khan et al., 2008). In phase one of this study the findings revealed that a variable developed for and unique to this study, the ‘perceived benefits of teamwork’ variable was the strongest predictor of collaborative behaviour across the professions. However GPs, PN and SLTs reported the lowest perceived benefits of teamwork scores as measured. This again highlights the General Practice-HSE structural divide in terms of their experiences in practice. For PNs, they articulated that they do not benefit from team membership and currently perceive themselves to be excluded from team processes, their current private employment status within general practice a significant perceived barrier. For SLTs this phase one finding is supported by phase two findings in that they perceive the patient cohort they care for do not benefit from the primary healthcare team processes as currently configured. While belief in teamwork as measured did not predict levels of collaborative behaviour in phase one, in phase two the participants belief in teamwork was negatively affected by a poor team working environment where the lack of resources made interprofessional interactions difficult and resulted in professionals reverting to working in a more uniprofessional manner as it was perceived to be easier and less time consuming.

8.5.5 Team Meetings

Meeting attendance is currently the only form of teamwork measurement employed by the HSE. Team meetings have been identified as a key element for effective teamwork (Nisbet et al. 2015; Cameron et al., 2013). The HSE defined teams to be
operating or functioning if clinical team meetings are held where at least one GP is present. The primary care division operational plan for 2015 (HSE, 2015 (c)) restates that position. In phase one the findings revealed that while team meetings were positively associated with collaborative behaviour scores as measured, 39% of the professionals surveyed did not attend meetings, with GPs reporting the highest level of non-attendance at 46%. In phase two findings revealed that team meetings were poorly attended, with many of the barriers to attendance outlined. The geographical anomalies between GP and HSE populations resulted in many of professionals being requested to attend multiple meetings where patients being discussed were not always known to all those present. This gave rise to concerns relating to confidentiality and the suitability of formal full-team meetings.

The findings within this study suggests that by only using this single measure of IPTW a significant level of healthcare professionals that are involved in primary healthcare teams are not seen not to be functioning as a team as they do not attend formal meetings. Yet professionals are still engaging with their colleagues, communicating and meeting when deemed appropriate. Using Reeves et al. (2010) typology of interprofessional working other forms of interprofessional working were clearly illuminated across the professions. As currently configured meetings are avoided if possible, infrequently held or have ceased. Lewin & Reeves (2011) found that planned team meetings sought to demonstrate team visibility rather than collaborative activities, which reflected participants perceptions in this study that the recording of meeting attendance rather than the quality of meeting processes was the priority. The definition of IPTW currently disregards more nuanced informal interprofessional working present and ignores the fact that many professionals are unwilling or unable to participate in formal meetings as currently organised. Continuing to measure team function in this manner is inappropriate. This type of formal team meeting does not appear to enable or support interprofessional interactions within the Irish context. Other methods of facilitating team interactions need to be introduced and new ways of identifying and measuring interprofessional interactions are required to both capture and acknowledge other forms of IPTW and to reflect a true measure of the levels of IPTW achieved by professionals in practice.
8.5.6 Goals & Objectives

Teams are defined by their shared goals and objectives and are considered fundamental for teamwork (West & Lyubovnikova, 2013, Reeves et al., 2010; Drinka & Clarke, 2000). However in phase two a clear lack of team goals and objectives were identified across the professions. While formalisation of care (e.g. protocols for care delivery) has been positively related to interprofessional collaboration (Sicotte et al. 2002) and thought to give structure to partnerships (Corbin & Mittlemark, 2008) the findings in phase one suggest that what is currently offered in terms of formalisation (e.g. standardised care records, formal team meetings) within the Irish context has no impact on collaborative behaviour as measured. This suggests that a significant level of work is required in this area to provide formalisation tools to support, encourage and sustain interprofessional working methods.

8.5.7 Leadership

Leadership is also seen as a key factor in moving the work of teams forward (Reeves, 2015). However while team leaders were reported by 55% of those surveyed, their presence had no impact on collaborative behaviour as measured in phase one. In phase two GPs were concerned with leadership in terms of who was in charge. Sims et al (2015 (b)) suggest that the main context which influenced leadership was the professional hierarchy within healthcare which has been discussed previously. However the overwhelming majority of NMHPs did not express any concern with local team leadership, this may reflect the specific healthcare setting. Øretveit (1997) states that less formal leadership roles are more suitable in the primary healthcare setting. However organisational-level leadership was perceived to be needed in terms of providing clear goals and objectives for the team.

8.5.8 Time

In phase one of this study, a lack of time was perceived to be the single greatest barrier to team meetings (48%). In phase two all of the professionals perceived the meetings to be time consuming, too long and ineffective. Likewise they articulated a work practice context of larger caseloads, less staff, less resources and larger geographical areas to cover which left them with less time to engage in
teamworking. Teamwork was also perceived to take more time than working in a uniprofessional manner and having to travel long distances to meetings was a perceived barrier to many. Oandasan et al. (2009) found that staff perceived that patient scheduling reduced the time available to engage in team processes and professionals who worked off-site found it difficult to find the time to travel to meetings. However, developing team reflexivity is also seen to be important, whereby teams meet and regularly take time out to define what they are trying to achieve (Casimiro et al., 2015; West and Lyubovnikova, 2013), enabling team members to reflect upon the suitability of their objectives to ensure they are aligned with patient needs and emerging organisational challenges. All of the participants articulated having no time to spare to be involved in team-related activities. Protected time would need to be provided and resourced by the organisation to enable team members to allocate time to be part of discussions and to develop functional trusting relationships necessary for patient-engaged care (Casimiro et al., 2015). Sims et al. (2015 (b)) suggest that critical reflection does not routinely happen within healthcare teams. While they suggest is may be related to a lack of time in addition to their clinical work more research is needed to assess its prevalence and relevance within settings. Furthermore while team compositions remain depleted health professionals will continue to struggle to balance patient and team related activities.

8.5.9 Gender

Gender appears to play a role in terms of progressing teamwork. Bell et al. (2014) suggest that the under-representation of women in the physician workforce and historically ‘gendered’ professions in healthcare could negatively impact on teamwork, while Falk et al. (2015) found male healthcare students less positive regarding interprofessional training. In phase one there was a small but statistically significant difference in terms of gender, with female participants reporting team membership and perceived benefits of teamwork more frequently and higher collaborative behaviour scores. However in phase two, female GPs did not differ from their male colleagues in their negative assessment of the current teamwork model. As all NMHPs interviewed were female, the ability to explore gender issues was limited. It appears that other factors may be more powerful in terms of influencing perceptions and practice related to interprofessional work. Other
research suggests that gender differences are minimal or did not find any significant differences when data was analysed by gender and profession (Kilminister et al., 2007; Hylin et al., 2007).

8.5.10 Communication

Communication is seen as a key factor for teamwork with teams relying on information sharing (Hewitt et al., 2015; Suter et al., 2009; Weaver, 2008). However in phase one only 39% of participants reported that all patient care decisions were communicated across the team. In phase two this was reinforced with serious concerns expressed in terms of poor communication infrastructure provision. This need can be contextualised in terms of the perceived communication barriers identified within this study such as a lack of co-location and time, unsupportive team meeting structures, unsuitable formalised documentation tools, poor role awareness within the team and multiple team memberships which reduced opportunities for face to face communication and relationship building. Overall this has created a working context where teamworking is perceived and experienced as a difficult, tedious and time-consuming activity. Reeve and Freeth (2003) refer to the need for an ‘electronic bridge’ to help team members to communicate effectively. Bleakley (2013) refers to the need for teams to have a greater tolerance of uncertainty and greater flexibility due to the complex nature of contemporary healthcare. He posits the professionals need to be skilled in ‘knotworking’, connecting, disconnecting and reconnecting as needed to provide care. Casimiro et al. (2015) referring to the concept of knotworking in healthcare suggests that in order to enhance teamwork the dynamic nature of therapeutic interventions and the natural ebb and flow of the relationships involved must be understood, including the role of communication tools such as computers and electronic patient records. The findings in this study indicate that while health professionals in this setting require organisational level interventions and investment in facilitating better communication, professionals must perceive there to be a benefit both professionally and for their patients to engage in altering current patterns of communication. While Casimiro et al. (2015) suggests that a detailed examination of the relationship between current structures (administration), context (patient need) and processes (communication strategies) must be undertaken in order to provide appropriate infrastructural support, this
study indicates that the healthcare professions must also be considered in this process.

### 8.5.11 Co-location

According to Crampton et al. (2005) ‘history matters’ (pg.235) where examining aspects of contemporary healthcare systems. In this study current physical infrastructure continues to reflect the historical working arrangements despite the Primary Care Strategy objective to provide primary care centres (DoHC, 2001). General Practice staff remain separate to HSE employed staff contractually and physically. Historically GPs have worked from separate private premises and this arrangement continues to prevail. However phase two revealed that GPs were not anxious to move to new primary healthcare centres. They perceived that it may negatively impact on their business having built up a patient list (public and private) in a specific geographic area, or having already invested financially in their own practice premises they simply had no interest in moving. Co-location is considered to be an enabling teamwork factor (Kaehne & Catherall, 2012; Oanasdan et al. 2009) and was viewed positively by the overwhelming majority of NMHPs through their own experiences. From a GPs perspective while recognising the need for better resources and facilities, they were also concerned in relation to the perceived possible negative impact of relocating on general practice from a business viewpoint. This highlights again the unique Irish context where GPs are self-employed, and this business perspective continues to be a very significant factor in terms of how willing GPs were to engage in, and viewed any proposed changes to practice.

Only 1.2% of the participants surveyed met the definition of co-located primary healthcare team members, where GPs and NMHPs share a work environment. The reluctance on the part of GPs to relocate as revealed in phase two findings suggests that co-location is a more complex process than simply the provision of purpose built facilities. When published the need for patient registration was acknowledged in the Primary Care Strategy (DoHC, 2001), however this has not been addressed and uncertainty as to the impact on general practices in terms of patients ability or willingness to attend at a different location remains a perceived threat to GPs in terms of their practice and acts as a barrier to the co-location of primary healthcare team professions in Ireland. However the benefits of co-location were clearly
discerned in phase two through the NMHPs who reported increased face-to-face communications, ease of access to colleagues, facilitation of corridor consultations (Kaehne & Catherall, 2012; Sargeant et al., 2008). They described the building of trust, better working relationships and a reduction in fear of engaging with other professions (San-Martín-Rodríguez et al. 2005). Oandasan et al. (2009) suggest co-location may alleviate the sense of exclusion from the main team. This is particularly relevant for team members practicing in very rural areas in Ireland and for PNs who currently perceive themselves to be excluded from the primary healthcare team.

8.5.12 Employment Status

While phase one highlighted statistically significant differences across the professions relating to the perceived benefits of, belief in and collaborative behaviour scores as measured, most significantly it highlighted a clear divide between the GP and NMHP groups. There were significant differences across variables relating to team membership, team training received and motivation to work within a primary healthcare team in these two groups, with GPs reporting membership and training less frequently and being less motivated as regards working within a primary healthcare team. In phase two GPs articulated that they want to remain independent of the HSE and the primary healthcare team. They did not want to be employees of the HSE, were defensive of their independent contractor status and were very concerned that the HSE were trying to gain control over how general practice was traditionally organised and functioned, reflecting the suggestion that doctors are more individualistic in their focus and autonomy driven (Barrow et al., 2015). NMHPs perceived that as long as GP contractual arrangements remain unchanged primary healthcare teams will struggle to function. In terms of their own position, while NMHPs perceived their employment status did oblige them to engage in team processes currently in place, they did not view being employed by the HSE negatively. However PNs did perceive that their employment status negatively impacted on their ability to engage with the primary healthcare team. Other research suggests that where primary healthcare team members are employed by and responsible to the organisation they are more effective, employees are more willing to engage and better working relationships are developed (Boudioni, 2009; West & Poulton, 1999). This issue illustrates that
contemporary arrangements continue to reflect the historical arrangements from which Irish primary healthcare services has evolved.

### 8.5.13 Education & Training

Education and training are considered key input factors for interprofessional working (Hood et al., 2014; Weaver et al., 2014), yet the perceived value of such education and training are influenced by professional socialisation (Falk et al., 2015; Curran et al., 2010; Yarsborough et al., 2002), and engagement can be negatively impacted by prioritisation of patients over such training opportunities (Way et al., 2007). Phase one revealed that team training was positively related to collaborative behaviour scores, yet also revealed that the overwhelming majority of staff had not received any education or training related to teamwork (80%). In phase two while NMHPs were positive in terms of their experiences of teamwork they were less aware of an evidence base to support teamwork processes. GPs identified a need for such evidence in order to foster GP engagement. Furthermore there was also a significant difference in those who had received training, with professionals within general practice (GP, PN) reporting significantly less team training than the HSE-employed group. This identifies a need for the organisation to not only provide more educational opportunities in this area but a need to invest in evidence-based education within the broader primary healthcare setting, specifically involving general practice and the dissemination of research findings relating to interprofessional working which could foster greater engagement in team processes.

### 8.5.14 Finance Structures

Financial structuring across the Irish healthcare system is not team orientated and is discipline based as discussed chapter two (section 2.8.3.3). While pooled budgets were identified as a driver of integrated working by Maslin-Prothero & Bennion (2010), the difficulties in achieving such funding is acknowledged (Jansen, 2008; Clements et al., 2007; Tussing & Wren, 2006). Tussing and Wren (2006) state despite GPs being self-employed operators of small local businesses, there is a need to integrate with the public sector, yet both phase one and two findings revealed that a significant divide between the two sectors remain conceptually and practically. While phase two identified general concerns over cuts to funding and
resources the overwhelming concern was voiced by GPs and the specific cuts to
general practice they have endured in recent years. It has reinforced their opposition
to participating in teamworking as envisaged by the HSE. They perceive that they
should be paid to engage in team processes/initiatives. This is unsurprising as
historically GPs were reimbursed for participation in specific national programmes
over and above basic capitation rates, highlighting another layer to of complexity
of the Irish primary healthcare service as it is currently structured.

8.6 Policy
Irish healthcare policy reflects an international healthcare policy trend which
embraces a broader definition of health and acknowledges the need for
interprofessional working in terms of health, well-being and care provision.
However the verbal rhetoric, while well intentioned, is in stark contrast to the
realities in terms of supporting infrastructure and finance allocation for the primary
healthcare sector. The Primary Care Strategy (DoHC, 2001) was a very significant
policy development in Ireland. For the first time primary healthcare was prioritised,
stating that primary healthcare, based on a team approach, would be central to the
planning and delivery of health and social care services. The changes would require
significant investment estimated to cost €615 million, however to date only €70
million has been provided, highlighting the lack of any meaningful investment for
change in the setting.

Conversely other existing Irish Government policies supports the view that it is
appropriate that the primary healthcare sector should, like the hospital sector,
operate to a medical model, yet acknowledges that it is not the most effective
approach to delivering some elements of community and continuing care (DoHC,
2010). Policy past and present continues to sustain separate general practice
structures and funding mechanisms and while there is research which suggests that
this may militate against teamworking (Brinkman & Wilson-Salt, 2007; Elston &
Holloway, 2001; Way et al., 2000) current policy and healthcare organisational-
level structures have not changed in terms of supporting of this position. This
illuminates contradictory aspects in concurrent healthcare policies. Health policy
plays a pivotal role in shaping the health services and the associated levels of
funding allocated define the quality of implementation and levels of service
provision possible. For the professionals involved, how policy is implemented and operationalised affects their level of interest in and commitment to driving change in professional practice. While the perceived benefits of teamwork as measured was the strongest predictor of collaborative behaviour in this study, the lack of funding to resource and support teamwork was clearly articulated, and subsequently any beneficial effect in practice was constrained. The level of policy implementation achieved contributed to the growth of reluctance to engage in team processes, a return to more silo-like working and increased levels of resistance to change over time.

Policy has a significant role to play in terms of providing a framework for developing teamwork. The impact of healthcare policy is evident within this study. Teams have been shaped and maintained by a conflicted policy direction which supports independent general practice and community and continuing care as two separate entities structurally and financially, yet states it is committed to developing greater professional integration and interprofessional teamworking. Murray (2006) states that Irish primary healthcare policy has marginalised certain aspects of primary healthcare, teamwork is one such aspect, contrary to the introduction of the Primary Healthcare Strategy (DoHC, 2001). Political will is needed to ring fence financial aid to implement policy, support and fund the removal of barriers to interprofessional working and most importantly to create environments where trust and basic working relationships can be rebuilt.

8.7 Generalisability

With regard to generalisability of the findings in this study, in phase one only three of the possible seventeen ISA’s were willing to participate. However the response rate exceeded expectations and covered metropolitan, urban and rural settings. It also was proportionally representative of the professions assigned to teams and reflected the gender balance where female representation is traditionally higher in the non-medical professions (Reeves et al., 2010). In phase one and two all of the professions are represented, however limited access to PNs in one area meant their participation was restricted. However when coalesced, the findings provide a rich and meaningful insight to the levels of IPTW achieved in Ireland thus far and provides the basis for recommendations for future progress.
8.8 Study Strengths & Limitations

While the findings in this study are of interest and highlight the current levels of and many challenges relating to interprofessional teamworking in the primary healthcare setting, it is important to acknowledge the limitations of the phase one study design. This study consisted of a cross-sectional survey therefore no causal inferences can be made. The potential for bias in the data must also be acknowledged, as with any self-reported data there is the potential for recall bias. As the study relied on the voluntary cooperation of the PCDO’s it may be that within the other ISAs where PCDO’s declined to be involved and thus limited the access to primary healthcare professionals, data collection could have produced divergent information. Access to the practice nurse population was also limited in one of the participating areas as the practice nurse co-ordinator declined to cooperate wholly with the study, thus practice nurses were under represented in the study. With regard to the overall responses received, it may be that these individuals were more committed or interminably opposed to IPTW.

However the sample profile provide assurances as the data on levels of collaborative behaviour are consistent with other studies in teamwork in healthcare generally and more specifically within the primary healthcare area. Furthermore as this study employed a carefully considered response rate strategy the response rate achieved exceeded that of other studies in the healthcare area (Field et al., 2002). Where other studies did achieve higher response rates they also reported monetary incentives offered (Martins et al., 2012; Nic Gabhainn et al., 2001) which were not feasible for this study. Baruch & Holtom (2008) suggest a benchmark figure of 35-40% for response rates with this study achieving a response rate of 52%. Furthermore the rates of response by profession were reflective of the levels of professional representation and gender balance within existing primary healthcare teams in Ireland.

This study is significant in that no other study has completed a comprehensive quantitative measure of the levels of teamwork achieved since the introduction and implementation of an IPTW model within the Irish primary healthcare setting, rather primary healthcare teams are considered to be operating if they meet the ambiguous HSE definition of teamwork.
As in phase one, phase two access to participants was limited to three integrated service areas. While the contexts of the work and professional roles are likely to be similar, it could be suggested that important data pertaining to this topic area remains undiscovered. However within the three areas all six professions, various team structures and busy metropolitan, urban and rural geographical practice locations are represented which provides a comprehensive view of the varying contexts and experiences of teamwork in practice settings.

Template analysis is referred to as a technique rather than a methodology. The coding structure could be considered to stand in the way of personal engagement with the data by those who prefer a more open and unstructured style. Furthermore there is a danger of an excessive level of focus on the template construction to the neglect of the data. Yet the technique is considered valuable as a flexible technique, not theory bound and therefore can be used from varying philosophical positions. It is also considered of particular use when studies seek to examine perspectives of different groups with an organisational context (King, 2012). Miles and Huberman (1994) suggest that coding is analysis, allowing words to be dissected meaningfully while keeping the relations between the parts intact. While Crabtree and Miller (1999) outline similar disadvantages, they highlight examples of template analysis being effectively applied in primary care-based research.

The technique was chosen based on its successful use in primary healthcare settings and the position offered by King (2012) who outlines the benefits of its use within an organisational context and where differing professional positions are being explored. Furthermore the template offers discipline in terms of having to take a systematic and well-structured approach to handling data. Another strength is the number of participants involved in phase two of the study (n=26) with template analysis considered suitable for use with data sets ranging from 10-30 participants. However overall the study draws only on the subjective experiences of individual healthcare professional and therefore the data is limited to perceptions. It must be acknowledged that team practice or professional behaviours may be very different within primary healthcare environments.
Chapter Nine: Conclusion

9.1 Introduction
This chapter outlines the recommendations for future practice and the implications for policy, practice and research based on the study findings.

9.2 Recommendations for Future Practice
This study revealed varying forms of interprofessional work are present within the Irish primary healthcare setting. However such forms are not acknowledged within the current rigid teamwork definition outlined within the Primary Care Strategy (DoHC, 2001) and adopted by the HSE. The teamwork typology used in this study (Reeves et al., 2010) provides clearly defined varying forms of interprofessional work. By using this typology, different forms of interprofessional working revealed in phase one and two were discerned. It supports the findings in this study, the presence of differing forms of interprofessional working based on a contingency approach and an acknowledgement that diversity across healthcare settings will warrant different levels of interprofessional interactions. Therefore the primary healthcare setting may not require the intensity of interprofessional interactions required in other settings. Within the Irish context, developing an understanding of the nature of the setting and a more appropriate and flexible model of interprofessional working would support team function and better demonstrate the presence of other forms of teamwork currently under acknowledged.

Bleakley (2013) observes that while it may not be ideal contemporary healthcare is underpinned by uncertainty which demands more fluid adaptable team processes, teams need to be adaptable. He cites the work of Engeström (2008) who captures the dynamic of modern healthcare through the idea of ‘negotiated knotworking’ and suggests that there is a lack of application of such theoretical modelling in clinical team practices. Theoretical teamworking modelling should be considered, it would be a realistic acknowledgement the current practice context, the disparate disciplines and unchanged organisational support structures which impact significantly on primary healthcare team function in Ireland at present. Teamwork as envisaged by the HSE has not progressed, it reflects the significant underfunding and lack of commitment to the implementation process of the Primary Care
Strategy (DoHC, 2001(b)) and the definition of teamworking employed. Therefore rather than trying to ultimately define team and teamwork as a stable entity, the focus should instead be on increasing tolerance of complexity and ambiguity which may help progress towards a more appropriate model of teamwork. Reconfiguring teams to be more patient-need than profession-led focused should be considered, so that team composition reflects the needs of the patient group (e.g. adults, paediatrics, elderly). This could also help provide greater clarity in terms of creating more specific goals and objectives.

The importance of focusing on both the provision of communication infrastructure and tangible benefits of being a member of a primary healthcare team are unambiguous. This means increased funding to the sector to provide more staff, education and training, better IT infrastructure and increasing access to services to make teamwork an effective, efficient and easier option than working alone. Within the Irish context, the reality is that currently team members remain in separate premises, serving different populations. There is no indication of any change to these arrangements at the time of writing. Therefore appropriate IT infrastructure is urgently needed to enable appropriate communication and enhance interprofessional interactions. If professionals are facilitated in this way they may have more time and space to consider the broader concept of team, not relating just to tasks but in developing a team identity, vision and progressing innovative programmes. Furthermore the process of repairing the levels of distrust between the organisation and professionals illuminated in this study will require considerable effort and time. However if the barriers identified are not addressed, team-building activities would be inappropriate as currently there would be little to build upon.

9.2.1 Implications for Policy

The results indicate that while the Primary Care Strategy is seen as a positive endorsement for change in the primary healthcare setting, teamwork is considered aspirational rather than a viable option as it is currently configured. No legislative support followed the publication of the strategy or commitment of funding to create the teams envisaged or the supportive infrastructure which would be required. This is similar to the findings in Tussing & Wren (2006), in which they conclude that the primary healthcare system needs sustainable funding, a credible plan and must
find a way to blend rather than merge the private and public aspects of primary healthcare. Therefore policy in this area must be reformed to provide reasonable long term ring-fenced funding to contribute to the provision of appropriate infrastructures and resources for teams. Policy which relies heavily on teamwork rhetoric only serves to frustrate further pragmatic practitioners, it must instead reflect the existing reality of two separate systems within one setting. While structural issues such as difficulties related to co-location, financing structures and continued geographic anomalies challenge teamworking in Ireland and need to be addressed over the long-term, the results showed an urgent need for modern communication systems. Therefore an IT infrastructure must be funded that allow professionals to communicate easily and allows patient data to be recorded and shared to promote teamwork. While confidentiality was a concern, other IT projects in the Irish healthcare system have proven that data can be both shared and protected appropriately.

The findings also revealed significant concern relating to the medico-legal aspects of shared care and professional roles within team as opposed to uniprofessional structures. Policy needs to provide national governance structures which relate to current scopes of practice. Local policy must then follow, clearly outlining roles, responsibilities, accountability and reporting relationships. This could be done by providing what Øvretveit (1997) refers to as an operating policy for teamwork. There has being no clear operational policy provided to support the professions within the Irish context. Such policy relates to very specific areas which are developed and interestingly the example headings provided by Øvretveit (1997) are closely aligned with not only issues of governance but many of the barriers identified by the professions in this study:

- The patient needs to be served by a team
- Team purpose and work
- Team catchment and boundaries
- Bases
- Team membership
- Referral and access to team
- Team processes and decision making
• Care co-ordination within the team
• Team leader role, responsibilities and authority
• Supervision, professional advice and quality of professional practice
• Case records and work recording
• Team management and reviews
• Team targets
• Other issues relating to leave, administration and safety requirements.

These would address the concerns and provide clarity for the profession but must provide enough flexibility to be able to prioritise local needs. It would also provide certainty for the SLT position within teams. There is a real need for national level policy on teamwork to be operationalised to support practical application locally.

9.2.2 Implications for Practice

Overall the results of this study indicate that differing forms of teamwork are present within the setting. However it remains a challenging process as many professionals struggle to engage with teamwork either conceptually and/or in practice. GPs, PNs and SLTs reported fewer benefits and in relation to GP experiences in practice they were very negative about the process thus far. Yet positive outcomes were reported for both professionals and patients. Creating a supportive working environment is critical but project funding primary healthcare teams (Joyce & Casey, 2004, DoHC, 2001(b)) will only stimulate change short term, without change at a systematic level such funding makes embedding change impossible (Clements et al., 2007).

A broader flexible continuum-type definition of teamwork must be established with a teamwork measurement tool developed which would allow more nuanced forms of teamwork to be recognised and acknowledged. Regular evaluation must be part of this measurement design. This would help the organisation assess the level and impact of support structures and processes on an on-going basis. Professionals will then be able to discern the value of their efforts and have a means to report persistent or unaddressed difficulties while the organisation can monitor effectiveness of their investment. Such engagement between the organisation and the professions would be a starting point to repair and renew teamwork processes and rebuild trust which the findings revealed have been significantly impaired.
History and tradition have been highlighted as significant factors for teamwork. The results indicate that professional socialisation has contributed to the resistance to change. A report by the HSE described the current educational arrangements as having a paucity of interprofessional education opportunities (HSE, 2009). The overwhelming majority of participants in this study reported a lack of team training provision. The HSE should provide resources for team training to provide a rationale for teamworking, its appropriate use and ensure a learning environment that nurtures a team culture that values different interprofessional interactions. This should be offered and incentivised with training fulfilling continuous professional development requirements. In the longer term undergraduate healthcare courses need to determine the core competencies and a curriculum for interprofessional teamwork in practice. At university level the health sciences need to develop interprofessional education programmes that provide opportunities for future health professionals to grow their awareness and respect for the various roles and scope of practices that exist. Furthermore leadership training opportunities that include a teamwork component should be introduced which recognises the value in informal and well as formal leadership styles and acknowledges the need for setting-appropriate leadership for both health professionals and managers.

The findings revealed that the perceived benefits of teamworking were the strongest predictor of collaborative behaviour. Benefits must be discerned both professionally and for patients. Teamwork is ultimately a human endeavour, ignoring the fact that professionals will not engage if the perceived effort outweighs the possible benefits is impractical, compromise must be sought partnered with a commitment to providing tangible benefits in practice. Varying forms of incentives need to be considered, funding for innovative team-level initiatives could help with the significant professional adjustments required in adopting changes to practice. This would help managers to increase their options in terms of how best to facilitate practitioners and create flexibility in terms of working with practitioners to identify differing forms of teamwork based on local needs and working contexts. This must include acknowledgment of the public-private attributes which currently define the Irish primary healthcare system.

Implications for practice also relate to local organisational-level practice. The findings reveal better communication within the HSE structures is required as it
appears that clinical line managers and primary healthcare managers’ objectives are not always aligned to promote collaboration in practice. Designated responsibility within the HSE for collaborative practice should put be in place, therefore educating those charged with promoting teamwork in practice settings should be considered, where practice change is sought organisation learning is also essential (Kvarnström, 2008). The findings also revealed a need for a consensus approach to practice change, as practitioners perceived their concerns have been ignored and teamwork arbitrarily applied.

9.2.3 Implications for Research

The Health Research Group was established in 2007 and identified a need for an interprofessional approach to conducting research in the health service (HSE, 2009). The HSE National Service Plan for 2015 (HSE, 2014) only refers vaguely to a system wide priority to the development of a culture of learning and development. While important lessons can be learnt from international research, differences in health and healthcare provision between countries mean that Ireland needs to develop its own research strategy and national level policy for primary healthcare research. Research and development to inform healthcare policy in terms of staffing and the organisation of primary healthcare must be undertaken and involve all the relevant university departments and professions who work in the setting. Within this process a prominent role for the HSE was envisaged to facilitate the implementation of a national research agenda. Yet research and development output in the primary healthcare sector in Ireland is less than that produced in the UK or Europe (HSE, 2009; HRB, 2006). No national level evaluation of the introduction of primary healthcare teams and the implementation of teamwork has taken place. Internationally research suggests that interprofessional teamwork outcomes for professional, patient and organisation are positive. However there is criticism of the quality of the research and the lack of conclusion evidence relating to the determining factors of team effectiveness. A valuable exercise would be to invest in an evaluation of the team model applied with a more open acknowledgment of the setting realities and what is actually feasible and practicable to achieve. The organisation needs to engage with and in contemporary research and explore collaborative projects in other jurisdictions to enhance their knowledge.
and awareness, to create a credible plan for primary healthcare teams and to provide interprofessional teams with a plausible future.

### 9.3 Conclusion

Overall, this study reflects the powerful influence of the factors considered in the framework for understanding IPTW, reflecting the international teamwork research literature and the relevance of both input and process level factors which act as enablers and inhibitors of teamwork (output). However this study provides a unique contribution in terms of revealing how historical developments in healthcare systems should be considered when attempting to understand IPTW in context. Within the Irish healthcare system it was a significant input factor in terms of understanding how the primary healthcare setting has developed, operates and are currently structured. As an input factor, it was a valuable aid in progressing understanding of the complex challenges in terms of facilitating greater integration within the setting. As currently measured by the HSE other forms of interprofessional working are not captured. However this study provided an original quantitative measurement of the current level of teamwork achieved in the Irish setting, and also was able to identify the presence of different forms of interprofessional working within the setting. Furthermore the strongest predictor of teamworking was established, professionals must perceive there to be benefits both professionally and for their patients to stimulate their participation in teamworking. If this is supported, collaborative behaviour as measured would be likely to improve.

Lemieux-Charles and McGuire (2006) states that teams are context specific, that there should be no overarching model of team effectiveness, rather researchers need to tailor and adapt models in order to produce findings that will be useful to healthcare managers and teams. This study provided a tailored approach and thus a unique understanding of the Irish primary healthcare setting and its evolution over the last century. It illuminates a level of complexity in terms of how primary healthcare is currently structured and the significance of understanding historical decisions as an input factor in terms of understanding IPTW, professional perceptions of and participation in contemporary teamwork practice. For Ireland, healthcare policy development in the 20th century has shaped the current system
and is still reflected in the significant division between general practice and HSE teams which has over time been reinforced by the healthcare system infrastructure. However general practice remains a key aspect of the primary healthcare service as provided within the Irish primary healthcare setting (DoHC, 2001), it is therefore unrealistic to continue to impose an IPTW model that has been firmly rejected this profession.

The reality is that the Irish primary healthcare setting currently remains two distinct organisations, general practice and community services. Despite the many issues examined which currently hinder teamwork, interprofessional working is present in the Irish primary healthcare setting, albeit in diverse and undervalued forms. However in its current form the study has revealed that it has also contributed to significant levels of stress and anger among the professions. The National Health Service Plan for 2015 (HSE, 2014) clearly states the aim to strengthen teams and network services in line with organisational reform. Reforms need to include an operational policy framework that addresses team processes, providing the clarity in terms of both professional and team roles and resources to support the professions involved.
References


Awofeso, N. (2004). What is the difference between ‘primary care’ and ‘primary healthcare’? Quality in Primary Care, 12 (2), 93-94.


http://saraburke.wordpress.com/2010/02/25/is-there-emperor-naked-are-there-really-222-primary-care-teams


Canadian Institute of Health Information (CIHI, 2001). Canada’s’ Health Care Providers. Ontario: Canadian Institute of Health Information.


Cott, C. (1997). “We decide, you carry it out”: a social network analysis of multidisciplinary long-term care teams. Social Science & Medicine, 45 (9), 1411-1421.


http://dx.doi.org/10.1016/j.colegn.2013.09.006


http://www.acsu.buffolo.edu/~duchan/1900-1945html


Harris, M., Chan, B., Daniel, C., Wan, Q., Zwar, N. & Powell Davies, G.(2010). Development and early experiences from an intervention to facilitate teamwork between general practices and allied health providers: the team-link study. Health Services Research, 10:104-112


Heath Research Board (HRB, 2006). Primary R & D in Ireland. Dublin: HRB.

Health Service Executive (HSE, 2015 (a)). Accessed May 2015.
http://www.hse.ie/eng

Health Service Executive (HSE, 2015 (b)). Accessed May 2015.
http://www.hse.ie/eng/services/list/2/PrimaryCare/about.html

Health Service Executive (HSE, 2015 (c)). Primary Care Division: KPI Metadata based on Divisional Operational Plan 2015. Dublin: HSE.


Health Service Executive (HSE, 2012 (a)). Accessed January 2012.
http://www.hse.ie/eng/services/Find_a_Service/Primary/Care/
Health Service Executive (HSE, 2012 (b)). Accessed February 2012.

http://www.hse.ie/eng/about/Who/clinical/ncp/

Health Service Executive (HSE, 2012 (c)). Accessed January 2012

http://www.oireachtas.ie/parliament/media/committees/pac/correspondence/2012-meeting252601/[PAC-R-252]Correspondence-3.5a.pdf


www.lenus.ie/hse/bitstream/10147/51033/PracticeManagersBook08.pdf


http://www.icgp.ie/go/search?r=in_the_practice&q=gms+contract&x=46&y=12


http://www.icgp.ie/go/about/policies_statements/2004/CCDF00F9-18C1-43E2-81142EA43F0D5041.html


http://www.imt.ie/opinion/2011/05/primary-care-teams-are-dead.html


http://www.irishpracticenurse.ie/about.php


http://www.irishpracticenurses.ie/roleofthepracticenurse.php


http://www.irishtimes.com/newspaper/ireland/2012/0127/1224310809102¬_pf.html


http://www.irishtimes.com/newspaper/ireland/2012/0107/1224309942246¬_pf.html


http://www.irishtimes.com/newspaper/health/2012/0313/1224313198586_pf.html


Leggat, S. (2007). Effective healthcare teamwork require effective team members: defining teamwork competencies. BMC, Health Service Research, 7 (1), 17


http://www.merriam-webster.com/dictionary/teamwork


Miller, K., Reeves, S., Zwarenstein, M., Beales, J., Kenaschuk, C. & Gottlieb-Conn, L. (2008). Nursing emotion work and interprofessional collaboration in


http://EzineArticles.com/?expert=Dr_Alex_B._Miguel


http://www.nhshistory.net/shorthistor.html


http://www.medicalindependent.ie/30885/hse_spend_on_new_primary_care_centres_falls_dramatically


http://www.cdc.gov/niosh/docs/99-101/


http://www.oecd.org/newsroom/healthspendingineuropefallsforthefirsttimeindecades.htm


http://www.oxforddictionaries.com/definition/english/membership


http://wwwchrisreynoldspractice.co.uk/physiotherapy.asp


http://www.researchgate.net/publications228542412¬_1


Appendices

Appendix 2: Mixed Methods Study Design (Leech & Onwuegbuzie, 2009)
Appendix 3: Questionnaire (Phase 1)

The Experience of Primary Care Health Professionals in Ireland: Interdisciplinary Teamwork in Practice

Questionnaire for Primary Care Health Care Providers

This questionnaire aims to examine your experience of interdisciplinary teamwork in your workplace. You do not need to do any research to answer any of these questions. Your answers should express your opinion, your thoughts and your knowledge. Your answers will remain anonymous and will be used solely by the research team. The results will be compiled in such a way that no individual can be identified. Some footnotes are supplied throughout the questionnaire to provide definitions and descriptions of some terms used.

The survey will only take 10-15 minutes to complete.

If you require further information about this questionnaire please do not hesitate to contact me:

Maura Burke
Health Promotion Research Centre
Aras Na Corrib
National University of Ireland, Galway
m.burke25@nuigalway.ie
086-XXXXXXX
Section 1: Interprofessional Teamwork Organisation

This section focuses on how your interprofessional team was and is currently organised.

1. Are you currently a member of a core primary care team?
   Yes □ No □ (please go to Q8)

2. Approximately, how long have you worked as a member of a primary care team?
   No. of Years ________________

3. (a) Are you a member of more than one team?
   Yes □ No □ (please go to Q4)

   (b) Please indicate the number of teams that you are a member of? _____

   (c) Please tick the number that best represents your experience in relation to the following statement:

   “Working in more than one Primary Care Team at the same time inhibits Interprofessional Teamwork”

<table>
<thead>
<tr>
<th>Totally Agree</th>
<th></th>
<th>Totally Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 4 3 2 1</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>□ □ □ □ □</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
4. Please tick the number of teams in which you work that are co-located:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

5. As a member of a primary care team, are you provided with designated clerical support?

Yes □ No □

6. (a) Has your team a designated team leader?

Yes □ No □ (please go to Q7)

(b) If so, does this position rotate between team members?

Yes □ No □

7. Please circle the numbers for the following statements, which best represent your experience:

<table>
<thead>
<tr>
<th>Being part of a Primary Care Team,</th>
<th>Totally Agree</th>
<th>Totally Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Provides me with workplace supports for teamwork</td>
<td>5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>b. Provides me with more professional support from other health professionals on the team</td>
<td>5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>c. Reduces the level of professional isolation in the workplace</td>
<td>5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>d. Increases my ability to access services for my patients more efficiently</td>
<td>5 4 3 2 1</td>
<td></td>
</tr>
</tbody>
</table>

8. In your area is there a resource available to describe interprofessional teamwork in the primary care setting, e.g. meeting rules, clear role descriptions for team members, specific professional tasks/responsibilities...?

Yes □ No □ Don’t Know □
9. (a) Have you ever received any training specifically in relation to interprofessional teamworking in the primary care setting in Ireland?

   Yes □ No □ (please go to Q10)

(b) If so, who provided this training?

<table>
<thead>
<tr>
<th>HSE</th>
<th>Professional Practice Association</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(c) What training tools were made available to you?

<table>
<thead>
<tr>
<th>Outside Professional Trainers</th>
<th>HSE Organisational Design &amp; Development Workshops</th>
<th>DVD</th>
<th>Literature/Leaflets</th>
</tr>
</thead>
<tbody>
<tr>
<td>□</td>
<td></td>
<td>□</td>
<td></td>
</tr>
</tbody>
</table>

10. In your opinion, have sufficient efforts being made in your area to train staff for interprofessional primary care team practice?

   Yes □ No □

11. Do you attend Clinical Team Meetings?

   Yes □ No □ (please go to Q19)

12. Was the purpose of these meetings explained sufficiently?

   Yes □ No □
13. Currently, how frequent are team meetings?

<table>
<thead>
<tr>
<th>Weekly</th>
<th>Fortnightly</th>
<th>Monthly</th>
<th>Less than monthly</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14. How is patient information (data) collected in preparation for a clinical team meeting? (please tick most frequent situation only)

- Each professional collects their own data
- One team member collects data for the team
- The first professional to meet the client collects data which is then shared with other professionals depending on the patients’ needs
- Other (please explain)

15. Does the team use a standardised patient primary care record/file for all clients?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16. Do all team members share the same patient file for recording observations/orders/communications?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

17. Do separate clinical team meetings take place to discuss specific cases?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
18. Do separate clinical team meetings take place where the patient and/or family members attend?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

19. Which of the following barriers apply to you attending formal interprofessional team meetings? (Please tick all that apply to you personally)

- [ ] The team meetings generally conflict with my schedule
- [ ] I do not have time to attend team meetings due to my vast caseload
- [ ] The team meetings are held in locations inconvenient to me
- [ ] I am not financially compensated for time spent at meetings
- [ ] I am not made aware of team meetings
- [ ] There are no barriers to attending team meetings
- [ ] Other (please explain):

________________________________________________________________________

20. Are all decisions made about the management of patients communicated to all professionals involved with the patient regardless of attendance at meetings?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
21. How are referring procedures organised between different professionals working in the primary care setting? (please only tick one box, which represents the most frequent method of referral used by you)

- By phone
- By written request
- By fax
- By e-mail

- Informal contact between professionals on the team
- The patient is asked to make an appt. with another member of the team
- During team meeting

22. If primary care teams in your area have introduced new ways of working together? (e.g. running classes, clinics or education sessions for patients or the public)

(a) Yes  No

-  

- (please go to Q23)

(b) If yes, please outline any you are aware of:

_________________________________________________________________________

_________________________________________________________________________

(c) Are you personally involved in any of the above?

- Yes
- No
23. In your primary care area are there Interprofessional Education (IPE)’ sessions taking place to share expertise and learning together?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

24. Please circle the most appropriate number for each of the following statements.

<table>
<thead>
<tr>
<th>In your opinion, Interprofessional Teamwork in Primary Care:</th>
<th>Totally Agree</th>
<th>Totally Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Improves the quality of the treatments and services offered to patients</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>b. Develops the care plan for the patient in a positive way</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>c. Supports professionals when dealing with a patient</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>d. Facilitates provision of a clear care plan for discussion with the patient</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>e. Is a better tool to provide for the psychosocial needs of patients</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

Contributes to higher levels of patient satisfaction

25. If you could introduce just ONE thing to improve interprofessional primary care teamwork, what would it be?

_________________________________________________________________________________________________________________________________
### Section 2: Interprofessional Relationships

26. Based on your knowledge and experience in the primary care setting,

<table>
<thead>
<tr>
<th>Statement</th>
<th>Totally Agree</th>
<th>Totally Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. There are differences between the hierarchical status of the professionals depending on their discipline</td>
<td>5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>b. Professionals from different disciplines consult with each other informally on a regular basis</td>
<td>5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>c. Professionals are aware of each other’s expertise</td>
<td>5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>d. There is a high level of mutual trust between the professionals</td>
<td>5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>e. The contributions of each professional are valued equally</td>
<td>5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>f. Decisions taken for patients with complex needs take into account the opinions of professionals from different disciplines</td>
<td>5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>g. There is a high level of motivation to work with other team members</td>
<td>5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>h. There is tension over the sharing of responsibilities by professionals in the different disciplines</td>
<td>5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>i. In general, tensions in relation to the sharing of responsibilities between professionals are easily resolved</td>
<td>5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>j. Interprofessional relationships are good between the different professions</td>
<td>5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>k. There are always professionals unhappy with decisions taken by the group</td>
<td>5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>l. There is a high level of competition between different professional groups</td>
<td>5 4 3 2 1</td>
<td></td>
</tr>
</tbody>
</table>

### Section 3: Demographic Details

27. Which Integrated Service Area (ISA) do you work in?

<table>
<thead>
<tr>
<th></th>
<th>Dublin North</th>
<th>Galway/Roscommon</th>
<th>Mayo</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

28. Are you: Male □ Female □
29. How old are you? ____________ (age in years)

30. What is your current occupation?

<table>
<thead>
<tr>
<th>General Practitioner</th>
<th>Practice Nurse</th>
<th>Public Health Nurse</th>
<th>Physiotherapist</th>
<th>Occupational Therapist</th>
<th>Speech &amp; Language Therapist</th>
</tr>
</thead>
</table>

☐ ☐ ☐ ☐ ☐ ☐

31. What is your highest level of education?

- Certificate ☐
- Diploma ☐
- Degree ☐
- Post Graduate Diploma ☐
- Masters Degree ☐
- PhD ☐

32. Have you received education specifically related to primary care? (reference to primary care here is in relation to the theory, principles and models of primary care, not just community based care)

- Yes ☐
- No ☐

33. Have you worked in a primary care team outside of Ireland?

- Yes ☐
- No ☐

*Many Thanks for taking the time to fill out this questionnaire, it is very much appreciated. If you would like a summary of the completed study please provide an e-mail address: ___________________
Appendix 4: Cover Letter (Phase 1)

Dear Colleague,

To date 417 interdisciplinary teams have been developed in Ireland. Yet, how this is working on the ground is unclear and undocumented.

This research project is exploring the experience of the introduction of interdisciplinary teamworking into the Irish context. It aims to document the key factors which have fostered or frustrated this process.

Enclosed is a questionnaire designed to gather the expert knowledge and experience of primary care health practitioners across the disciplines. This survey gives you the opportunity to provide evidence of what you are encountering as part of interdisciplinary primary care teams on the ground.

**Even if you are currently not attending scheduled team meetings, your experience and opinion is very valuable. The questionnaire is designed to facilitate such practitioners.**

I am conscious of your very busy schedules and the questionnaire is designed to take between 10-15 minutes to complete. I would be extremely grateful if you could find the time to become involved. There is a freepost envelope enclosed for your convenience. Participants will remain completely anonymous and the data will only be assessable to the researcher and stored securely in accordance with data protection guidelines.

This project has the support of Mr. Brian Murphy, National Director of Primary Care &Social Inclusion and the local Primary Care Development Officers.

Yours Sincerely,

____________________________

Maura Burke

m.burke25@nuigalway.ie | 086-XXXXXXXX
Appendix 5: Participant Information Letter (Phase 1)

Title of the Study: The Experience of Primary Care Health Professionals: The Introduction of Interdisciplinary Teamwork in Practice.

Invitation to Participate: You are being invited to take part in this study which is to form part of my PhD thesis in Health Promotion. As a Primary Care Health Professional you have experience of the introduction of interdisciplinary teamwork which I would like to describe and explore.

What is the study about? The aim is to explore the perceptions and experiences of interdisciplinary teamwork in the primary care setting.

How was I chosen? All primary care professionals located in the X, X and X integrated service areas are asked to participate.

What will taking part involve? All participants are asked to complete a postal questionnaire. Later a representative sample of primary care professionals will be asked to participate in interviews exploring teamwork in primary care. You may be contacted with a request to be interviewed. If you are particularly interested in being interviewed please let me know.

What are the possible benefits of taking part? It gives participants the opportunity to highlight their personal work experiences, what the introduction of interdisciplinary teamwork means in the Irish context and how and why it has worked or not, in the practice setting. It also assists the researcher to develop a clear picture of interdisciplinary teamwork in this unique workplace for primary care health professionals.

What are the possible disadvantages? There are no foreseeable risks attached to taking part in this study.

Ethical Considerations: It is important to point out that anonymity and confidentiality is assured. Data collected will be anonymised, stored securely and accessed only by the researcher. The information gathered will be analysed as a whole so as to facilitate the identification of themes and patterns to highlight the issues identified by the participants. The data will be stored for 5 years and then destroyed. The regions will not be identifiable. Professionals will only by referred to as part of a professional group. The team location or names of professionals will not be identified anywhere in this study. There is no obligation on you to participate in this study. Consent is assumed if the questionnaire is completed and returned.

You may note a number on each freepost envelope, this is only to allow the researcher to identify the professional as having completed the survey and therefore eliminate duplication or receipt of another request and survey pack.
What will happen at the end of this study? A copy of my PhD thesis will be sent to the Health Service Executive, Primary Care Directorate and also will be available through the James Hardiman Library, National University of Ireland, Galway. A summary of the results will be sent to all participants who indicate on the questionnaire that they wish to receive such a summary.

Whom do I contact for more information or if I have any concerns? Please contact me if you have any questions at all, at m.burke25@nuigalway.ie
Appendix 6: Cover Letter (Phase 2)

Dear

Thank you for agreeing to participate in the second phase of this project.

This research project is exploring the experience of the introduction of interdisciplinary teamworking into the Irish context. It aims to document the key factors which have fostered or frustrated this process. To date 417 interdisciplinary teams have been developed in Ireland. Yet, how this is working on the ground is unclear and undocumented.

To understand these key factors and as part of this study I wish to interview health professionals involved in primary care teams. **Even if you are currently not attending scheduled team meetings, your experience and opinion is very valuable.**

Your identity will remain anonymous but gives you the opportunity to provide evidence of what you are encountering as part of interdisciplinary primary care teams on the ground. Participation is voluntary and you may withdraw from the study at any time.

I am conscious of your very busy schedules and the interview should only take 30 minutes. All data will remain completely anonymous and will only be assessable to the researcher and stored securely in accordance with data protection guidelines.

This project has the support of the HSE and the local Primary Care Development Officers.

Time & Date of Interview:

Yours Sincerely,

__________________

Maura Burke

m.burke25@nuigalway.ie | 086XXXXXXX
Appendix 7: Interview Schedule for Qualitative Phase

- Define what does interprofessional teamwork (IPTW) mean to you?
- What is your experience of IPTW in the primary care workplace?
- Does teamwork fit with the Primary Care environment?
- Do you consider it to be working here, as you experience it?
- Does the team you are assigned to have clear goals and objectives, as a team?
- What is wrong with team working in your experience?
- What basic features would make you consider the team to be ‘working’?
- What are the advantages of teamwork here?
- What are the disadvantages of teamwork here?
- What has hampered/hindered team working?
- What would motivate you to work as part of a primary care team?
- Do you think there is enough evidence to suggest that teamwork should be pursued, regardless of the levels achieved so far in your experience?
- What are the first three words that come to mind when I say ‘primary care teamwork’?
- Is there anything else that comes to mind that I have not covered or you want to add?

Thank You
Appendix 8: Spearman’s rho, $Z_{obs}$ calculation between measures of hierarchical status differences between GP cohort and all other professions cohort.

\[ r_1 = .25 \quad \text{All Other Professions} \quad r_2 = .24 \]

\[ N_1 = 165 \quad N_2 = 283 \]

\[ Z_1 = .225 \quad Z_2 = .245 \]

\[
Z_{obs} = \frac{Z_1 - Z_2}{\sqrt{1 + 1}} \frac{N_1 - 3}{N_1 - 3} \]

\[ Z_{obs} = \frac{.225 - .245}{\sqrt{1 + 1}} \frac{165 - 3}{283 - 3} \]

\[ Z_{obs} = \frac{.225 - .245}{\sqrt{.006 + .0003}} \]

\[ Z_{obs} = -0.02 / 0.095 = -0.21 \]
Appendix 9: Spearman’s rho, \( Z_{obs} \) calculation between measures of perceived benefits and collaborative behaviour by gender.

Males \( n = 364 \)  \( n^2 = .526 \)

\( N_1 = 93 \)  \( N_2 = 287 \)

\( Z_{1} = .377 \)  \( Z_{2} = .685 \)

\[
Z_{obs} = \frac{Z_1 - Z_2}{\sqrt{1 + 1}}
\]

\[
\sqrt{N_1 - 3 \quad N_2 - 3}
\]

\[
Z_{obs} = \frac{.377 - .685}{\sqrt{1 + 1}}
\]

\[
90 \quad 284
\]

\[
Z_{obs} = \frac{.377 - .685}{\sqrt{.0111 + .0035}}
\]

\[
Z_{obs} = \frac{.308}{.12} = -2.566
\]
Appendix 10: Akaike Information Criteria- comparing regression models with same outcome variable

AIC\(^1\): Standard Multiple Regression Model

<table>
<thead>
<tr>
<th>Model Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Target</strong></td>
</tr>
<tr>
<td><strong>Automatic Data Preparation</strong></td>
</tr>
<tr>
<td><strong>Model Selection Method</strong></td>
</tr>
<tr>
<td><strong>Information Criterion</strong></td>
</tr>
</tbody>
</table>

The information criterion is used to compare to models. Models with smaller information criterion values fit better.

AIC\(^2\): Hierarchical Regression Model

<table>
<thead>
<tr>
<th>Model Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Target</strong></td>
</tr>
<tr>
<td><strong>Automatic Data Preparation</strong></td>
</tr>
<tr>
<td><strong>Model Selection Method</strong></td>
</tr>
<tr>
<td><strong>Information Criterion</strong></td>
</tr>
</tbody>
</table>

The information criterion is used to compare to models. Models with smaller information criterion values fit better.
## Appendix 11: Connecting Phase 1 & 2

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Team membership</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phase 1 Findings</strong></td>
<td>Participants were asked if they were a member of a primary care team:</td>
</tr>
<tr>
<td></td>
<td>79% of sample reported team membership.</td>
</tr>
<tr>
<td></td>
<td>It varied by profession with GP’s, PN’s and SLT’s reporting highest levels of non-membership.</td>
</tr>
<tr>
<td></td>
<td>Females expressed membership more frequently. A positive relationship between membership and collaborative behaviour was revealed.</td>
</tr>
<tr>
<td></td>
<td>There was no significant relationship between multiple team membership (MTM) and collaborative behaviour.</td>
</tr>
<tr>
<td><strong>Phase 2 Findings</strong></td>
<td>Found:</td>
</tr>
<tr>
<td></td>
<td>Similar to phase 1.</td>
</tr>
<tr>
<td></td>
<td>GP: consultant to, rather than member of team.</td>
</tr>
<tr>
<td></td>
<td>No gender difference.</td>
</tr>
<tr>
<td></td>
<td>PN: employment status inhibited membership.</td>
</tr>
<tr>
<td></td>
<td>SLT: unsure of SLT status in team currently and if membership appropriate to paediatric caseload. All other professions reported high levels of membership.</td>
</tr>
<tr>
<td></td>
<td>Membership was challenged by professionalisation.</td>
</tr>
<tr>
<td><strong>Congruent &amp; Divergent Findings</strong></td>
<td>GP’s, PN’s and SLT’s reported difficulties with primary healthcare team membership.</td>
</tr>
<tr>
<td></td>
<td>Reflects a GP/HSE divide with the HSE-based SLT position being the exception.</td>
</tr>
<tr>
<td></td>
<td>Profession rather than gender-related influence.</td>
</tr>
<tr>
<td></td>
<td>While phase 1 did not reveal MTM as significant many professionals in phase 2 reported a negative effect.</td>
</tr>
</tbody>
</table>
Unlike phase 1, MTM was found to inhibit teamwork.

<table>
<thead>
<tr>
<th>Team Supports</th>
<th>Participants were asked what team supports were made available in the workplace: Low levels of supports and resources were reported across the professions. The levels of support variables included in survey that were reported to be present in practice, ranged from 15 to 55%. Colocation was the most frequently reported item reported in terms of improving teamwork, only 1.2% of sample co-located as per HSE definition.</th>
<th>Found: Comparable low levels of supports reported. Severe funding cuts for services and staffing reported. No governance structure for teams in place, lacks clarity in terms of professional roles and team vision. Lack of support and cutbacks have led to a lack of trust between the professions and the organisation.</th>
<th>Similar to phase 1, all the professions identified a dearth of support mechanisms for teamwork. Phase 2 illuminated the impact, the deterioration of relationships between the professions and the organisation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education &amp; Training</td>
<td>Participants asked if: - They had received specific education relating to PHC: 42% reported PHC education, however participants who worked abroad reported higher levels of PHC education (62% v. 37%).</td>
<td>Found: Similar to phase 1, inadequate training opportunities were reported.</td>
<td>Both phases reveal lack of team training. Phase 2 revealed GP disinterest in training, it also revealed that provision</td>
</tr>
</tbody>
</table>
They had received IPTW training: 80% reported no IPTW training was provided, 81% reported insufficient efforts were made to provide training.

IPE was available in their area: 17% reported IPE was taking place.

GP: not interested in team training, however research evidence of teamwork may be constructive. IPE was low, more disciplinary-focused education reported.

While there is evidence to support IPE, more rigorous evaluation is necessary. IPE needs to be carefully implemented and evaluated. All professions need to be involved.

<table>
<thead>
<tr>
<th>Process</th>
<th>Benefits of being part of a Primary Healthcare Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants asked if they benefitted from the team model regarding:</td>
<td></td>
</tr>
<tr>
<td>- Professional support provision</td>
<td></td>
</tr>
<tr>
<td>- Organisational support provision</td>
<td></td>
</tr>
<tr>
<td>- Reduced social isolation</td>
<td></td>
</tr>
<tr>
<td>- Increased ability to access patient services</td>
<td></td>
</tr>
<tr>
<td>The mean average score for this variable was 3.2 (range of 1-5), it varied by profession, with GP’s and SLT’s reporting the lowest scores.</td>
<td></td>
</tr>
<tr>
<td>It was the strongest predictor of collaborative behaviour, yet was achieved the lowest score of the scale variables.</td>
<td></td>
</tr>
</tbody>
</table>

Found: Similar to phase 1 professionals reported poor support. NMHPs valued the social aspect of team and GP involvement. Service access did not improve but as working relationships improved, of an empirically-based rationale for teamwork may aid their participation.

Phase 1 and 2 revealed the presence of some benefits, most frequently reported by NMHPs. However there was an effort/benefit imbalance revealed across the professions. GPs did not perceive there to be any real
NMHPs reported being less inhibited in contacting team members, increasing learning and knowledge share opportunities. Smaller flexible teams were seen as beneficial. Teamwork as currently configured required a lot of extra effort.

**Benefits to being involved in a primary healthcare team.**
Across the professions, teamwork was seen to be beneficial in relation to complex cases.

| Formal Team Meetings | Participants were asked:  
If they attended clinical team meetings.  
61% of participants reported attending team meetings.  
Participants were asked to report on the barriers to attending such meetings:  
No time, conflicting scheduled and no financial compensation were the most frequently reported.  
Findings revealed a positive relationship between attending team meetings and collaborative behaviour scores. | Found:  
Team meetings were contentious.  
NMHPs did report a level of value to meetings, GPs did not.  
All participants reported an over-emphasis on team meetings rather than on enabling teams to function. | While phase 1 revealed a positive relationship between team meeting attendance and collaborative behaviour, phase 2 revealed many inhibiting factors. Meetings were imposed, lacked substance and raised confidentiality issues. However they |
Informal meetings were preferred and ongoing. The lack of trust was also revealed as the professionals identified the presence of HSE managers at meetings as disconcerting. Helped build working relationships and provided reassurance for NMHPs. GPs reported meetings as non-beneficial and were disengaged from meetings process.

<table>
<thead>
<tr>
<th>Communicati on</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants were asked: If all decisions re. patient care was disseminated to the team members and what was the most frequently used mode of communication. Only 39% reported such decisions are reported to the team. Written referrals were reported at 58% and email 6%.</td>
</tr>
<tr>
<td>Found: Similar to phase 1 communication was identified as problematic. The need for appropriate IT infrastructure connecting general practice to HSE-based professions was seen as critical for interprofessional interactions. Communication was poor. Modern IT infrastructure was required because the overwhelming majority of teams could be described as ‘virtual’ due to the geographical spread of team members and lack of colocation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Innovations in Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants were asked: If they were aware of any new innovative teamwork practices:</td>
</tr>
<tr>
<td>Found: Similar to phase 1 low levels of innovation The difficult and stressful working</td>
</tr>
</tbody>
</table>
21% reported awareness of new teamwork practices.

were revealed. However phase 2 revealed these were underpinned by a lack of time and resources to facilitate involvement.

environments described severely inhibited professionals’ interest to innovate.

<table>
<thead>
<tr>
<th>Outputs</th>
<th>Collaborative Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants were asked in their experience in primary healthcare team if:</td>
<td></td>
</tr>
<tr>
<td>• There were hierarchical status differences.</td>
<td>Found: The presence of differing forms of interprofessional working employed appropriate to identified patient need. Driven by professional judgement and task.</td>
</tr>
<tr>
<td>• Professionals consult informally on a regular basis.</td>
<td>All professionals frustrated by rigid teamwork model envisaged by HSE. Good one-to-one individual professional relationships.</td>
</tr>
<tr>
<td>• There was a high level of trust between the professions.</td>
<td></td>
</tr>
<tr>
<td>• Professional contributions are valued equally.</td>
<td></td>
</tr>
<tr>
<td>• Complex decisions take into account all professional opinions.</td>
<td></td>
</tr>
<tr>
<td>• There is a high level of motivation to work with other professions.</td>
<td></td>
</tr>
<tr>
<td>• There is tension over sharing responsibilities</td>
<td></td>
</tr>
<tr>
<td>• Tensions are easily resolved.</td>
<td></td>
</tr>
<tr>
<td>• Interprofessional relations are good between the professions.</td>
<td></td>
</tr>
<tr>
<td>• Some are always unhappy with group decisions.</td>
<td></td>
</tr>
<tr>
<td>• There is a high level of competition between the professional groups.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The findings revealed significant differences across the variables investigated by profession and professional grouping. It reflected a general practice v. HSE divide. SLT’s were the exception reflecting a position more similar to the GP position. However SLTs concerns centred on their predominantly paediatric-focused caseload.</td>
</tr>
<tr>
<td>The mean average score of this variable was 3.6 (range 1-5). Findings revealed that GP’s, PN’s and SLT’s reported the lowest scores (3.36, 3.53, 3.63). Hierarchical status was negatively associated with collaborative behaviour.</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Similar to phase one the GPs reported less frequent interprofessional working. SLTs also reported less interactions. Their reasons differed.</td>
<td></td>
</tr>
<tr>
<td>GPs do not want to alter their working methods. They associated teamwork with a loss of autonomy within the primary healthcare structures. In practice collaborative behaviour was predominantly present within separate GP and HSE teams however this was influenced by the patient need and the setting. Teamwork was seen to be of use in complex cases. Differing forms of interprofessional working methods were identified. Team development fluctuates between norming and performing.</td>
<td></td>
</tr>
<tr>
<td>Professional Attitudes</td>
<td>The findings revealed significant differences across the variables investigated by profession and professional grouping. It reflected a general practice v. HSE divide. It also illuminated a professional disparity, findings revealed GPs did not experience the benefits of, or believe in its potential to enhance patient care, unlike the other professions. SLT’s were the exception reflecting a position more similar to the GP position.</td>
</tr>
<tr>
<td>Potential Negative Health Impact</td>
<td></td>
</tr>
</tbody>
</table>