Scottish School of Primary Care

Evaluation of New Models of Primary Care in Scotland

Highlands & Islands Case Study

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This study was led by the University of the Highlands and Islands

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Disclaimer

The views, information, or opinions expressed in this report are solely those of the authors and do not necessarily represent those of the University of Highlands & Islands or the study funder, the Scottish Government. They are based on the information provided by the identified key informants who participated in this case study and may not necessarily represent potential key informants who were either not identified by the study recruitment strategy or who declined the invitation to participate in the case study.

KEY MESSAGES
Highland & Islands (H&I) Case Study

Key Findings

Twenty primary care tests of change were identified across 4 health boards - NHS Highland (including Argyll and Bute), NHS Western Isles, NHS Orkney and NHS Shetland. The expected impacts of these tests of change included: i) workforce development, training and team building, ii) reduced GP and GP practice workload, iii) MDT working, iv) access to services and service development, v) patient health and wellbeing, vi) use of technology, and vii) families. By November 2017, all but 1 of these 20 projects had been implemented or were in the early stages of implementation. Barriers to early implementation related to recruitment and appointment of staff, inadequate project leadership, lack of time and competing workloads.

Four projects were selected for more in-depth exploration. These were a primary and secondary care interface project; a computer-based Cognitive Behavioural Therapy (CBT) project; the Staying Well project, which involved Staying Well Advanced Nurses (SWANs) and GPs working together to manage patients with long-term conditions (LTCs), and a self-management project, which comprised a course for patients with LTCs and common mental health problems.

The primary and secondary care interface project appeared to have been implemented with little consultation or communication with staff or patients, which was reported to have resulted in considerable disharmony. The computer-based CBT project was considered successful in managing waiting times, but there was a perception that GPs had not fully engaged with it. The Staying Well project was reported to have increased levels of trust and confidence between GPs and SWANs, with quality of care being maintained. The Self-Management project was reported to have benefits for patients but spread and sustainability was felt to be a challenge because provision relied on the drive of a single health care provider.

Key Recommendations

- Transformation is challenging in remote and rural areas due to location, scale, and geographical distances. **Rural proofing** ought to be considered when planning new initiatives so that projects are appropriate for remote and rural settings.
- Implementation of projects was facilitated when stakeholders were supported to identify problems or gaps in service delivery and involved in the design and deliver local solutions. **Co-production including patient and public involvement in project design ought to be promoted**.
- Models of primary care that use existing evidence or are informed from earlier projects are likely to be more acceptable to stakeholders and therefore potentially pave the way for smooth implementation. Mechanisms to support recording and sharing of primary care tests of change within and between health board areas ought to be promoted to facilitate **knowledge exchange**.
- **Online health care programmes** have the potential to improve early access to health care support and consequently impact on health inequalities in remote and very rural communities.
- **Sustainability** ought to be a key consideration in project design. For example, person-dependent projects pose a risk to sustainability.
- **Measurement** of actual impacts, sustainability and spread of new models of care, both in the short-and longer-term will require additional support for data collection, extraction and analysis.

Abbreviations

A&B	Argyll and Bute
ACP	Anticipatory Care Planning
ANP	Advanced Nurse Practitioner
AfC	Agenda for Change
CBT	Cognitive Behavioural Therapy
CCBT	Computerised Cognitive Behavioural Therapy
GAD	Generalised Anxiety Disorder
GP	General Practitioner
H&I	Highlands and Islands
IT	Information Technology
ITR	Investigation Treatment Room
LTC	Long Term Conditions
MDT	Multi-Disciplinary Team
N&W	North and West
MH	Mental Health
NHS	National Health Service
PCFMH	Primary Care Fund for Mental Health
PCTF	Primary Care Transformation Fund
PHQ	Patient Health Questionnaire
SG	Scottish Government
SSPC	Scottish School of Primary Care
SWAN	Staying Well Advanced Nurse

Glossary of Terms

Stakeholders	Individuals who are directly or indirectly involved in service delivery, not including patients.
Self-evaluation	Evaluation of a project conducted locally and internally by those responsible for the project. This compares to the external evaluation commissioned by the Scottish government.
Perception	The word 'perception' or 'perceived' is used when reporting the findings from the interviews with key stakeholders conducted for the external evaluation commissioned by the Scottish government.
Key Informants or Participants	Individuals who took part in individual interviews or focus group discussions.
Transformational	Projects that appeared to be novel and innovative either locally or nationally were labelled by the research team as 'transformational'.
Local Documents	Documents provided about the test of change projects, such as patient information booklets, internal project notes and reports; referral criteria; testing and evaluation materials; and intervention materials. *The terms 'local' and 'project' are used interchangeably. (Appendix G)*

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EXECUTIVE SUMMARY

BACKGROUND

In February 2016, the Scottish Government (SG) awarded Primary Care Transformation Funds (PCTF) and Primary Care Fund for Mental Health (PCFMH) to Scottish National Health Service (NHS) Health Boards to test new models of primary care. This report concerns one of 7 case studies contributing to the Scottish School of Primary Care national evaluation of these tests of change and focusses on primary care tests of change in rural and island communities in 4 health boards: NHS Highland, NHS Western Isles, NHS Orkney, and NHS Shetland. The geography and demographics of the Highlands and Islands distinctively influences patients' illness experience, access to healthcare, and healthcare service delivery. Acknowledging this uniqueness 'rural proofing' of health services has been proposed.

AIMS

The broad aims of this case study were to:

- understand primary care transformation in remote and rural settings and the context in which new ways of working were being tested
- identify the new ways of working models that were being tested in primary care
- identify which models seemed to be working well, and why; and which were not working so well, and why
- identify new models of working for further exploration (the case study 'deep dives')
- explore the implementation, impact, sustainability, likely spread and impact on health inequalities of the deep dive models from the perspective of those involved in the implementation and delivery of these models

FINDINGS

Phase one of this case study was conducted between March 2017 and December 2017, with phase two conducted between January 2018 and May 2018. The findings are informed by the review of 39 local documents relevant to primary care transformation in the 4 H&I health boards, 58 interviews with 62 key informants and 6 focus group discussions involving a total of 73 participants.

A total of 20 tests of change projects were identified, all of which were funded by PCTF or PCMHF. No additional primary care tests of change were identified that were funded by alternative sources. Funding was used for professional networking, staff education and training, staff incentives, new appointments, increase staff hours, staff meetings, information technology (IT), audit and self-evaluation of the test of change. Twelve projects were located in rural areas, 5 in urban areas and 2 were based in both a rural and an urban area. The projects aimed to address SG PCTF themed work-streams including multi-disciplinary team (MDT) working (9 projects), GP clusters (3 projects), MH (9 projects), improved pharmacy or prescribing models (5 projects), supporting citizens (4 projects) and technology (5 projects). Expected impacts of these projects were, i) workforce development, training and team building, ii) reduced GP or GP practice workload, iii) multi-disciplinary working, iv) access to services and service development, v) patient health and wellbeing, vi) use of technology, and vii) families.

The tight timescale to apply for funding meant that some ideas for tests of change had to be generated quickly with limited time available for detailed project planning or stakeholder engagement. Early implementation was facilitated if the project built on previous work and when stakeholders were supported to identify problems or gaps in service delivery and to design and deliver

local solutions. Challenges to implementation related to recruitment and appointment of staff, inadequate project leadership, lack of time to implement the project and competing workload.

It was difficult to assess the impact of the projects as many were in the early stages of implementation, and only 5 had planned self-evaluations. Based on their progress and potential to be 'transformative', 4 tests of change were proposed by the research team, and accepted by the SG, for more in-depth exploration (deep dives):

1. Moray Firth Interface between Primary Care and Secondary Care (NHS Highland, funded by PCTF)
2. Cognitive Behavioural Therapy (CBT) Mastermind Programme in Argyll and Bute (A&B) (NHS Highland, funded by the PCFMH)
3. Staying Well Programme (NHS Western Isles, funded by PCTF)
4. Self-management course for patients with long term conditions (LTC), minor MH problems and physical symptoms (NHS Western Isles, funded by PCFMH)

Moray Firth Interface between Primary Care and Secondary Care (NHS Highland)

This project comprised (i) an advice gateway between primary and secondary care, and (ii) a community-based Investigation Treatment Room (ITR) for carrying out routine tests requested by a hospital out-patient consultant (traditionally, these would have been carried out in 15 Inner Moray Firth GP practices). The ITR component was explored in-depth.

Key Findings

The introduction of this model was perceived to have had a differing impact on GP workload in the Inner Moray Firth area. The impact was dependent on the geographical location of the GP practice in relation to the ITR. Based on their use of the service, perceptions of impact of the ITR differed between urban and remote and rural GP practices. For example, GPs in rural locations perceived that the ITR would have a negative impact on access to care because patients would be required to travel a longer distance for a procedure that previously was carried out at their local health centre. Nurses in both primary and secondary care perceived that their workload had increased as a consequence of the introduction of the ITR. Both primary and secondary care staff reported instances when patients had complained to them about having to travel a considerable distance for a service which previously had been provided locally in their GP practice. For example, some patients lived 50.37km (31.3 miles) from the ITR location in Inverness. Consequently, there was a perception that some patients were choosing not to use the ITR and reverted to the previous system. This was perceived to be causing confusion over the referral criteria for the new service. Despite a perception that the ITR was proving divisive, there were plans to sustain the model and roll it out across other areas. Local press had reported that some more rural GP practices were gathering patient opinion about the change to the ITR model to assist with public-informed decision making about these plans.

Key Implications

- Consultation with stakeholders during the planning and implementation phase might have been helpful to reach consensus, share learning and if necessary, revise referral pathways and protocols.
- A whole systems approach for understanding workload might have highlighted how change in one part of the system impacts on another.
- The implementation of this test of change illustrated the importance of the need for rural proofing in service planning and delivery due to the geographical location of the ITR and the travelling times for those outwith inverness city boundaries.

Cognitive Behavioural Therapy (CBT) Mastermind Programme (NHS Highlands)
This computer-based CBT Mastermind programme was for individuals with mild to moderate depression and anxiety. Mastermind uses the 'Beating the Blues' programme made up of eight online sessions of approximately 50 minutes. The programme is confidential and available online 24 hours a day. Patients can be referred directly from NHS 24 to a GP or Community Mental Health (MH) Practitioner who can then refer the patient to the programme.

Key Findings
The project was perceived to reduce MH staff workload and to facilitate patient access to immediate help for their MH problem whilst waiting for appointments to see MH care professionals. Online CBT was perceived as advantageous for patients in rural areas who wished to keep their MH problems private. It was also perceived to improve access to care, which was considered particularly important for people living in remote and rural areas. Local self-evaluation data showed that people who had used the online CBT course rated their anxiety, depression and stress lower at the end of the course. There was a perception of those implementing the CBT programme that GP referrals could be higher and that the online programme would be used more if there was further publicity about it.

Key Implications
- Online CBT appeared to yield a number of benefits including reduced workload for MH staff, improve health outcomes for patients, greater protection of privacy for patients about their MH problems and speedier access to MH support.
- Efforts to increase referral rates may reap dividends for example, greater publicity and marketing of the online programme in all A&B GP practices.

Staying Well Programme (NHS Western Isles)
This primary care project was based in one GP practice on the Isle of Lewis. It involved 'Staying Well' Advance Nurses (SWANs) engaging in anticipatory and preventative clinical support for patients with long-term conditions. For example, a new system of triaging home visit requests was implemented whereby practice receptionists used a protocol to allocate routine home visits to a SWAN and complex cases to the on-call GP.

Key Findings
Supervision by GPs of SWANs conducting home visits was considered to work well, particularly in the early implementation stages. Local self-evaluation data suggested that the total number of homes visits undertaken in the practice increased and that GPs conducted considerably fewer of these home visits after the project was introduced. From this, a review of the eligibility for any home visit was considered necessary. Following implementation of the project only a small minority of patients continued to request a home visit by a GP, suggesting that most patients accept home visits by a nurse. Local self-evaluation data suggest that SWAN home visits tend to be longer than GPs. There was a perception that patients benefitted from the longer visit. The model whereby GPs undertake home visits for the more complex cases appeared to be working, but whether or not nurses taking on 'GP work' undermines the traditional roles of these two distinctive health professions remain unclear.

Key Implications
- Time for support for SWANs by GPs may need to be built into this model to ensure safe and confident care delivery for patients in their own homes.
- SWANs working within general practice have the potential to make an important contribution to

rural GP workload in relation to management of patients requiring home visits.

Self-management Course (NHS Western Isles)
This primary care project involved one GP delivering a two-hour session, six-week self-management course for people with long-term conditions (LTC), minor MH problems and physical symptoms who were referred by a GP, specialist or practice nurse.

Key Findings
A local self-evaluation of 85 patients suggests that participants achieve health benefits from the course, for example, in 93% of course participants, pre- and post- course anxiety or depression scores had shown an improvement. There was a perception that the course had contributed to fewer GP appointments because people were better self-managing their LTC. The challenge of replicating the personal attributes and skills of the current GP course leader was perceived to be considerable, in order to sustain future delivery of the model. However, there was recognition of the potential for course leaders to be found in other health disciplines and the third sector.

Key Implications
- There was a perception that the course success was due to the particular characteristics of the healthcare professional delivering it, which raises challenges for (i) sustaining the programme and (ii) rolling it out to other areas.
- There might be need for revision, refresher and top-up sessions so that people do not relapse, which could challenge the feasibility of sustaining the programme.

KEY RECOMMENDATIONS
- Transformation is challenging in remote and rural areas due to location, scale, and geographical distances. **Rural proofing** ought to be considered when planning new initiatives so that projects are appropriate for remote and rural settings.
- Implementation of projects was facilitated when stakeholders were supported to identify problems or gaps in service delivery and involved in the design and deliver local solutions. **Co-production including patient and public involvement in project design ought to be promoted**.
- Models of primary care that use existing evidence or are informed from earlier projects are likely to be more acceptable to stakeholders and therefore potentially pave the way for smooth implementation. Mechanisms to support recording and sharing of primary care tests of change within and between health board areas ought to be promoted to facilitate **knowledge exchange**.
- **Online health care programmes** have the potential to improve early access to health care support and consequently impact on health inequalities in remote and very rural communities.
- **Sustainability** ought to be a key consideration in project design. For example, person-dependent projects pose a risk to sustainability.
- **Measurement** of actual impacts, sustainability and spread of new models of care, both in the short-and longer-term will require additional support for data collection, extraction and analysis.

1. INTRODUCTION

1.1 Background

Primary care is healthcare provided in the community that can be accessed by members of the public, usually by self-referral. Primary care professionals include National Health Service (NHS) salaried staff (such as nurses, health visitors, physiotherapists, speech and language therapists, dieticians and podiatrists) and independent contractors (such as General Practitioners (GPs), pharmacists, optometrists and dentists) [1]. In June 2015, the Cabinet Secretary for Health and Sport announced a new Primary Care Transformation Fund (PCTF) worth £20.5 million aimed at supporting the redesign of primary care services across Scotland. A further £10 million was to be invested in new models of primary care mental health (MH) services. The PCTF and the Primary Care Fund for Mental Health (PCFMH) put out a joint tender to all Scottish NHS Health Boards in February 2016 asking for bids for pilot projects to start from April 2016 and to run for two years. The new 'models of care' were expected to focus on the development of enhanced, intelligence-led, multi-disciplinary teams (MDTs) in each locality, with a clarified and strengthened role for general practice.

A new 'model of care' or 'test of change' is defined in this report as any primary care pilot project which may be a new initiative or one that builds on previous or existing work, that is testing a new way of delivering, or facilitating the delivery of, primary care services or improving the integration or interface between primary care and other services (such as other health sectors, social care and third sector).

Integrated Joint Boards and NHS Boards identified the priorities for improvement which were adopted as the PCTF 6 themed work-streams:

1. multi-disciplinary models
2. clusters and hubs
3. Mental Health
4. alternative, improved pharmacy, prescribing models
5. supporting citizens
6. technology.

The PCTF also identified 3 themed work-streams for the primary care MH pilot projects:

1. shortfall between need and demand for children and young people;
2. variation in access to MH services;
3. inequity of treatment between physical and MH.

To facilitate applying lessons learnt from each pilot project, the Scottish School of Primary Care (SSPC) was commissioned to conduct a national evaluation of all tests of change in primary care, regardless of the source of funding. The overall purpose of the evaluation was to *tell the story* of primary care transformation and simply to find out what seems to be working well and why, what doesn't and why, and what the most potentially transformative projects might be for future investment and the roll out of particular primary care models.

This report concerns 1 of 7 case studies contributing to the SSPC national evaluation. It focusses on primary care tests of change in rural and island communities, irrespective of funding source in 4 health boards: NHS Highland (including Argyll and Bute (A&B)), NHS Western Isles, NHS Orkney, and NHS Shetland (hereafter collectively referred to as H&I in this report).

1.2 H&I Context

1.2.1 Health and wellbeing in rural communities

The 4 H&I NHS Health Boards are predominantly rural and account for 7.3% of the population of Scotland [2]. Rural populations in Scotland are growing at a faster rate than urban areas [3, 4]. Rural population shifts (out-migration, inflows and counter-urbanisation) have been conceptualised as a 'health risk' [4], or 'challenges' [5], with in-migration of the comparatively affluent service and professional classes and out-migration of young people being perceived as detrimental to rural cultures, the rural age profile, rural housing markets, and rural social networks [6]. Overall, life expectancy and health are more favourable in rural areas than in urban areas [7-8]. MH is generally better on average in rural areas compared to urban areas but in sparsely populated remote and rural areas MH is worse than national averages [9-11]. Like urban areas [12], inequalities in morbidity and mortality outcomes associated with income deprivation have increased or remained very similar over recent decades in rural areas despite significant work on health improvement [13]. Health inequalities in rural areas are often masked by overall and average levels of greater affluence and wellbeing in those areas [4, 11, 14-16]. Not all deprived people live in areas that would be recognised as deprived, and rural deprivation differs in that it tends to present in small pockets e.g. a few isolated houses on the edge of a village [4]. Some rural settlements in the Scottish Highlands - a region renowned for its outstanding natural beauty and a leading tourist destination [17] fall within the fifth most deprived areas of Scotland [18].

1.2.2 Access to healthcare services in rural communities

Access to healthcare services and support are sub-optimal for people living in remote and rural communities [9, 19]. Centralisation of services in urban centres exacerbates problems accessing healthcare in rural areas and centralisation has been highlighted as an example of inequitable access to health services [20]. A recent report by Mind and Scotland's Rural College found that there were major challenges to receiving proper care in rural communities due to poor public transport and lack of support when someone with mental illness is discharged from hospital [21]. Lack of local availability of health care has a higher impact on older, poorer and disabled people who have lower levels of personal mobility [22]. Weather is an additional factor which influences both access and willingness to seek care (e.g. cancellation of ferries to and from the islands) [23].

Telehealth has been identified as a potential solution to the problem of poor access to services in rural communities [24-26] and research about the use of telehealth in general, in rural areas and in primary care suggest that it is a clinically effective form of care delivery. A review of 58 systematic reviews that synthesised the impact of telehealth interventions on clinical outcomes, utilization, or cost found that the most consistent benefit has been reported when telehealth is used for communication and counselling or remote monitoring in chronic conditions such as cardiovascular and respiratory disease, with improvements in outcomes such as mortality, quality of life, and reductions in hospital admissions [27]. A recent systematic review and meta-analysis of 43 studies of telehealth interventions delivered by allied health professionals and nurses in rural and remote areas found no significant differences in patient outcomes [28]. Individual studies of telehealth interventions in primary care show evidence of

effectiveness and include for example, a telehealth primary care weight management intervention for adults with obesity, and the role clinical pharmacy specialists in telehealth primary care for the management of chronic disease [29, 30].

1.2.3 Healthcare professionals in rural areas

The Scottish Government's 2018 National Health and Social Care Workforce Plan [31] acknowledges the challenges in recruiting and retaining GPs and other primary care clinical staff in remote and rural areas. Further, the plan recognises that clinical staff working in these remote areas often have a wider or different range of skills to meet the needs of the local population. Empirical research highlights some of the unique challenges experienced by healthcare professionals in rural areas. A review of innovation in remote and rural health service organisation and delivery worldwide [25] found that activities undertaken by staff did not match their formal role descriptions and suggested instead that it was more important that individuals can practice confidently rather than focusing on professional entities. Lack of support, especially for the particular challenges faced in rural primary care has an impact on retention of staff [32] which then has an impact on "continuity of care" [25].

1.2.4 Rural proofing

To address the particular challenges in recruiting and retaining GPs and other primary care clinical staff in remote and rural areas, the SG have committed to setting up a Rural Short Life Working Group, which will support the implementation of the new GP Contract in rural areas, and continue to fund the Scottish Rural Medical Collaborative to take forward work looking at the recruitment, retention and training needs of primary care staff working in rural Scotland. The Royal College of GPs UK Rural Forum report, 'Helping to Rural Proof Health Policy' [33], includes information about higher levels of unscheduled care provided in rural areas and the challenges of the ageing and changing nature of the GP workforce, and concluded that more innovative solutions would be required in remote and rural practices and suggested that potential innovative solutions are not considered to purely be of benefit to rural areas but could be as be rolled out to the benefit of the wider NHS. Finally, rural proofing of health services has been proposed as a systematic approach to ensure the needs of rural populations are considered in the planning and delivery of health services [20]. Practical guidance is provided by Department for Environment, Food and Rural Affairs in assessing the impacts of policies on rural areas which involves a four stage process: Stage 1 'What are the direct or indirect impacts of the policy on rural areas?', Stage 2 'What is the scale of these impacts?', Stage 3 'What actions can you take to tailor your policy to work best in rural areas?', Stage 4 'What effect has your policy had on rural areas and how can it be further adapted?'[5]. Allied to this and specific to rural island communities, the Islands (Scotland) Act 2018 places duties on island communities and Scottish Ministers to prepare and review impact assessments to ensure island proofing of health and wellbeing policies, strategies and services [34].

1.3 Case Study Aims

The broad aims of this case study were to:

- understand primary care transformation and the context in which new ways of working were being tested
- identify the new ways of working models that were being tested in primary care
- identify which models seemed to be working well, and why; and which were not working so well, and why
- identify new models of working for further exploration (the deep dives)

- explore the implementation and sustainability of the deep dive models of care from the perspective of those who implemented, and worked in, these models.

2. METHODS

This case study was conducted over a 15-month period (1 March 2017 to 31 May 2018) and concerned the 22 months period from the release of funding to Scottish Health Boards for pilot testing of new models of primary care to the end of the study (i.e. from July 2016 to May 2018). Thus, at the start of the case study tests of change were already being planned, developed or implemented across Scotland.

2.1 Case Study Design

The study used a qualitative mixed methods approach, informed by the SSPC Evaluation Framework agreed with the SG (Appendix A). Within this framework, a number of key questions were addressed over two distinct but complementary work phases:

- Phase One (conducted between March 2017 and December 2017) sought to identify and understand the tests of change that were being implemented and their expected impacts. This led to proposing a selection of tests of change for further in-depth exploration (the evaluation's 'deep-dives'). The selection of the deep dives was agreed with the SG.
- Phase Two (conducted between January 2018 and May 2018) explored the early impacts, key learnings, sustainability, likely spread or roll out and potential impact on inequalities in relation to the selected deep-dives.

Methods used included reference to the published international literature relating to primary care transformation in remote and rural areas, analysis of documents relating to primary care transformation in H&I, and individual interviews and focus group discussions with key informants involved in the planning, implementation and delivery of the tests of changes in H&I.

2.1.1 Documentary analysis

Documents relating to primary care transformation and new ways of working in H&I were identified from relevant websites, such as HSCPs and Integration Joint Boards and also from internet searches. The key informants interviewed as part of the case study were a further source of documents. At the time of requesting their participation in an interview, informants were also asked if they were willing to share documentation relevant to the new ways of working in which they were involved (Appendix G).

2.1.2 Key informant individual interviews and focus group discussions

For the Phase 1 interviews, the listed contacts in the SSPC initial national scoping of primary care transformation report in October 2016 (see Appendix B for information relevant to H&I), were first approached by the research team to arrange an interview. If any individual had moved to another role and suggested someone else with more recent knowledge, an interview was then requested with the suggested alternative key informant. Key informants were given the option to be interviewed either in person or by telephone.

The identified key informants for each of the selected 'deep dives' were contacted again to address the research questions of Phase 2 of the case study. Key informants were given the option to be interviewed either in person or by telephone and when possible, several key informants participated in a focus group discussion. Informed consent from each key informant was obtained before the start of data collection, and, with the key informant's permission, the interviews were audio-recorded, and subsequently transcribed verbatim.

2.2 Data Analysis

2.2.1 Literature review

The evidence from the international literature relating to primary care transformation in rural areas informed the interpretation of the case study findings and relevant literature was also cited in the Introduction of this report.

2.2.2 Phase 1

The primary care tests of change were identified from documentary analysis and interview data, and summarised in order to describe their key features, including a description of the new way of working and the context in which it was being introduced. The funding source of each new way of working was also identified along with its duration and a description of governance arrangements. Furthermore, details of any local evaluation work were summarised including the type of data being collected and if any measures of success or quality standards had been agreed.

Initially each test of change project was categorised using the SG's 2-fold Urban Rural Classification [35, 36]. Further analysis was undertaken to identify island status in response to the "*large variations between areas, especially in terms of mainland and island*" which are masked by the collective term 'remote and rural'. Thereafter, the projects were described in more detail using the SG's 6-fold Urban Rural Classification [35, 36].

The rationale for the test of change projects and their anticipated short, medium and long-term impacts were described by participants during qualitative interviews, along with the theory of change underpinning the anticipated impacts.

During Phase 1, a small number of projects were selected for further exploration in phase 2. Two main factors were taken into consideration to inform a decision by the research team and SG about which projects to select:

- The status of the project using an implementation staging system. Projects were classified as not got off the ground or development or implementation had been stopped; in the planning stages, not yet fully implemented; or implemented. The 'status' of the project was a key consideration in the selection of 'deep dives'.
- The potential of the project to transform primary care.

2.2.3 Phase 2

Phase 2 qualitative data were analysed using the framework approach [37]. Thematic codes were grouped around similar and interrelated concepts and entered into matrixes to summarise the thematic data based on the SSPC evaluation framework (Appendix A).

2.3 Ethical Approval

The evaluation was approved by the chair of the University of the H&I Research Ethics Committee on 19 April 2017 (Appendix C).

3. PHASE 1 FINDINGS

The findings are based on documentary evidence and interviews with key informants. To maintain anonymity, each participant quotation is coded with a unique numerical identifier attributing the project number and participant number e.g. (P.3, p.5).

A total of 31 local documents were reviewed relating to primary care transformation and new ways of working in H&I. Documents included leaflets for patients, internal test of change project reports and spreadsheets with project data (Appendix G).

A total of 14 individual key informant interviews were conducted; 13 interviews were conducted during face-to-face meetings and 1 was conducted by telephone. Collectively, the interviewees were key informants for all but one of the identified tests of change projects in H&I. In the case of this exception, a key informant felt that the project had made insufficient progress due to staffing-related issues.

Figure 3.1 Map of Highlands & Islands Case Study Area

(The areas of the four H&I health boards are highlighted dark blue.)

3.1 Context

The 4 H&I Health Board areas cover a predominantly rural geography on the northern and western periphery of Scotland. Taken together the areas comprise around half of Scotland's land mass with an estimated resident population of ~394,000 [38]. While Scotland's population is projected to rise, this population increase is likely to be unevenly spread within the 4 H&I Health Board areas; NHS Highland is projected to be static, NHS Western Isles and Shetland are projected to fall, and NHS Orkney is projected to increase [39]. Access to services can be potentially problematic in these areas. The Scottish Index of Multiple Deprivation's 'access' domain is derived from measures of drive times and public transport to different services, including to a General Practice. In 2013, 15% of people in Scotland lived in 15% of the most 'access deprived' areas whereas the percentage of people in NHS Highland, Western Isles, Orkney and Shetland living in 15% of the most 'access deprived' areas was 41.8%, 83.8%, 61.8%, 68.4%, respectively [40]. In contrast economic deprivation indicators suggest that the level of

deprivation in the 4 H&I Boards is lower than the national average [40]. The 4 H&I Health Boards have differing primary care organisational structures reflecting whether integration of health and social care services has been adopted with an Integration Joint Board or Lead Agency Model [41] and their unique geography. In total, 462 GPs and an estimated 174 GP locums are working across the 122 practices in the 4 H&I Health Boards. Additionally, these practices employ practice nursing staff and Advance Nurse Practitioners (ANPs) and are supported by a variety of NHS community clinical staff such as allied health care professionals, nurse specialists etc. Detailed reporting relating to the geography, population, deprivation, access to services and primary care organisation in each Health Board area is available in Appendix H.

3.2 H&I Test of Change Projects

A total of **20 tests of change projects** were identified in Phase 1 scoping stage of the evaluation. Eleven projects were funded through the PCTF and 9 funded through the Primary Care Fund for Mental Health (PCFMH). No other primary care projects were identified. The 20 projects were:

NHS Highland

1. Moray Firth: Cluster development
2. Moray Firth: Enhanced Anticipatory Care Planning (ACP)
3. Moray Firth: Interface between Primary Care and Secondary Care
4. N&W: Cluster development
5. N&W: MDTs working
6. N&W: Quality of Urgent Care centres
7. A&B: Cluster development
8. A&B: Pilot of Buurtzorg Model
9. A&B: Development of Urgent Care consultations
10. The effectiveness of specialist MH Pharmacist time in Primary Care
11. MH - Everyone's Business
12. Cognitive Behavioural Therapy (CBT) Mastermind Programme
13. Project Manager for Mindfulness Network and Decider Life Skills Service
14. Developing Mental Health MDTs

NHS Orkney

15. Empowering Localities: Locality Led Design of Multi-Disciplinary Models
16. Fit for the Future services: A Review and Redesign

NHS Shetland

17. Development of capacity to deliver behavioural activation support to people

NHS Western Isles

18. Staying Well Programme
19. Primary Care-led dementia diagnosis and support
20. Self-management Course

3.2.1 Use of SG funding and project rationale

According to key informants, funding was used by projects for the purposes of professional networking, staff education and training, staff incentives, staff appointments, increase staff hours, staff meetings, information technology (IT), audit and evaluation.

The 11 PCTF projects were:

NHS Highland

1. Moray Firth: Cluster Development (Project 1). The funding was used for multi-disciplinary networking events and leadership training for Cluster Leads.
2. Moray Firth: Enhanced ACP (Project 2). The funding was used to pay GP Practices incentives for ACP.
3. Moray Firth: Interface between Primary Care and Secondary Care (Project 3). The funding was used for digital tools to share information and clinical advice. This test also included a community-based Intensive Treatment Room (ITR), but this was funded by secondary care.
4. N&W: Cluster Development (Project 4). The funding was used for multi-disciplinary networking events and leadership training for Cluster Leads.
5. N&W: MDT Working (Project 5). The funding was used to purchase video conferencing equipment for each GP Practice.
6. N&W: Quality of Urgent Care Centres (Project 6). The funding was used to audit the Out-of-Hours care kits.
7. A&B: Cluster Development (Project 7). The funding was used for a Cluster Development Day, for the Cluster Quality Leads to attend the monthly Locality Planning Groups and to purchase video conferencing equipment for each GP Practice.
8. A&B: Pilot of Buurtzorg Model (Project 8). The funding used for a quality improvement lead to deliver the 'neighbourhood teams' model.
9. A&B: Development of Urgent Care Consultations (Project 9). Funding was used to increase hours of an ANP provide direct access to a physiotherapist 2 days a week, employ a Link Worker 1 or 1.5 days a week to facilitate social prescribing, and provide longer appointments with GP.

NHS Orkney

10. Empowering Localities: Locality Led Design of Multi-Disciplinary Models (Project 15). The funding was to be used to establish an Isles Network of Care with rural generic support workers.
11. NHS Western Isles Staying Well Programme (Project 18), which was nurse-delivered, GP supervised, pro-active monitoring and management of patients with long-term conditions. Funding was used for project management and specialist nurse time.

The 9 PCFMH projects were:

NHS Highland

1. The effectiveness of specialist MH Pharmacist time in Primary Care (Project 10). The funding was used for Specialist psychiatric pharmacists with non-medical prescribing (NMP) qualifications to generate high quality evidence based prescribing in a primary care setting; to provide educative or supportive input to the practice(s) for all psychopharmacological issues; to survey educational needs of the network of primary care and community pharmacists to determine learning needs to take on some of the functions of the specialist MH pharmacist at the end of the project; and for an audit on whether severe and enduring patients physical health is monitored as per relevant NICE and SIGN guidance including the national standard for clozapine.
2. MH; Everyone's Business (Project 11). The funding was used for a Band 6 Nurse Practitioner and for crisis training for community health and social care staff and other public sector agencies and third sector workers.
3. CBT Mastermind Programme (Project 12). Funding was used for an administrator, to link e-CBT to existing guided self-help workers, and to work with GP practices.
4. Project Manager for Mindfulness Network and Decider Life Skills Service (Project 13). Funding

was used for a Project Manager post, to establish the Mindfulness Network, and to implement the Decider Skills package.

5. Developing MH MDTs (Project 14). Funding was used for an experienced social worker to raise awareness and train other members of the MDT in the development of SDS packages for people with MH.

NHS Orkney

6. Fit for the Future Services: A Review and Redesign (Project 16). The funding was used for the review and to start implementing the recommendations of the review.

NHS Shetland

7. Development of Capacity to Deliver Behavioural Activation Support (Project 17). The funding was used for project management time.

NHS Western Isles

8. Primary Care-Led Dementia Diagnosis and Support (Project 19). The funding was used for Dementia specialist nurse time.
9. Self-Management Course (Project 20). The funding was used to design and deliver self-management courses.

Key informants situated the projects within the context of SG policy. A number of SG policies, international and national service developments, and organisational reports informed the development of the primary care tests of change in the 4 NHS H&I Health Board areas including:

Prescription for Excellence: A Vision and Action Plan [42]

This recognises that the integrated delivery of care requires the delivery of NHS pharmaceutical care to adapt new and innovative models to facilitate professional independence of pharmacists, working in collaborative partnerships with other health and social care professionals and the third sector. It recognises the continuing and important role of pharmacists located in communities and high streets across Scotland and considers their future relationship with other local healthcare provision. This is acknowledged as crucial for future service planning in remote and rural areas in particular.

The Matrix: A Guide to Delivering Evidence-Based Psychological Therapies in Scotland [43]

This summarises the most up-to-date advice on evidence-based interventions, provides information and advice on strategic planning issues in the delivery of efficient and effective services and explains the levels of training and supervision necessary for staff to deliver psychological therapies safely and effectively.

The MH Strategy [44]

This sets out framework priorities organised around life stages that SG advises will deliver significant improvements in the MH of the population of Scotland. The strategy makes direct reference to primary care transformation and the establishment of *The National Rural MH Forum* help develop connections between communities across rural Scotland, so that isolated people can receive MH support when and where they need it.

The Treatment Time Guarantee and the Referral to Treatment Standard [45]

This places a legal requirement on health boards that once planned inpatient and day case treatment has been agreed with the patient the patient must receive that treatment within 12 weeks. The standard is for 100% of patients to be seen within 12 weeks of agreeing inpatient or day case treatment.

The Referral to Treatment 18-week standard is the overarching measure in relation to the stage of treatment standards for diagnostic tests, new outpatient appointments, and day case and inpatient treatment. The 18 weeks standard applies to the whole pathway from a referral to the point where each patient is treated. The SG has determined that the 18 Weeks referral to treatment standard should be delivered for at least 90% of patients.

Improving Together: A National Framework for Quality and GP Clusters in Scotland (2017) [46]
This advocates strong, collaborative relationships across GP Clusters and specifies that each GP practice will have a Practice Quality Lead that will engage in a local GP cluster. GP clusters were introduced in Scotland with the 2016/17 GMS agreement between the Scottish GP Committee and the SG.

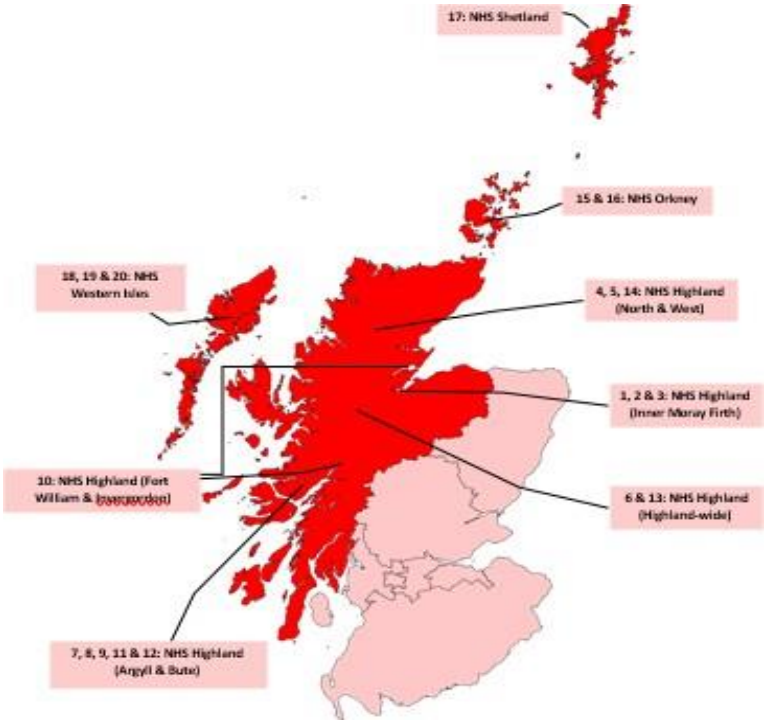
Developing a Culture of Health [47]
This report by The Health and Social Care Alliance (Scotland) encourages social prescribing and signposting to link individuals with non-medical sources of support. This approach supports a shift to a more reciprocal, community facing model of care. Social prescribing was mentioned as a government recommendation by one project which had used the transformation funds to develop urgent care consultations and improve patient access to services in one island community.

Buurtzorg [48]
There are a number of different models of Buurtzorg, but essentially it is a nurse-led, nurse-run organization of self-managed teams that provide home care to patients in their neighbourhoods, set up initially in the Netherlands.

Advanced Nursing Practice Roles Guidance for NHS Boards [49]
ANP roles are increasingly seen as key to the development and delivery of health and wellbeing services. The guiding principle is that such roles should be based upon demonstrable patient and service user need and that good governance lies in consistent benchmarking of these roles at recognised levels of practice in terms of expectations of competence, educational preparation and reward.

The Biopsychosocial Model of Health and Wellbeing [50, 51]
This considers biological, psychological, and social factors and their complex interactions in understanding health, illness, and health care delivery which aligns with World Health Organisation perspectives.

Figure 3.2 Map of the Geographical Location of H&I Test of Change Projects



3.2.2 Rural classification of projects

Twelve pilot projects were located in rural areas, 5 in urban areas and 2 were based in both a rural and an urban area (Table 3.1). In relation to the SG 3- fold Urban and Rural Classification [35, 36]:

- 3 projects - Moray Firth Primary Care Transformation: Cluster development, Enhanced ACP and the Interface between Primary Care and Secondary Care - included accessible rural areas as well as the city of Inverness and settlements of 3,000 or more people.
- 7 projects - A&B Development of Urgent Care Consultations, Empowering Localities, Fit for the Future Services, Development of Capacity to Deliver Behavioural Activation Support, the Staying Well Programme, Primary Care-led Dementia Diagnosis and Support, and the Self-management Course - were set on islands.
- 8 projects were based on the mainland but also covered islands - N&W Cluster Development, N&W MDT Working, N&W Highland Quality of Urgent Care Centres, A&B Cluster Development; A&B Pilot of Buurtzorg Model, MH - Everyone's Business, CBT Mastermind Programme, Project Manager for Mindfulness Network and Decider Life Skills Service, and Developing MH MDTs.
- 2 projects – N&W Highland: Quality of Urgent Care Centres and Project Manager for Mindfulness Network and Decider Life Skills Service - were Highland-wide and therefore included both urban and rural settlements.
- 5 projects - A&B Primary Care Transformation: Cluster development, A&B Primary Care Transformation: Pilot of Buurtzorg Model, A&B Primary Care Transformation: Development of Urgent Care consultations, MH: Everyone's Business and the CBT Mastermind Programme - were in the A&B local authority area of NHS Highland where 52% of the population live in areas classified as 'rural', 45% in areas classified as 'remote rural'; and 7% in areas classified as 'accessible rural'.
- 3 projects - N&W: Cluster development, N&W: MDT working and Developing MH MDTs - were set in fragile zones according to the H&I Enterprise Fragility System [52].

Table 3.1 Geographical Context of the H&I Test of Change Projects

Project Reference Number	Test of Change Project Name	Rural	Urban	Rural and Urban	Island	Mainland	Mainland with Island
1.	Moray Firth Cluster Development		x			x	
2.	Moray Firth Enhanced ACP		x			x	
3.	Moray Firth Interface between Primary Care and Secondary Care		x			x	
4.	N&W Highland Cluster Development	x					x
5.	N&W Highland MDT Working	x					x
6.	N&W Highland Quality of Urgent Care Centres			x			x
7.	A&B Cluster Development	x					x
8.	A&B Pilot of Buurtzorg Model		x			x	
9.	A&B Development of Urgent Care consultations	x			x		
10.	The effectiveness of Specialist MH Pharmacist in Primary Care		x				
11.	MH - Everyone's Business	x					x
12.	CBT Mastermind Programme	x					x
13.	Project Manager for Mindfulness Network and Decider Life Skills Service			x			x
14.	Developing MH MDTs	x					x
15.	Empowering Localities: Locality-Led Design of Multi-Disciplinary Models	x			x		
16.	Fit for the Future Services: A Review and Redesign	x			x		
17.	Development of Capacity to Deliver Behavioural Activation Support to People	x			x		
18.	Staying Well Programme				x		
19.	Primary Care-led Dementia Diagnosis and Support	x			x		
20.	Self-Management Programme	x			x		

3.2.3 H&I tests of change in relation to PCTF themed work-streams

Eleven of the 20 test of change projects covered more than one of the SG PCTF themed work-streams (Table 3.2).

Table 3.2 PCTF Themed Work-Stream

PCTF Work-Stream Theme	Number of Projects	Test of Change Name
1. Multi-Disciplinary Models	9	Moray Firth: Enhanced ACP; Moray Firth: Interface between Primary Care and Secondary Care; N&W: MDT working; A&B: Pilot of Buurtzorg Model; A&B: Development of Urgent Care consultations; The effectiveness of specialist MH Pharmacist time in Primary Care, Developing MH MDTs; Empowering Localities: Locality Led Design of Multi-Disciplinary Models; and the Staying Well Programme
2. Clusters and Hubs	3	Moray Firth: Cluster development; N&W: Cluster development; and the A&B: Cluster development
3. MH*	9	The effectiveness of specialist MH Pharmacist time in Primary Care; MH - Everyone's Business; CBT Mastermind Programme; Project Manager for Mindfulness Network and Decider Life Skills Service; Developing MH MDTs; Fit for the Future services: A Review and Redesign; Development of capacity to deliver behavioural activation support; Primary Care-led dementia diagnosis and support; and the Self-management Course
4. Alternative, Improved Pharmacy, Prescribing Models	4	The effectiveness of specialist MH Pharmacist time in Primary Care; N&W: Cluster development; MH - Everyone's Business; and the Primary Care-led dementia diagnosis and support
5. Supporting Citizens	4	Developing MH MDTs; Development of Capacity to Deliver Behavioural Activation Support; Staying Well Programme; and the Self-management Course
6. Technology	5	Moray Firth: Cluster development; N&W: Cluster development; N&W: MDT working; A&B: Cluster development; and the CBT Mastermind Programme

*These represent the 9 projects funded by the PCFMH funding stream

Specific projects and quotations from key informants are used to illustrate each theme:

1. Multi-disciplinary models

Nine out of 20 projects were categorised under the PCTF multi-disciplinary model work-stream theme. These included projects that involved:

- team working,
- different health professions and AHPs working together,
- bringing different parts of the health system together.

For example, the N&W MDT project focussed on the use of technology to facilitate team working.

> *"… in every single GP surgery… they've all been wanting VC* [videoconferencing] *for a long time not just for the GPs to link in to meetings that NHS Highland have, but also for their teams of practice nurses, ANPs, to be able to link in, so it's a whole GP practice team."*
>
> (P.5, p.3)

In Project 14, Developing MH MDTs, the multi-disciplinary model was used as the basis for improving care and access to services for people with MH need, and involved a social worker working with a Community Psychiatric Nurse.

> *"So the idea of looking at the transformation fund was to have some funding to put in place for a practitioner – in this case it was a Social Worker – to try and work with the Community Psychiatric Nurses to look at ways of developing paths of care and access to services such as self-directed support for people with mental health needs."*
>
> (P.14, p.2)

Project 3, Moray Firth: Interface between Primary Care and Secondary Care, focussed on the interface between primary and secondary care, and brought two parts of the health system together which traditionally work (or are perceived to work) in silos.

> *"we saw that as a huge opportunity when we became Inner Moray Firth Operational Unit to look at the interface between secondary and primary care services, so the third project is all around how we enhance that interface and what we can develop to make things better for patient and patient journeys"*
>
> (P.3, p.1)

2. Clusters and hubs

There were 3 test of change projects explicitly concerned with the development of GP Clusters (N&W Highland, Moray Firth and A&B). The 'bottom up' approach where the GPs influenced development was perceived by key informants to have engendered enthusiasm for Cluster work.

> *"We didn't give any directions to what the Cluster should look at, but the Clusters have now developed individual target areas they're working at, and that's depending on what's happening locally."*
>
> (P.1, p.2)

3. MH

The 9 tests of change projects categorised under the MH PCTF workstream theme ranged from:

- pharmacy (Project 10, The Effectiveness of Specialist MH Pharmacist Time in Primary Care)
- community based therapeutic interventions (Project 17, Development of Capacity to Deliver Behavioural Activation Support; Project 12, CBT Mastermind Programme; Project 13, Project Manager for Mindfulness Network and Decider Life Skills Service; and Project 20, Self-Management Course),
- health professional training (Project 11, MH - Everyone's Business),
- diagnosis and support (Project 19, Primary Care-Led Dementia Diagnosis and Support),
- MDT approach (Project 14, Developing MH MDTs),
- whole service review and redesign (Project 16, Fit for the Future services: A Review and

Redesign).

Locating MH pharmacists (Project 10) in the general practice was viewed as logical because many patients present with MH problems.

> *"if you look at the figures, em, it's one person in three visit their GP practice has a mental health issue … and one person in five have a common mental health issue, and that's anxiety and depression, anxiety and depression, so it seemed like a bit of a no-brainer"*
>
> (P.10, p.15)

Project 13, Project Manager for Mindfulness Network and Decider Life Skills Service, sought to support the roll out of a suite of community-based psychological therapies including Deciders; Mindfulness; Survive and Thrive; Behaviour Activation for Depression; Behavioural Family Therapy; STEPPS; and STAIRWAYS. Funding was used to support the delivery of these community-based programmes.

> *"it was for the Project Manager time and a bit of admin support and some training money to provide the courses"*
>
> (P.13, p.10)

Project 11, MH - Everyone's Business, focussed on upskilling different health professionals in primary care to respond to MH related incidents, including out of hours.

> *"Everyone's Business,' which was basically to look at improving primary care's knowledge and skills around mental health care … so we delivered a two day training to local community staff, and we noticed an increase in their confidence and their ability to deal with mental health care and challenges … and certainly the areas that have had the training before we see a different presentation and a different response, and a lessening anxiety I would say, because of upskilling"*
>
> (P.11, p.23)

Project 19, Primary Care-Led Dementia Diagnosis and Support, was about improving the diagnosis of dementia in primary care settings.

> *"… to move dementia diagnosis back into primary care, basically to reduce the barriers to people coming for a diagnosis, but also to try and address some of the problems that were actually happening locally about what was stopping people coming for a diagnosis... I was also very aware there was quite a lot of waste in the system … and people taking a long time sometimes to get a diagnosis, so I wanted to try and sort of reduce the variances that were happening, and I was also very aware that the more remote parts of the islands were getting an even less satisfactory service than the people who lived in* [named location]*"*
>
> (P.19, p.1)

The Behavioural Activation project in Shetland (project 14) used multi-disciplinary staff from the Health Improvement Team to deliver MH courses to individuals in the community through GP practices.

> *"the therapy sessions will be delivered by members of the Health Improvement Team who come out, who are kind of practice-linked, so they come out and do regular sessions with people in the practices, and GPs can make referrals directly to that team who would also come and do a lot of our smoking cessation work and weight management work, and are involved in supporting the delivery of computerised CBT"*
>
> (P.17, p.3)

Pilot Project 16, Fit for the Future services: A Review and Redesign, focused on whole service review and redesign, building on previous work and implementation of previous recommendations from an earlier service review. A previous review of MH services had recommended many actions which were not possible to implement in a rural setting. The review which was undertaken as part of this test of change was more focussed on the local context and was reported to have resulted in recommendations that were more realistically achievable.

> *"They were recommendations that somebody had come in and made but they were built upon a Community Mental Health structure that wasn't remote and rural …… I mean we could have implemented anything with an extra few million pounds, we could have implemented it all, but the point was that … it has to be realistic and it has to be targeted to specific remote and rural"*
>
> (P.16, p.7)

4. Alternative, improved pharmacy, prescribing models

Four tests of change projects were categorised under this theme. For example, the Specialist MH Pharmacist in Primary Care project (project 10), a clinical pharmacist was based one day a week in a GP practice. A GP referred patients diagnosed with anxiety or depression to the clinical pharmacist who would then prescribe treatment (medication or a therapeutic intervention).

> *"patients who would normally be going back to their GP surgery and seen by a GP will be getting effective treatment by a non-medical prescribing clinical pharmacist"*
>
> (P.10, p.28)

Project 9, A&B: Development of Urgent Care Consultations, focussed on social prescribing in their project activity.

> *"a person who's taking up GP appointments because they're feeling a bit down, they're new to the area, maybe a young mum with kids on her own; rather than the GP spending time with that person they'll be able to refer to the Link Worker who will have time to sit with that person"*
>
> (P.9, p.51)

5. Supporting citizens

Three out of 20 primary care pilot projects were categorised under the supporting citizens theme including those that included activities that supported self-management, individual behaviour change and self-care. For example, Project 14, Developing MH MDTs, aimed to support people with MH needs, especially around opportunities for self-directed support.

> *"to look at ways of developing paths of care and access to services such as self-directed support for people with mental health needs"*
>
> (P.14, p.2)

6. Technology

The 5 test of change projects that were categorised under this theme, mainly concerned facilitating communication between health professionals. Video conference equipment was used in all three of the Cluster Development projects and also in Project 5, N&W: MDT Working, which focussed on the use of technology to facilitate team working. As well as video conference access, one Cluster was supported to access the NHS intranet from out with NHS bases to facilitate rural working practice and reduce professional isolation.

> *"we have some single-handed practices within our area where we've got an isolated clinician, and that can be a concern for retention, it can be a concern for patient safety, how are people*

keeping up-to-date, how are they discussing significant events … and then we're going to be looking at doing remote meetings, so you know, … would chair a meeting, people can join or not join, up to them, but it's designed for the people who would otherwise be professionally isolated"

(P.4, p.12)

3.2.4 H&I tests of change in relation to PCMHF themed work-streams

All 9 PCMHF funded test of change projects covered more than one of the SG PCMHF themed work-streams (Table 3.3). A specific project and a quotation from a key informant are used to illustrate each theme:

Table 3.3 PCMH Themed Work-Stream

PCMHF Work-Stream Theme		Number of Projects	Test of Change Name
1. The shortfall between need and demand for children and young people		1	Fit for the Future services: A Review and Redesign
2. The variation in access to MH services		9	The effectiveness of specialist MH Pharmacist time in Primary Care; MH - Everyone's Business; CBT Mastermind Programme; Project Manager for Mindfulness Network and Decider Life Skills Service; Developing MH MDTs; Fit for the Future services: A Review and Redesign; Development of capacity to deliver behavioural activation support; Primary Care-led dementia diagnosis and support; and the Self-management Course
3. The inequity of treatment between physical and MH		4	Developing MH MDTs; Fit for the Future services: A Review and Redesign; Development of capacity to deliver behavioural activation support; and the Self-management Course

1. The shortfall between need and demand for children and young people

Project 16, Fit for the Future Services: A Review and Redesign, was categorised under this theme as it involved a review of all MH services in Orkney.

2. <u>The variation in access to MH services</u>

All 9 PCMHF test of change were categorised under this theme. For example, Project 12, CBT Mastermind Programme, aimed to improve access to increase the number of people receiving timely support for a MH problem.

"we feel that because they have waiting lists, they struggle to meet the RTT [Referral to Treatment Time] *because of the volume of people that come through at that level … also if folk are waiting they can have that option of having the CBT before they get to an appointment"*

(P.12, p.8)

3. The inequity of treatment between physical and MH

Four PCMHF funded primary care pilot projects were categorised under this theme. For example, Project 14, Developing MH MDTs, looked to address the inequality in services for people with MH problems compared to people with physical health needs.

> *"when we were looking at integration I was finding that general nursing services and social work kind of had a structure already, informal though it may be in some places; there was more of a dialogue between services regarding clients with health needs, physical health needs, and the older frail people were being kind of captured within that discussions, but I was aware that within the mental health we had less discussion within the other members of the integrated team around support to people with mental health needs"*
>
> (P.14, p.1)

3.2.5 Expected impacts of projects

Key informants identified short, medium and long-term outcomes during the interviews. An impact flowchart was drawn during the interview to graphically represent impact (Appendix E). Key informants were also asked to describe how they intended to measure impact. The majority of impacts, from short term through to longer term, were around workforce development, multi-disciplinary working, reduced GP workload, and new or improved process or services. Most key informants did not articulate a short-term impact on patients' health or wellbeing, but these impacts were expected as time progressed. Quotations from some of the key informants are used to illustrate each expected impact:

Expected Impact 1: Workforce development, training and team building

The 3 GP Cluster Development projects (projects 1, 4 7) all included expected impacts on workforce development from induction days and training courses:

> *"And we're also delivering a leadership programme which is a five-day training event, split into three sections, and that is being funded by the Primary Care Transformation Fund. I think undoubtedly some of the GPs who've not worked in this way before need some training to bring along their other practices that are in their cluster, 'cause they've not necessarily been involved in that kind of facilitative improvement before so they need some coaching on that"*
>
> (P.1, p.5)

> *"the Cluster Quality Leads, so they are the locality leads, so they're going because we need them to have leadership skills, so I would say they, most of them are natural leaders but it's helping them, as I say in some areas they have specific challenges"*
>
> (P.4, p.22)

Training in the field of MH was used to help staff to respond to out of hours MH crisis (Project 11, MH - Everyone's Business) and so they could deliver therapeutic courses in life skills (Project 13, Project Manager for Mindfulness Network and Decider Life Skills Service) and behaviour activation (Project 17, Development of Capacity to Deliver Behavioural Activation Support):

> *"… people are asking for training, they're asking for development and we have developed a pathway and the crisis framework, we delivered a two-day training to local community staff, and we noticed an increase in their confidence and their ability to deal with mental health care and challenges"*
>
> (P.11, p.22)

"The Deciders course, we trained 260 people in that" … "from a mental health service point of view we would want staff in each of the teams based in … trained in these therapies" … "there was someone from every team and department, apart from Lochaber"

(P.13, p.14)

Expected Impact 2: Reduced GP and GP Practice workload

Several projects were expected to reduce GP workload. For example, it was expected that the development of the ITR (Project 3) would reduce GP Practice workload, and that this would subsequently also help with recruitment and retention of GPs:

"we hope by reducing their burden that they'll be able to devote more time to person-centred care and not make, because they've got so much other work sitting there, we're hoping just to reduce the burden … and also recruit/retention"

(P.3, p.35)

The self-management project in the Western Isles (project 20) linked improvements in the health and wellbeing of patients who completed the course to reductions in demand for GP consultations:

"well one thing that I'm planning on doing is counting GP consultations before the course and after the course, so I've started doing that in my, and it's very, very early days, but my initial counts look as though they have plummeted"

(P.20, p.48)

Expected Impact 3: Multi-disciplinary working

Several key informants perceived that their project would improve multi-disciplinary working. For example, the ACP Alerts project (project 2) aimed to align working practices between disciplines to support multi-disciplinary working to care for older adults:

"we're hoping having that as part of the ACPA that the practices will, I know it's rather indirect, but we'll start to look at practice alignment with community geriatricians and alignment with care homes and community geriatricians … that's all through the ACPAs"

(P.2, p.13)

Developing links between the community MH team and GPs was included in the work of Project 16, Fit for the Future Services: A Review and Redesign, as part of an island wide review of MH services:

"… I think the bed-reduction is an indirect result of the work that was done because of the additional staff, but I think the other key factor for us is the improved relationships with our primary care colleagues, particularly with GPs, because one of the things that … we need to improve our interface with primary care and GPs, you know, there are models of working which will maximise our interface with GPs and we've taken that very seriously, so we've set up a liaison system so that GPs now have named workers who are linked into the Community Mental Health Team and we'll attend their Practice Meetings as required and things like that"

(P.16, p.17)

Expected Impact 4: Access to services and service development

Some key informants perceived that their project would improve access to services. For example, the MH Pharmacists in GP practices test of change project (Project 10) sought to improve access to specialist pharmaceutical care for patient diagnosed with anxiety or depression:

"once they're in the clinical pharmacist's system is it easier for these patients to access the clinical pharmacist in terms of appointment"

(P.10, p.27)

Expected Impact 5: Patient health and well-being

Some short-term impacts of projects on patient health and wellbeing were articulated by key informants. For example, the impact on patients in Project 8, A&B: Pilot of Buurtzorg Model, was around a reduction in the flow of health and support staff through the patient's home:

"For me medium-term is a patient focused one and a service-user focused one, that there's less traffic going into their homes"

(P.8, p.35)

A wide range of benefits to patients was identified by early treatment of mild depression and anxiety for Project 12, CBT Mastermind Programme, Project 13, Project Manager for Mindfulness Network and Decider Life Skills Service and Project 17, Development of Capacity to Deliver Behavioural Activation Support):

"we know that by dealing with that quickly then it prevents chronicity of illness, it prevents more social aspects from developing, reduced medication, better wellbeing … being more active, enabling them to continue in work"

(P.12, p.25)

Expected Impact 6: Use of technology

Technology was used in projects for several purposes. For example, video conferencing kits in GPs surgeries were purchased as part of Project 5, N&W: MDT Working to help isolated primary care staff in a GP cluster avoid working in isolation:

"they share some of the same challenges in terms of secondary care and referral patterns and … so rather than them working in silos they can actually share, so what we're encouraging them to do when the kit's there is to actually have a cluster session where all three in the north and the operational unit are linked in to share what they've done, what works, because they do share so many of the same issues"

(P.5, p.4)

Another purpose of technology was to improve access to, and choice of treatment by offering online support alongside or as well as face-to-face support. For example, Project 13, Project Manager for Mindfulness Network and Decider Life Skills Service, aimed to improve use of technology to provide access to MH intervention materials and for online booking for group therapies:

"in a year, 18 months' time we can have a Website up and running where all the material, so if you're referred to us, we say "right, so you've been referred for depression … this is what's available in your area, and not only that this is what it means," so you can download the pathway if you want, so you'd get all the information there and then, you can sort of say right, this is the workbooks that you need to work your way through and so on, and this is what you'll get in the group itself and, so we can say "right, so here you are," so no matter where you come in it's best practice, it's evidence based, all our folks are up to the required standard and we're going to deliver it, either in your … in your own patch or if you're happy to travel, then come through"

(P.13, p.17)

Expected Impact 7: Families

Some key informants perceived that their project would have a positive impact on families. For example, in Project 6, Quality of Urgent Care Centres staff described how changes to out of hours working was believed to streamline the process for families using the service:

> *"what we found is it's taking about 30 minutes out of the process for the families, but it means they only have to answer one lot of questions, and generally speaking the families that have used it have liked it because it quickly gets them somebody who can answer a question on the end of a phone"*
>
> (P.6, p.5)

3.2.6 Local evaluations

Five out of 20 projects reported planned self-evaluations:

Project 1, Moray Firth: Cluster Development;
Project 9, A&B: Development of Urgent Care Consultations;
Project 16, Fit for the Future Services: A Review and Redesign;
Project 18, Staying Well Programme; and
Project 20, Self-Management Course.

Project 20 had also used initial data to produce an interim report. Data were being collected to evaluate the impact of cluster networking events (Project 1), measure patient outcomes (projects 9, 18 and 20), and monitor patient satisfaction to inform future service delivery (projects 18, 20).

In addition, audit data were being used in the CBT Mastermind Programme to quantify the number of staff under-going training (project 12).

3.3 Selecting Projects for Phase 2 "Deep Dives"

Two main factors were taken into consideration to inform a decision by the research team and SG about which projects to include in Phase 2 of the evaluation: project status and barriers to implementation and project potential to transform primary care:

3.3.1 Project status and barriers to implementation

An implementation stage system was used to assess each of the test of change projects in relation to stage of implementation at the end of Phase 1 of this case study (Table 3.4):
13 were Implemented , **6 Partially implemented** or were in the early stages of set-up and **1 had not started/stopped**.

The remaining test of change was classified **Unknown** (Empowering Localities: Locality Led Design of Multi-Disciplinary Models) because it proved impossible to arrange an interview with a key informant during Phase 1 of this case study.

Virtually all the test of change projects experienced challenges in relation to implementation, but those that were categorised as Partially Implemented appeared to encounter barriers that significantly hindered progress.
These barriers related to recruitment and appointment of staff, inadequate project leadership, lack of time and competing workload and are described below with relevant quotations from key informants.

Test of change projects that required the appointment of new staff experienced challenges associated with producing job descriptions and recruiting highly skilled staff:

"it really was, that whole chunk of time that was involved with going through Agenda for Change, writing a Job Description, that we couldn't utilise other health boards', it wasn't acceptable, so we had to write it ourselves, so it's a lot of duplication … it went through twice"

(P.12, p.4)

" we're very short of having nurses recruited.., we're looking at somebody that's got clinical credibility and expertise that can actually speak with GPs, can actually make it meaningful and actually support ,..we actually want to be able to send a person out who's pretty robust… to support a challenging workforce who are at the far end of crisis and, you know, struggle, and we want them to be a robust facilitator …"

(P.9, p.26)

The tight timescale to apply for PCTF or PCMHF meant that ideas for test of change had to be generated quickly and some key informants perceived that there was very limited time available for detailed project planning or preparation. Hence, confirmation of funding was both a pleasant surprise and cause for anxiety in that time had to be created within existing workloads to deliver the projects. Key informants expressed a desire for a longer lead in time prior to the start date for a project to allow planning and preparation tasks to be completed:

"I think as part of the application process that we should have a section round about, it's not just about putting in a bid, it's about, when it came to me we didn't even have a Job Description … and we couldn't take on anybody else's 'cause it was such a new initiative round the country, so actually the money was there for a year, time was ticking. The Agenda for Change process is quite considerable and eats into a lot of that time, so for me any bids that go through, alongside that bid there should be the Job Description, the advert, there should be a plan for carrying forward, because this money ends and we have no additional resource after that, but we now will have an established service"

(P.12, p.3)

A further challenge around the application process was that there was insufficient time to engage with stakeholders and involve them in the application process. Consequently, this meant that staff had then to 'win over' individuals who were integral and critical to the success of the project after the project had started:

"I just honestly think that at this moment our big thing is about getting everybody on-board."

(P.12, p.39)

"*I was keen to try to get the GPs more engaged in the process as well … A bit more ownership, and also a bit more, an incentive for them to actually just start …"*

(P.19, p.3)

The challenge of integrating project activity into existing staffing structures was highlighted by some key informants. This seemed to be especially pertinent to small teams in rural areas. Some individuals had to fit in the management of the project on top of their existing heavy workload:

"We've already got somebody who's doing it on a part-time basis in amongst their own work, but again when it comes to these kinda systems you need somebody checking that system every single

day."

(P.12, p.4)

3.3.2 Project potential to transform primary care

Each project was assessed in terms of its potential to be transformative, which was defined as potential to improve primary care service delivery and/or patient outcomes (Table 4, column 5). Three of the test of change projects concerned GP Clusters Development. Clusters are a relatively new approach in Scotland to improve primary care and, therefore, can collectively be considered novel. However, it is unknown if activities by the Clusters will actually deliver transformational change and address key SG policy and agenda. Some projects were classified as potentially transformative by virtue of being novel. Some projects were novel because it involved setting up a service that had not been introduced in Scotland before or were considered novel to the health board for example, the ITR and the Buurtzorg project appeared to be novel. Other projects were applying existing tried and tested procedures but in novel and innovative ways e.g. using financial incentives to increase the number of Anticipatory Care Plans. Some of the test of change projects could be characterised as 'improvement' rather than 'transformative' in that they focused on potential solutions in response to local circumstances. These included the Primary Care-led Dementia Diagnosis and Support, the Specialist MH Pharmacist in Primary Care and the Development of MDTs in MH.

3.3.3 Project selection for Phase 2

The assessments of the implementation status and its potential for transformational change were used to inform considerations for the selection of projects for more in-depth exploration (the deep dives) in Phase 2 of this case study (Box 3.1). These were:

- Moray Firth Interface between Primary and Secondary Care (NHS Highland)
- A&B CBT Mastermind Programme (NHS Highland)
- Staying Well Programme: (NHS Western Isles)
- Self-management Programme (NHS Western Isles).

Box 3.1 Status Report at End of Phase 1 of the Case Study (February 2018)

Project (Reference Number	Test of Change Name	Components	Status at end of Phase 1	Assessed Potential for Transformational Change and/or Notable Feature
1	Moray Firth Cluster Development	Multi-disciplinary Networking events for Cluster Leads; Leadership Training for Cluster Leads	**Implemented**	Bottom up approach, where GPs make decisions as opposed to the health board or other, seems to be an interesting and effective approach to change. To date, it is unknown if activities by the Clusters will deliver transformational change and address key SG policy and agenda.
2	Moray Firth: Enhanced ACP	Incentive payments to GP practices for ACP	**Partially Implemented**	Financial incentives for GP behaviour change are not novel but applied to ACP is novel.
3	Moray Firth Interface between Primary and Secondary Care	ITR and digital tools to share information and clinical advice	**Partially Implemented**	Secondary care tests previously undertaken in GP practices to be performed in a secondary care-funded ITR by community nursing teams. This is novel. An advice gateway - advice from secondary care to GPs in order to prevent GPs making referrals to a consultant is also novel. This is novel.

Implemented: projects or tests of change that have been implemented and which may or not benefit from help to evaluate.
Partially Implemented: projects or tests of change that are still planned but which are still in the planning stage or early in the implementation process, and which may or may not benefit from help to evaluate.
Not started/Stopped: projects or tests of change that have been abandoned during the planning stage or early in the implementation process
Unknown: still to be determined

Project (Reference Number	Test of Change Name	Components	Status at end of Phase 1	Assessed Potential for Transformational Change and/or Notable Feature
4	N&W Cluster Development	Multi-disciplinary networking events and leadership training for Cluster Leads	**Implemented**	Bottom up approach, where GPs make decisions as opposed to the health board or other, seems to be an interesting and effective approach to change. To date, it is unknown if activities by the Clusters will deliver transformational change and address key SG policy and agenda.
5	N&W MDT Working	Video-conferencing (VC) equipment for each GP Practice	**Partially Implemented**	VC in healthcare is not novel. Yet, use of VC in this region is novel and could transform local practice.
6	N&W Quality of Urgent Care Centres	Audit of Out-of-Hours (OOH) Care Kits	**Implemented**	Out of Hours Care Kits are not novel. Yet, purpose of OOH Care Kit audit is to reduce variation in practice, which is novel.
7	A&B Cluster development	Cluster Quality Lead invited to the GP Clinical Forum; Cluster Development Day; Funding for the Cluster Quality Leads to attend the monthly Locality Planning Groups	**Implemented**	To date, it is unknown if activities by the Clusters will deliver transformational change and address key SG policy and agenda
8	A&B Pilot of Buurtzorg Model	A Quality Improvement Lead to deliver the neighbourhood teams model	**Partially Implemented**	There is potential for transformational change in delivering community-based health and social care.

9	A&B Urgent Care Consultations	ANP hours; direct access to a physiotherapist 2 days a week; social prescribing by Link Worker 1-1.5 days a week; and extended GP appointments	**Implemented**	Improving access to physiotherapy and introducing social prescribing is novel locally.
10	Specialist MH Pharmacist in Primary Care	2 MH pharmacist weekly visits to 2 GP practices; patient information leaflet; educative and supportive input to nursing and GP; survey educational needs of the of primary care pharmacists; audit of patients' health checks	**Implemented**	Bringing secondary care into primary care setting to allow quicker access to appropriate medication is novel.
11	Everyone's Business	MH training which has upskilled staff (this included hospital staff, and partners in Police Scotland and independent partners); The pathway and crisis framework	**Implemented**	MH champions recruited and networks of practitioners with an interest in MH created to increase MH awareness and build confidence in dealing with MH crisis out of hours; A package which can be delivered to support primary care in relation to supporting MH care in communities; Reducing the incidence of crisis
12	CBT Mastermind Programme	Administrator; link e-CBT to existing self-help workers; promotion to GP practices	**Implemented**	Implementing a standard service model at local level. CBT not novel.

13	Mindfulness Network and Decider Life Skills Service	Project manager post; establish Mindfulness Network; implement Decider Skills package	**Implemented**	Focus on fidelity to model, quality and ensuring access across whole region.
14	Developing MH MDTs	Experienced social worker to raise awareness and train other members of the MDTs in the development of Self Directed Support packages for people with MH	**Partially Implemented**	Unique local and dispersed rural context.
15	Empowering Localities: Locality Led Design of Multi-Disciplinary Models	Establish an Isles Network of care with rural generic support workers	**Stopped/ not started**	No data available
16	Fit for the Future services: A Review and Redesign	A report to inform MH service improvement in Orkney; implementation of the report's recommendations	**Implemented**	The report itself is complete. Implementation of the recommendations may change in response to the input from stakeholders or efficiency savings within the service.
17	Development of capacity to deliver behavioural activation support to people	Project management time	**Partially Implemented**	Unique multiple island context (service delivered in smaller islands off Shetland mainland).

18	Staying Well Programme:	Project management time; specialist 'Staying Well' nurse time	**Implemented**	'SWAN' role development to directly relieve pressure on GP workload.
19	Primary Care-led dementia diagnosis and support	Dementia specialist nurse time	**Implemented**	Bringing secondary care to primary care and community setting. Unique local context.
20	Self-management course	6-week self-management courses	**Implemented**	Unique local context.

3.4 Summary of Phase 1

A total of 20 tests of change projects were identified in this case study, all of which were funded by PCTF or PCMHF. No additional primary care tests of change were identified that were funded by alternative sources. The ITR space in the RNI community hospital was set up with PCTF, staffed by community nurses, costs of procedures and tests carried out in the ITR are funded by secondary care. SG funding was used by projects for the purposes of professional networking, staff education and training, staff incentives, staff appointments, increase staff hours, staff meetings, IT, audit and evaluation. Twelve pilot projects were located in rural areas, 5 in urban areas and 2 were based in both a rural and an urban area.

The H&I test of change projects were aimed to address SG PCTF themed work-streams including MDT working (9 projects), GP Clusters (3 projects), MH (9 projects), improved pharmacy and prescribing models (5 projects, supporting citizens (4 projects) and technology (5 projects).

Expected impacts of these projects included i) workforce development, training and team building, ii) reduced GP and GP practice workload, iii) multi-disciplinary working, iv) access to services and service development, v) patient health and well-being vi) use of technology vii) families.

Only 5 out of the 20 projects had planned evaluations.

Using the implementation stage system, 13 projects were classified as Implemented, 6 were classified as Partially Implemented or in the early stages of set up and 1 was classified as not implemented. Barriers to implementation and progress related to recruitment and appointment of staff, inadequate project leadership, lack of time and competing workload and are described below with relevant quotations from key informants.

It was difficult to assess how transformative the projects are likely to be for primary care because this evaluation was conducted in the early stages of their implementation. Nonetheless, some could be considered as potentially transformative for rural primary care by virtue of being relatively novel in Scotland such as GP clusters, ITR and the Buurtzorg project.

Based on their progress and potential to be 'transformative', 4 tests of change were proposed by the research, and accepted by the SG, for more in-depth exploration (deep dives):

- Moray Firth Interface between Primary Care and Secondary Care: Investigation Treatment Room (NHS Highland, funded by PCTF)
- CBT Mastermind Programme in A&B (NHS Highland, funded by PCFMH)
- Staying Well Programme (NHS Western Isles, funded by PCTF)
- Self-management course for patients with long term conditions (LTCs), minor MH problems and physical symptoms (NHS Western Isles, funded by PCFMH).

2 PHASE 2 FINDINGS

Of the four-primary test of change projects that were selected for more in-depth exploration during Phase 2 (early November 2017 to end of May 2018) of this case study, 2 were located in NHS Highland and 2 in NHS Western Isles. The rationale for their selection for more in-depth exploration is outlined in Box 4.1.

Box 4.1 Rationale for the Selected Deep Dive

Moray Firth Interface between Primary Care and Secondary Care (NHS Highland)
This test of change has the potential to reduce GP workload by (i) the use of an advice gateway between GPs and hospital consultants with the aim of avoiding unnecessary referrals to secondary care, and (ii) use of an ITR for procedures requested by hospital consultants that traditionally were done in General Practice. Overall, the aim is to improve the patient journey through the care system as well as the flow of information and advice between primary and secondary care.

A&B CBT Mastermind Programme (NHS Highland)
This test of change has the potential to provide evidence about the challenges of implementing a nationally recommended programme in a rural primary care context

Staying Well Programme (NHS Western Isles)
This test of change comprised a nurse-delivered, GP supervised, pro-active monitoring and management of patients with long-term conditions. It has the potential to provide evidence about the practical implementation of advanced nursing roles and the impact on the GP practice and patients.

Self-management Programme for Patients with Long-term Conditions, Minor MH Problems and Physical Symptoms (NHS Western Isles)
This test of change has the potential to provide evidence about the impact of a new GP approach to supporting patients, who may have complex needs, to contribute to the management of their problems.

In addition to the sources of evidence used in Phase 1 of this case study**,** this section draws on evidence obtained from focus group discussions or individual interviews with 73 key informants:

- Moray Firth Interface between Primary Secondary Care (NHS Highland)
  32 key informants participated in 4 focus groups and 7 participated in individual interviews. They represented GPs, hospital consultants, GP practice managers, GP practice nurses, community nurses and administration staff who work in the ITR, and members of the Inner Moray Firth Operational Unit management team.
- A&B CBT Mastermind Programme (NHS Highland)
  5 key informants participated in individual interviews. They represented Cognitive Behavioural Therapists, Primary MH Care Workers, Project Coordinators, and Local area Managers. Despite multiple requests to GPs, no GPs participated in the evaluation (some GPs were using the

Computerised Cognitive Behavioural Therapy (CCBT) programme but all declined to answer requests for evaluation participation or said that they were too busy to take part).

- Staying Well Programme: (NHS Western Isles)
  16 key informants participated in 17 individual interviews (one interviewee had a further interview to include additional information about the project). They represented health board managers, GPs, SWANs and enhanced role practice-based nurses), GP Practice receptionists, a GP practice nurse, a GP practice manager.
- Self-Management Programme for Patients with Long-term Conditions, Minor MH Problems and Physical Symptoms (NHS Western Isles)
  20 key informants participated in 2 focus groups and 15 participated in individual interviews. They included GPs, ANPs, administrative staff, NHS and GP managers, hospital consultants, and members of third sector organisations for people with LTC.

For each selected 'deep dive' test, an overview is first provided in relation to location, target population, rationale, and component parts. Thereafter, the findings of the 'deep dive' are in relation to implementation, expected and actual impacts, unintended consequences, planned local evaluations, and likely sustainability and expansion.

4.1 Moray Firth Area Interface Between Primary and Secondary Care (NHS Highland)

This project was situated in the Inner Moray Firth area, the most densely populated part of the Highlands, with a population of 156,736. This area includes accessible rural areas according to the SG 3-fold Urban Rural Classification [35, 36] as well as the city of Inverness and settlements of 3,000 or more people. Inner Moray Firth is delineated within the South and Mid areas of NHS Highland.

The Inner Moray Firth Operational Unit provides community care around locally-based integrated health and social care teams and 6 community hospitals in this area. NHS Highland's only District General Hospital, Raigmore Hospital, is situated in this area. Since 2015, Raigmore Hospital has been managed as part of NHS Highland's Inner Moray Firth operational unit. This arrangement brings together acute, primary, community and social care services, with budgets, management and clinical leadership across the whole patient pathway, falling within the one unit.

The Inner Moray Firth has a younger age profile than the H&I but a marginally older profile than Scotland as a whole. There has been an increase in the ageing population in this area; the population aged 65 years and over increased from 15.9% in 2001 to 17.6% in 2011, while the population aged between 45 and 64 years increased from 26.7% to 29.0% [53, 54]. Given this increase in population age, there is likely to be increasing demand on health and social care services.

This test of test of change project was designed to address 2 issues:

1. A reluctance from some GP practices to carry out procedures (e.g. blood tests) requested by secondary care and a resultant 'crisis' within the care system.
2. Increase in GP referrals for secondary care investigations due to lack of timely access to advice from (or consultation with) hospital consultants, and the resultant pressures on GP workload, and patient waiting times for investigations, results and subsequent management.

The project comprised 2 components:

- Investigation Treatment Room (ITR), which sought to alleviate the pressures on GP practices associated with responding to secondary care requests for blood tests and other treatments
- Advice Gateway, which sought to facilitate communication between GPs and specialist hospital consultants.

4.1.1 Implementation

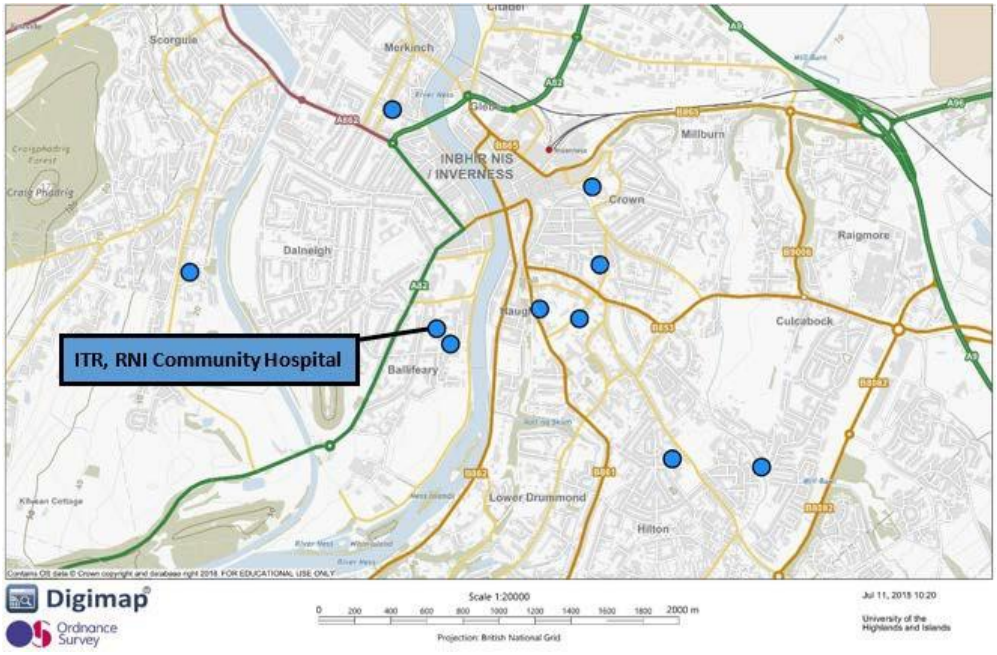
The ITR was established in March 2017 to accept referrals from secondary care hospital consultants for blood tests and procedures (e.g. wound dressings). This test of change involved patients from 15 GP practices dispersed across the Inner Moray Firth area attending the ITR for procedures requested by hospital consultants. Previously the hospital consultants would have requested the patient's GP practice to undertake these.

A key informant reported that GPs had been offered the choice of receiving funding directly to operationalise this new service or have it funded, implemented and managed through secondary care:

> *'all of the GPs in Highland … were given the choice of the funding going to GP practices or to the Health Board, the GPs said they did not want the service to be based in their surgeries so the board took it on.'* (P.3)

Consequently, it was set up by the health board within an existing NHS community hospital site in the west side of Inverness, and accepted hospital consultant referrals of patients registered with 15 GP practices across the Inner Moray Firth area (Figure 4.1).

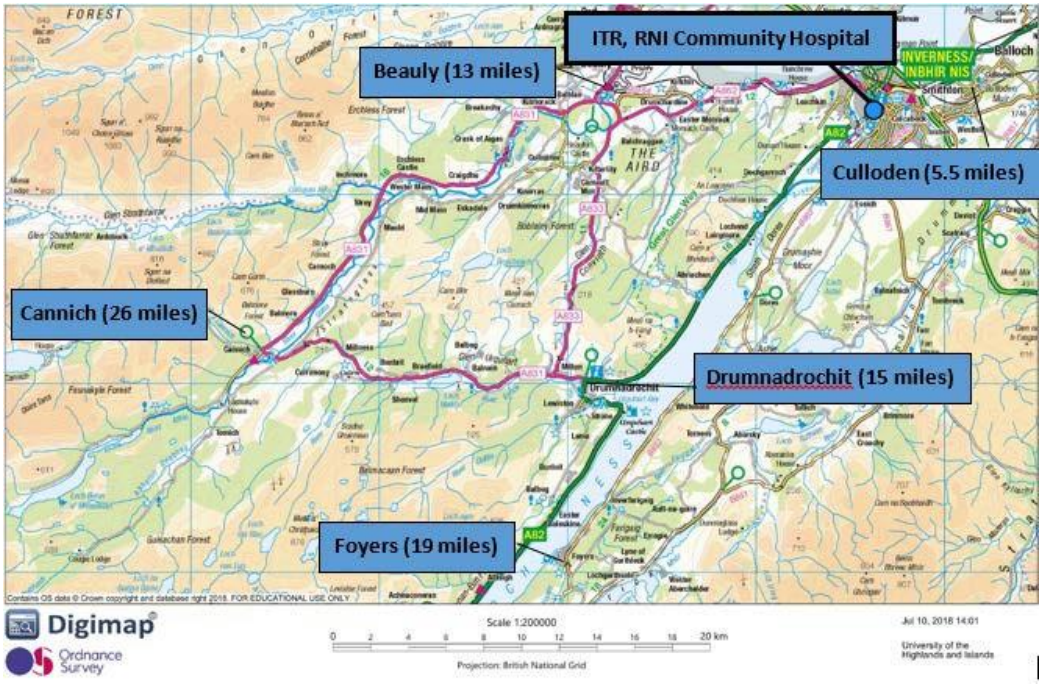
Figure 4.1 Location of ITR in Relation to Inverness GP Practices



The location of the ITR in relation to the peripheral GP Practices or branches it serves is illustrated in Figure 4.2.

The ITR was initially staffed by 1 full-time Band 5 staff nurse and two part-time administrators with district nurses providing holiday cover. Six months after it was established, a part-time phlebotomist position was created to work alongside the staff nurse.

Figure 4.2 Location of ITR in Relation to peripheral GP Practices or branches



Despite recognition that the introduction of the ITR required, '*quite a significant change in practice*' (P.3, p.10) there were no launch events for GP Practices and other services or public or patient information activity.

In Phase 1, key informants identified an Advice Gateway as a component of the Interface project. Phase 2 key informants however, focussed exclusively on the ITR which reflects the controversies surrounding its introduction, many of which are articulated below.

4.1.2 Expected impacts

According to key informants, the expected impacts of the Moray Firth Interface between Primary and Secondary Care test of change project were in the:

Short term: increased number of patients being tested at the ITR and perceived improved communication between primary and secondary care.

Medium term: fewer hospital admissions and referrals, improved efficiency in the patient journey and the opportunity for GP's to provide more patient-centred care due to reduced work load.

Long term: enhanced relationships between primary and secondary care staff, workforce development, and ultimately, retention and recruitment of GP's in this area.

4.1.3 Actual impacts

In relation to the short-term expected impact of an increased number being tested at the ITR, data on ITR activity showed rapid uptake of the service whereby it was considered to be operating at full capacity within the first few months of implementation, with a mean number of patient attendances at

406 per month. A total of 4,472 patients attended the ITR in the first 10 months of operation (March 2017 to January 2018) (Table 4.1). The number of patients attending the ITR peaked at 569 in August 2017.

Table 4.1 Number of ITR Attendance per Month

YEAR	2017										2018	Total
Month	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	
Number of Attendances	32	162	349	440	472	569	530	480	516	396	525	**4,472**

A comprehensive range of secondary care departments or specialties referred patients to the ITR including Accident and Emergency, Cardiology, Colorectal, Day Care Unit, Dermatology, Diabetes, Dietetics, Eating Disorder, Endocrinology, ENT, Gastroenterology, General Surgery, Haematology, Infusion Suite, Neurology, Oncology, Ophthalmology, Orthopaedics, Plastic Surgery, Renal, Respiratory, Urology, Vascular, and Weight Management.

The procedures undertaken in the ITR were blood tests, suture removal, and wound dressings. The ITR staff capacity for appointments per day was 24 for a nurse and 14 for the phlebotomists.

At the time of Phase 2 for this evaluation, data on GP Practice activity had not been collected to inform a measurable impact of this test of change project on their workloads. However, the high levels of activity in the ITR suggest that the volume of workload created by secondary care requests for procedures in GP practices was likely to have been significantly reduced. Key informants were divided in their opinion about the impact of the ITR on GP workload. There were clear differences in opinion of all 15 GP practices on the workload impact of the ITR. Differences were identified between the key informants representing urban inner-city areas of Inverness, towns on the outskirts of the city, and more rural village areas. Key informants representing:

- urban areas of Inverness believed that the introduction of the ITR had '*created more scope for us to do our* (GP) *own work'* (P.3, p.1) and described a sense of '*relief*' as a result of having some of the burden of responsibility for secondary care testing and interpretation of results removed from their workload. Some were hesitant to describe the impact of the ITR as reducing their workload because previous demand had exceeded capacity for tests and instead described its impact as '*it's just given us that bit of space to actually meet demand.'* (P.3, p.1).
- outlying larger towns did not perceive a reduction in GP workload. Indeed, some perceived an increase in their workload due to duplication of tasks at the GP practice and the ITR was perceived to have increased administrative tasks and increased the time explaining to patients they had to now go to a different site for procedures that had previously been conducted in the GP practice. For some, the ITR had created more stress and difficulties, '*just got a bit of hassle out of it*.' (P.3, p.3).
- rural village areas had not noticed any reduction in their workload (P.3, p.2; P.3,p.2) and could see '*no benefit*' (P.3, p.11) in the new model.

In relation to the expected short-term impact of improved communication between primary and secondary care**,** communication about the ITR between the sectors was reported to be inconsistent and inadequate (P.3, p.7) and this had caused some confusion, *'sometimes we're not entirely sure what*

bloods need to be done but usually there's something from the ITR that says this patient is meant to have whatever, we then do it, but we can't put the consultant's name on the form because it's us that's requesting it, so of course results come back to us' (P.3, p.2). There were similar frustrations about poor communication from the primary care sector to the secondary care sector. For example, a key informant reported that in some cases, the first time that hospital consultants were made aware of the ITR followed receipt of letters from GP practices informing them that they no longer carried out certain procedures and this had caused *'a lot of unhappiness'* amongst hospital consultants (P3, p.7).

Additional problems relating to poor communication were repeatedly associated with the lack of consultation with communities, patients, GP practices and other services about the introduction of the ITR. Key informants expressed the view that the ITR clinic had been set up *'in a rush'* (P.3, p.2) and having been given *'no warning'* (P.3, p.5) about it. Some key informants described the implementation of the ITR as '*forced*' (P.3, p.4) and '*imposed*' (P.3, p.7). Some described the process of implementing the ITR as *'badly designed'* and *'inefficient'* (P.3, p.5) *and 'chaotic.'* (P.3, p.6).

The referral criteria for the ITR was described as *'very rudimentary'* (P.3, p.8), and there was a lack of clarity about the type of patient who should attend, from which secondary care specialty, and what kind of procedural tasks were to be carried out there. For example, the age range for patients attending the ITR was 16 years and over, and this had caused some confusion when secondary care consultants had referred younger patients to the service. Patients under 16 years who had attended the ITR were refused treatment for procedures, including removal of sutures from head injuries initially treated in casualty, and were re-referred back to the GP practice. There was also confusion about administrative changes to the referral process, whose responsibility it was to refer, and to follow up the test results. These experiences appeared to contribute to the ITR being labelled as '*controversial*' (P.3, p.8).

There was also a lack of clarity about whose role it was to inform patients and staff about the change to the patient pathway. Some GPs and hospital consultants described their experience of finding out about the ITR after it was already up and running, or via an email stating that the ITR had begun without being involved in the planning, discussion, negotiation process or *'idea of the impact it's going to have.'* (P.3, p.6). One member of a GP Practice described first finding out about the ITR when a patient entered the GP practice, '*…all guns blazing'* (P.3, p.11) asking why the practice was no longer willing to do blood tests at the surgery.

There was a general feeling that the wider community should have been informed of this change in the form of a local press release and that a patient information leaflet should have been devised.

In relation to the perceived impact on GP Practices, some key GP informants expressed the view that the addition of a third site for patients to travel to had removed an '*element of care from the community*,' (P.3, p.3) and was to '*the harm and detriment of general practice'* (P.3, p.3). This experience had brought to the forefront issues with the new GP contract and exemplified unwanted changes to the way general medicine was practiced. This was particularly salient for GPs in more rural areas who articulated concern about the future and how to '*fit into society as a General Practitioner'* due to the perceived unwelcome decisions that had been made on their behalf and by the '*attitude of the people negotiating for us'* (P.3, p.2). GPs in more rural sites were accustomed to fitting their practice and clinics around patient travel times due to the practice boundary area for their surgeries covering remote geographical locations and thus saw their way of working as patient-centred and holistic. They viewed the ITR model as opposing the way that they approached, viewed and practiced primary care medicine.

In relation to the perceived impact on secondary care, some key informants described how the ITR had impacted on hospital consultants in different and unequal ways, depending on the medical specialty in which they worked. Some held the view that the implementation of the ITR had not '*necessarily planned for all the eventualities of different specialities*' (P.3, p.7). For hospital consultants, there was a perception of increased administrative workload associated with identifying which patient resided in the Inner Moray Firth area who should be referred to the ITR and which patients resided in other areas of NHS Highland who should be referred to their GP practice.

There had also been a perceived increase in workload for consultants when patients required a considerable amount of complex blood testing and management. Consultants whose patients had long-term chronic conditions had found the change more difficult to manage than those whose patients attended the ITR for a 'one off' visit, for example, a post-op surgical wound check-up.

In relation to the perceived impact on nursing workload, all GP participants identified that the implementation of the ITR had created a transfer of workload into secondary care, and in particular, an increase of workload 'sideways' onto nursing staff and those community nurses staffing the ITR clinic.

One GP articulated that there was '*a feeling of robbing Peter to pay Paul'* (P.3, p.1). For example, secondary care specialist and senior nurses were given the responsibility for the administrative tasks involved in referrals and in communication with the ITR, but this was not always viewed as the best use of their time. Consequently, some hospital departments had employed additional band two nursing staff to support these tasks. A district nurse manager was given responsibility to set up the ITR, and administrative staff and nurses from the district nursing team were responsible for organising and delivering patient care in the ITR. It was reported during key informant interviews that they had been given a 3-week timescale to implement the ITR, however, it had taken 3-months for this to happen. Inadequate infrastructure, particularly in relation to IT, posed challenges for the ITR staff. For example, the lack of an electronic booking system and IT support meant that, for the first 7 months, they had to rely on paper diaries for booking appointments and make repeated phone calls to patients to arrange their appointments. One key informant felt that the ITR had been implemented and was running due to *'pure graft and resilience'* (P3, p.8).

There was a perceived increase in the district nursing workload as a direct result of reallocating some existing district nursing team members to resource the ITR. It was reported that district nursing staff were '*working very much at full capacity and beyond*' (P.3, p.1.3) and this created a strain on some working relationships. There was a lack of clarity about how incorporating the tasks requested by secondary care consultants fell within a district nursing model and what this meant for the future:

> *'how does that fit in with any District Nursing model, how does the ITR clinic fit into District Nursing development?'*
>
> (P.3, p.8).

The levels of activity and staff needed to run the ITR had been *'underestimated*' (P.3, p.10). It was reported that ITR staff had regularly worked out with their allotted hours and through breaks in order to meet the increasing demands of providing the service:

> *'… slot in extra people before the clinic started and work through ... lunch hour and after.'*
>
> (P.3, p.8).

There was a perception that the ITR staff (i.e. nurses) had to deal with significant amounts of negative

feedback about the ITR model, in general rather than the care it delivered, from patients, primary care and secondary care staff.

In relation to perceived impact on patients**,** a survey of a small sample of patients (number = 36) attending the ITR during the early stages of operation found that the majority described their experience of treatment as excellent, caring and efficient, however one had complained about the travel time due to the location of the ITR. Patient access to the service was a contentious issue for the key informants. In addition to the distances that some patients would be required to travel, the ITR site was described as *'probably the most difficult part of town* [Inverness] *to get to'* (P.3, p.1), with poor access via transport links, especially for those patients located out with the urban areas of Inverness. GPs whose practices were located in nearby towns, and those in more rural villages expressed the view that the ITR had created inequity of care due to the difficulties with travel for patients located in these areas. Some more remote areas were only accessed by a '*once a week'* bus service to enable people to access shops in a nearby town but had no bus service to and no taxi service to reach the ITR in Inverness. In other areas the ITR site was reachable by two bus changes which was described as both expensive and inconvenient for patients. It was therefore identified that some patients could not physically travel to the ITR whilst others had refused to go. Patients frequently had to drive or being driven there by relatives or friends. For some patients, for whom previously a blood test had involved travelling to their local GP, the change to the patient pathway now meant a 70-mile round trip to Inverness.

The lack of funding to reimburse patients travel costs and failure to take account of the limited personal resources of patients to manage their conditions, including the workload involved in managing multiple appointments across different sites, were considered likely to impact negatively on health inequalities. This was considered more likely to impact negatively on elderly patients with chronic conditions, those currently on chemotherapy, and patients with mobility difficulties. By way of illustration, one key informant described how an 84-year-old chronically ill, frail patient whose attendance at the ITR for a blood tests necessitated three buses to get there and then another three to travel back home. The patient then had to repeat this process the following day for a Raigmore Hospital appointment, and was '*exhausted'* (P.3, p.8). Both primary care and secondary care service providers described experiences when patients had been '*very upset'* (P.3, p.11), and they believed that patients being required to travel further was *'wrong'* and *'unacceptable'* (P.3, p.2; P.3, p.4). It was reported during key informant interviews that GP practices had received a number of complaints from patients. At the time of evaluation, one practice was dealing with a formal complaint from a patient about the change in service. Key informants from both primary and secondary care perceived patients to *'have a lack of faith*' (P.3, p.6) in their local GP who were viewed as '*just being difficult'* (P.3, p.11) and that the introduction of the ITR model had '*damaged the relationship between GPs and the communities they're looking after'* (P3, p.2). The introduction of an ITR located a considerable distance from patient locale was perceived as working counter to recent guidance such as providing personalised care enabling patients to remain at home, or as near to their home as possible.

4.1.4 Unintended negative consequences

- Implementation - The lack of public, patient and service provider consultation prior to and during the implementation of the ITR was reported to negatively impact on implementation and was in contrast to expected impacts around improving communication between primary and secondary care.
- Impact on GP Practices - There was inconsistency in the use of the ITR; GPs who were opposed to sending patients to the ITR, for a number reason including frailty of patients, challenges

associated with travelling to the ITR site, and patient resistance to the new model, continued to carry out tests and procedures requested by secondary care at their practices. A deterioration in professional relationships was reported and complaints were made by patients to GPs.

- Impact on Secondary Care - Hospital consultants expressed similar concerns relating to perceived fragmentation of patient care and deterioration in primary and secondary care interface. Consequently, some hospital consultant had initially declined to refer patients to the ITR and instead referred patients to GP Practices.
- Impact on Nursing Workload - ITR staff expressed that they had borne the brunt of the negativity surrounding the implementation of this project, dealing with the '*very political*' nature of the test of change alongside resentment, anger, complaints and confusion from patients, management, and from both primary and secondary care staff. Relationships between staff in the ITR, primary care and secondary care had therefore been affected in a negative way. However, the ITR staff were held in high regard by hospital consultants and were repeatedly praised for the quality of their work in a difficult and demanding situation. It was the introduction of the ITR model itself that was viewed as problematic.
- Impact on Patients – key informants reported a range of negative impacts on patients; additional appointments in a different location where before they would see the practice nurse locally, difficulties in accessing the service in relation to distance and lack of public transport, and confusion about the change in a service and absence of information about the change. The most negative impacts were experienced by patients from peripheral practices and patients who were frail or weak as a result of their condition.

4.1.5 Planned local evaluations

For the ITR, self-reported evaluation using 36 patient satisfaction surveys had been conducted using a sample of patients attending the ITR during the early stages of its operation in June 2017. Most patients described their experience of care within the ITR as excellent, caring and efficient, however one complained about the travel time due to the location of the ITR. Data is routinely collected about the number of types of ITR appointments. No other evaluation was reported.

4.1.6 Sustainability and likely spread or rollout

Based on the key informant interviews, the introduction of the ITR was without doubt divisive. Nonetheless, despite the strong criticism of the ITR, some hospital consultants expressed that they had become used to the process of referring patients to the ITR and identified positive aspects such as good wound care. Key informants reported that the clinic was now '*calm … and run on time*' (P.3, p.8) thus facilitating good relationships with the patients attending. One key informant from an urban GP practice felt that the ITR model had become a *'normal and embedded'* practice (P.3, p.1), although hospital consultants expressed concern that GP locums may be unaware of the ITR model that was used in NHS Highland. Thus, the ITR was still operational at the time of reporting, and there were plans to sustain it in the Inner Moray Firth area and to roll out the model into areas of NHS Highland. These plans were justified as they were considered in line with the future direction for primary care in the new GMS contract [55] (P3, p.9), and perceived need to meet the '*increasing workload*' (P.3, p.9) in primary care. Planning and preparation were underway to support this change to primary care in other areas of NHS Highland.

Opposition to these plans was evident. GP practice key informants expressed concerns about the risk of vulnerable groups of patients and those with young families falling *'through the net'* (P.3, p.2) if they had to go elsewhere for tests and treatments and found travel to the ITR difficult. More rural GPs were

concerned that the uptake of vaccinations would plummet if the responsibility for these were moved to an ITR. Indeed, such was the strength of feeling about the ITR model that one GP practice had begun its own patient consultation about the ITR, and this had gathered some local press attention [56]. Safety and governance issues were raised if patients refused to go to the ITR, and GPs refused to provide testing at the GP practice. It was recognised that this was still '*a very grey area'* (P.3, p.3) that had yet to be negotiated. Hospital consultants were concerned that the roll out of the model across wider geographical areas may create a '*dramatic increase'* (P.3, p.6) in their workload. Generally, key informants believed that the success of ITR implementation would be dependent on location; the more remote and rural location of the patient, the less effective the model.

4.1.7 Key findings

- Inadequate public, patient and service provider consultation had been carried out before and during the implementation of the ITR. Consequently, a great deal of frustration and difficulty was reported from all stakeholders concerning this unanticipated change to a referral or treatment pathway.
- The ITR met the first anticipated short-term outcomes by being fully operational within months of its implementation. No data were available to compare uptake of the service between patients in urban GP practices patients and remote and rural GP practices. There were also no data to assess the impact in relation to changes to GP Practice workload.
- The failure to adequately consult with key stakeholders was perceived to be directly related to deterioration in communication not only between primary and secondary care (which was counter to the second anticipated outcome of the ITR).
- Perceptions of impact of the ITR differed between urban and remote and rural GP practices, whereby the latter were more likely to believe that it would have a negative impact on access to care because patients would now have to travel a longer distance for a procedure that in the past was carried out at their local health centre. It was reported that GP practices had received a number of complaints from patients.
- There was a perception that the ITR shifted how consultants and GPs worked together to treat a patient. Consultants referred directly to the ITR, thereby removing the patient's General Practice from key aspects of their care, which some GPs believed would have a negative impact on the provision of generalist medicine and holistic care.
- The ITR was associated with a perceived shift in workload from primary care nurses to secondary care nurses and ITR staff. Secondary care nurses gained new responsibilities relating to making ITR referrals, and ITR assumed responsibility for booking patient appointments and carrying out requested tests and treatments. There was also perceived impact on the district nurse team relating to staffing the ITR, particularly when required to provide holiday cover for ITR staff.
- Despite evidence that the ITR was divisive, there were plans to sustain the model and roll it out across other areas. Consequently, some of those with negative views appeared to be organising themselves to oppose these plans.

4.1.8 Key Learning

- Given that prior consultation did not appear to take place in Moray Firth, then it may be helpful instead to consult with stakeholders during the planning and implementation phase. This consultation could present an opportunity to share learning and revise referral pathways and protocols.

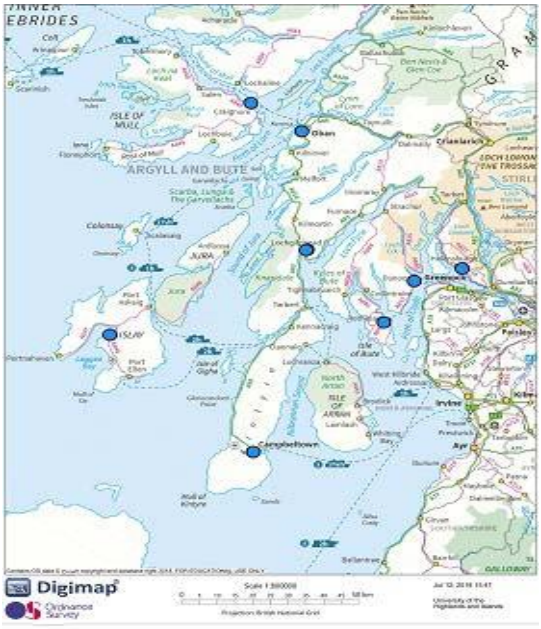
- A whole systems approach for understanding workload may prove useful so that it is clear how change in one part of the system impacts on another part. For example, the health care system as a whole does not appear to have experienced a reduction in workload as a result of the introduction of the ITR but appears to have shifted existing workload with nurses bearing the brunt of an increased workload.
- It will be important to closely monitor unintended consequences, such as the burden placed on patients in rural areas who are now having to travel to an ITR to undergo procedures that were previously done at their local GP practice.

4.2 A&B CCBT Mastermind Programme (NHS Highland)

The population of A&B is 89,590. A&B has the third sparsest population of the 32 Scottish local authorities, with an average population density of 0.13 persons per hectare (Figure 4.2). Twenty five percent of the people living in A&B are aged 65 or over, this is 7% higher than in Scotland as a whole [57, 58]. Between 2014 and 2024 the population of A&B is projected to decrease overall by 3% [59]. The number of working age adults is projected to decrease by 8% but the number of people 75 and over is projected to increase by 36%. In 2015, 35% of deaths in A&B were due to Mental and Behavioural disorders, including dementia [60].

There are four localities within the A&B Health and Social Care Partnership that manage acute, primary, community health and MH services across the region. These localities include Oban, Lorne and the Isles, Mid Argyll, Kintyre and Islay, Cowal and Bute, Helensburgh and Lomond. The geographical context of A&B includes mainland and island areas which are classified as rural, accessible rural and remote rural. The area is served by one Rural General Hospital, 8 community hospitals and 33 GP practices dispersed across the mainland and islands.

Figure 4.3 Map of A&B with Hospital Sites



4.2.1 Implementation

Project 12 piloted a community based CCBT Mastermind programme intervention for individuals with mild to moderate depression and anxiety. The Transformation funds were used to employ an

administrator to guide and support new CCBT users and for computer equipment to facilitate this delivery. Mastermind is a European Commission project which provides CBT for patients with mild to moderate depression in Scotland. The Mastermind project has been developed in four other health boards including: NHS Lanarkshire, NHS Grampian, NHS Fife and NHS Shetland. The work was originally established in NHS Forth Valley and NHS Tayside who have offered CCBT as one of their core psychological therapies since 2005 and 2007. Early trials of CCBT by NHS Forth Valley and Tayside have led to its' adoption by their psychological therapy departments due to consistently effective results.

The use of the mastermind project in the A&B area of NHS Highland is novel to this locality. Mastermind uses the 'Beating the Blues' programme made up of eight online sessions which last approximately 50 minutes. The programme is confidential and available online 24 hours a day and has been recommended for use in the NHS by the National Institute for Health and Clinical Excellence [61]. Patients can be referred directly from NHS 24 to a GP or Community MH Practitioner who can then refer the patient to the mastermind project administrator through the use of SCI gateway software. The mastermind project administrator contacts the patient with an activation code to start the CCBT intervention, feedback about the patient's progress and any risks or improvements are provided electronically to the administrator.

Participants interviewed in Phase 1 of the SSPC research articulated that the motivation for this primary care pilot project derived from three different sets of policy guidelines; The MH Strategy [44], The Psychological Therapies Matrix [43] and the Referral to Treatment standard [45]. The Referral to Treatment 18-week standard is the overarching measure in relation to the stage of treatment standards for diagnostic tests, new outpatient appointments, day case and inpatient treatment. The 18 weeks standard applies to the whole pathway from a referral to the point where each patient is treated. Interviewees in phase 1 of the evaluation recognised that nationally and, in the A&B area it is a challenge to meet the referral to treatment standards for individuals diagnosed with depression and anxiety.

The use of CCBT which is a recognised and validated therapy in the psychological therapies matrix, was perceived as seeking to address both the challenges for waiting times and providing access to a therapy recommended by the MH Strategy. Interviewees articulated that patients in smaller more rural communities may benefit from the anonymity of a self-directed CBT programme accessible at any time from their own homes. Alongside the anonymity the programme may provide, an additional rationale for implementation was the element of encouraging self-responsibility and management of patients' own health and well-being. Therefore, the primary care pilot project aimed to provide immediate and confidential access to CCBT for individuals with mild to moderate depression and anxiety and reduce waiting times for service use.

4.2.2 Expected impacts

The short, medium, and long-term expected impacts of the CCBT Mastermind programme were as follows:

- Short term: immediate access to evidenced-based therapy and early intervention for patients with mild to moderate anxiety and depression in rural communities whom may be reluctant to access, or be seen to access, talking therapy.
- Medium term: improved access to psychological services and improved service development in this area. Online psychological therapy was perceived to facilitate the care management of large patient numbers, and lead to a decrease in workload pressure on General Practices with a reduction of repeated appointments by people with depression and/or anxiety.

- Long term: an increase in patient well-being, empowerment to self-care, reduced chronic medication use and ultimately, sustainability of the programme to enhance access to psychological services in this area.

4.2.3 Actual impacts

Implementation of the project had been delayed by a re-tailoring of protocols for referrals and administrator job descriptions to the local area, and by a subsequent delay in staff recruitment. One project administrator worked 2 days per week for the project. As a result, there was a period of time when no referrals were being made to the CCBT programme despite the resource being available in A&B. Interviewees articulated that the co-ordination and implementation of the project had added workload to those with other roles and responsibilities within the MH team.

The primary care pilot project commenced in February 2017 and at the time of writing this report is currently continuing. The implementation of this project was viewed as a positive experience. The 'Beating the Blues' CCBT has a national implementation manager to assist staff with the roll out of the programme which was viewed by participants as very beneficial. The willingness of the National Implementation manager to travel to remote areas in A&B was seen as beneficial to promote the service to GPs. Interviewees felt well supported throughout the implementation process due to the '*collaborative'* and *'responsive'* discussions with this manager (P.12, p.2). Psychological therapy staff and project co-ordinators who were involved in the implementation of the project attended national meetings, accessed support and information from others and perceived this as a positive first engagement with the programme. Interviewees described a '*willingness*' (P.12, p.2) for this new resource to be made available to patients in A&B; staff were pleased and enthusiastic about the implementation of a new resource that could improve services.

4.2.4 Unintended negative consequences

Very few negative consequences were identified about the implementation and efficacy of the project by interviewees. However, one negative issue identified was possible confusion and reticence of GPs towards referring patients to the CCBT programme. Communication with GPs about the existence of the CCBT programme was important for the uptake of the service. Some difficulty with GP engagement was expressed by interviewees, '*maybe GPs think it is going to increase their workload*' (P.12, p.4). At the time of the evaluation, a newsletter specifically for GPs was being produced to highlight and market the programme.

It was difficult to evaluate the impact and opinion of the CCBT programme for GPs in this area. Despite repeated requests by the evaluation team, no GPs in the A&B area agreed to take part in the SSPC evaluation. Face-to-face marketing was a part of the implementation strategy used to inform GPs about the new online resource. The geography and traveling distances in remote and rural areas to advertise the service in this way was raised as a possible barrier to communication with GPs.

4.2.5 Planned local evaluations

Evaluation is incorporated into the Beating the Blues programme at national level by the Scottish Centre for Telehealth & Telecare. Data can be extracted for A&B and ad hoc reports can be provided as required. No other evaluation plans were reported.

4.2.6 Sustainability and likely spread or rollout

Some interviewees expressed fears that what was perceived as an extremely beneficial service offered to patients would not be continued due to concerns about funding for staff. The CCBT programme was seen as an important resource for patients with mild to moderate anxiety and depression and that this would allow for sustainability of the model as long as staff roles were funded for it. It was articulated that the model had not yet *'reached the peak'* (P.12, p.5) of the ways in which it could be used in A&B, yet insecure funding had seemed to inhibit the ability to grow and sustain the model. Due to structural management and staffing issues at the time of the evaluation it was unclear whether the project was going to continue. There was ambiguity around different NHS departments' involvement in the project, for example, psychological or technological services, and which department had ownership of the model. Patient self-management was viewed by participants as a key component in the sustainability of the model and also for the wider sustainability and future of NHS MH resources. Interviewees were certain in their view that self-directed online services would contribute to a culture shift in the approach of both NHS staff and the general public to psychological services and the treatment of mental ill-health.

4.2.7 Key findings

- The pilot project was perceived to reduce MH staff workload by all interviewees, alongside being used as a way of patients accessing immediate help for their MH problem whilst waiting for appointments to see MH care professionals.
- Online CBT was perceived by all interviewees as advantageous for patients in rural areas who wish to keep their MH problems private and away from the public gaze.
- Online CBT was perceived by all interviewees to improve access to care, which is a particularly important issue for people living in remote and rural areas.
- Local patient feedback data show that people on the CBT course rate their anxiety, depression and stress lower at the end of the course, thereby suggesting that it yields positive health outcomes for patients.
- There was a perception by all interviewees that GP referrals to the programme could be higher and that the online programme would benefit from further publicity.

The CCBT course was used in conjunction with the NHS text message service (FLORENCE) to prompt patients to complete the online programme. Lack of access to technology and fast broadband was a practical barrier identified that may prevent access to online CBT, however team leads had been in touch with local libraries so that patients could have the option of using library IT resources to access the programme. The use of online technologies was viewed as a way of providing more sustainable services for patients in remote and rural context.

Overall, the majority of interviewees initially viewed this change, and the implementation processes, in a positive way. The role of the CCBT project co-ordinator was described as '*really interesting'* (P.12, p.4) and valuable in that it provided direct access to patient responses to the programme through the online patient scores for anxiety and depression and evaluation of each CCBT module, '*I could see how beneficial it was to the patients'* (P.12, p.3). Good communication skills when contacting patients and introducing the programme in the correct way was perceived as important for the success of the project. The model was viewed as constructive and patient-centred. The project was also identified as beneficial for reducing MH staff workload, alongside being used as a way of patients accessing immediate help online whilst waiting for appointments to see MH care professionals. The introduction of online CBT was perceived as additional to primary care MH service for patients. This test of change

was viewed by interviewees as creating the opportunity to align practice in Argyle and Bute with the national MH strategy which was seen as positive step in increasing equity of care for patients in this locale. The CCBT programme was perceived as expanding patient choice, '*we have choices then, people like to learn in different ways'* (P.12, p.2).

The ease of access and '*almost instantaneous'* (P.12, p.4) nature of the patient pathway from referral to therapy was viewed as particularly beneficial. This quick access to therapy was perceived as a useful tool preventing individuals from becoming more unwell and having to access *'a higher tier in our psychological therapies'* (P.12, p.5) thus minimising the severity and duration of their illness. Psychological therapists and MH workers could see the value and efficacy of the CCBT programme and therefore were confident in its use, '*it is clinically proven to work*' (P.12, p.4). Interviewees articulated that patients were receiving '*good sound psychological assistance*' (P.12, p.1), through the use of CCBT. The use of the programme was seen as valuable for patients waiting to be seen by the MH team; when patients attended for appointments they were coming in already with information and a *'better understanding*' (P.12, p.3) of what to expect from psychological therapies. One interviewee described initially using the programme as a way of managing waiting lists but subsequently used it as a '*standalone treatment*' (P.12, p.1).

Interviewees gave anecdotal accounts that in some cases patients had completed the CCBT course and felt that they did not need further assistance from professionals. Words to describe the benefits of the CCBT programme included, '*self-help'* (P.12, p.4) and *'empowerment'* (P.12, p.5). One interviewee described how the successful use of the CCBT programme in guiding patients to have their own '*lightbulb moments'* (P.12, p.1) without the use of a practitioner would lead to a lasting change for the patient. For example, one interviewee reported that a patient whom had previously seen a psychiatrist regularly for two years completed the 'Beating the Blues' programme and felt that the programme had been more beneficial than past therapies. The CCBT programme was identified as giving the patient '*the skills to carry on being his own therapist*' (P.12, p.1). This increased self-care and self-management and was viewed as a significant intervention to reduce the long-term effects of mental illness for patients and consequently reducing the workload on the MH team.

The anonymity and accessibility of CCBT in remote and rural Scotland was seen as particularly beneficial, and more widely as *'normalising'* (P.12, p.1) MH issues in general. The lack of need for travel and the ease of accessing the service from patients own home was seen as extremely helpful due to the '*vast geography'* (P.12, p.5) of A&B, particularly for those living in island populations:

> *'so many people can miss appointments from living in a rural area; whether it's weather conditions or roads, or like the ferries, a lot of people are reliant on ferries, so if you are doing a programme that's so flexible as Beating the Blues, you don't have anything like that to hinder you at all.'*
>
> (P.12, p.3)

Interviewees identified that referral rates to the CCBT programme '*fluctuates, quite dramatically'* (P.12, p.5) from month to month and week to week. This was attributed to surges in uptakes of the programme occurring after marketing strategies had been used to advertise the resource to GPs. However, referrals decreased once marketing strategies had not been employed for a few months. At the time of evaluation, it was reported that a total of 153 referrals, an average of six per week, had been made to the CCBT programme over a timescale of 11 months. Two thirds (67%) of these were female and one third (33%) were male, those referred and using the program were typically young, 64% <46,

84% <56. Those completing the course through to Session 8 took approximately 2-3 months. However, completion rates through to Session 8 were low (Table 4.2).

Table 4.2 Completion Rates of CCBT Program Users in A&B

Session 1	Session 2	Session 3	Session 4	Session 5	Session 6	Session 7	Session 8
75	52	39	32	25	17	14	12

Of those that had completed the full course, anxiety, depression and distress levels had reduced by the last module (Tables 4.3 and 4.4). At the time of evaluation 12 people had completed the full course. The "Beating the Blues" programme asks users to rate their anxiety, depression and distress levels at the end of each online session. This is done using a sliding scale from 1-6 (1 being low level and 6 being the highest level) the higher the number the worse the condition. Data is automatically collected from the online system. These data were retrieved from the Beating the Blues Service Development Manager.
Taken together, these figures provide evidence to suggest high attrition rates, however, those patients completing the programme rated their anxiety, depression and distress levels as lower at the end of the CCBT.

Table 4.3 Anxiety and Depression Scores of CCBT Users in A&B

Anxiety/Depression Levels

	1	2	3	4	5	6	7	8
Anxiety Score	3.47	3.20	2.47	2.80	2.93	2.73	2.73	2.40
Depression Score	5.93	4.60	4.20	4.40	4.13	4.20	4.07	3.60

Table 4.4 Distress Level Scores of CCBT Users in A&B

Distress Levels

	1	2	3	4	5	6	7	8
Problem 1	6.67	4.80	4.47	3.93	4.47	4.27	4.20	4.13
Problem 2	6.07	4.93	4.20	4.93	4.20	3.73	4.20	3.33
Problem 3	6.17	4.25	4.58	4.75	4.17	4.08	3.58	3.42

4.2.8 Key Learning

- Online CBT appears to yield a number of benefits including reduced workload for MH staff, improve health outcomes for patients, greater protection of privacy for patients about their MH problems and speedier access to support. In essence, the key learning from this pilot project is that it appears to work.
- Efforts to increase referral rates may reap dividends for example, great publicity and marketing of the online programme in all A&B General Practices.
- More robust evidence of the effect of online CBT may be required for example, comparing online CBT with usual care.

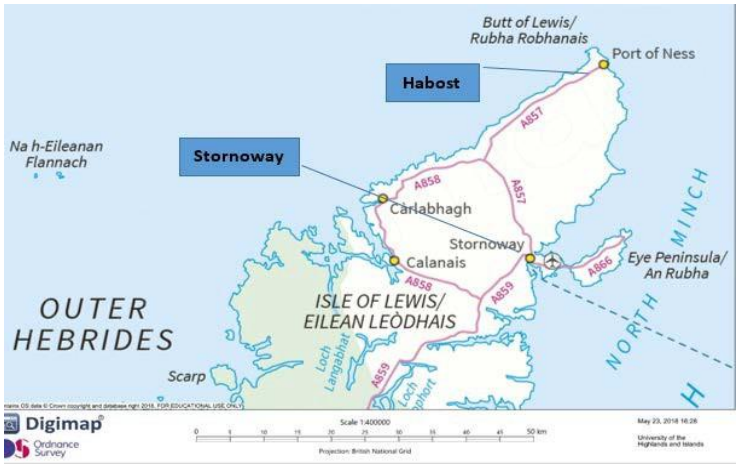
4.3 Staying Well Programme (NHS Western Isles)

Project 18 is situated in The Group Practice, a family medical practice on the Isle of Lewis, which is located in the NHS Western Isles Health Board area. The Group Practice has surgeries in Stornoway and Habost and accepts patients with HS1 and HS2 postcodes and has a list size of approximately 7, 900 patients. Project activity occurs both in the town of Stornoway as well as the rural hinterland included in the practice. Public transport is limited.

The population of the Western Isles is both ageing and declining. Over the 10-year period between 2006 and 2016, there was a decrease in the population below 45 years and an increase in the population of people 45 and above [62]. By 2037, the population of over 65s is projected to rise by 14.7%, compared to a national rise of 8% in the whole of Scotland, to 37.1% of the population of the Western Isles.

The impact of this demographic change on health and social care services is therefore likely to exceed the pressures described in the Audit Scotland report 'Changing Models of Health and Social Care' [63]. There is a high proportion of patients with LTC in the Practice Group where this primary care pilot project was situated, and it is common for patients to have unscheduled admissions to hospital or emergency Out of Hours care and to request home visits. One GP, usually a partner, is routinely allocated as the on-call GP for each day to cover emergency appointments, administrative tasks such as signing of repeat prescriptions, and to cover home visits.

Figure 4.4 Map of Area Covered by The Group Practice



4.3.1 Implementation

The primary care pilot project was initially designed to target clinical support from practice nurses with enhanced skills to patients with long-term conditions LTCs in the GP practice to alleviate the pressure on GPs. These practice nurses were called Staying Well Advanced Nurses (SWANs) or Staying Well Nurses. The support would involve anticipatory and preventative clinical support and was facilitated by the enhanced knowledge and skills the SWAN nurses possessed, for example post-graduate qualification in clinical assessment and non-medical prescribing. The project has built on the experience and training of nursing staff at the practice around out of hours and community-based care. Project staffing initially involved a development post of 22.5 hours (Summer 2016) and thereafter one FTE post (Autumn 2016). While it is acknowledged that SWAN nurses did not strictly fulfil newly established criteria for an Advanced Nurse Practitioner [64] participants interviewed would use the term SWAN, ANP and nurse

practitioner interchangeably.

4.3.2 Expected impacts

In Phase 1, short, medium, and long-term expected impacts were as follows:

- Short term: help patients with LTC and support them to manage their conditions better, hence avoiding preventable exacerbations and reducing their need for out of hours and unscheduled GP appointments or home visits and alleviate pressure on GP workload.
- Medium term: develop close working relationships and communication between SWANs and GPs, with other health professionals, and with family members involved in the care of patients.
- Long term: improve monitoring of patients, including the use of remote monitoring using mobile health technology, to support patients to self-manage and improve patient care.

4.3.3 Actual impacts

The work of the SWANs evolved from focussing on patients with LTCs to managing the daily list of all patients requesting a home visit. The change resulted from awareness within the practice that the anticipated outcomes were *'not going to be realised within timescales and resources'* (P.18, p.4) and that concurrently the practice was struggling to manage unscheduled care. The change has become increasingly embedded in the practice with SWANs undertaking home visits by default with the on-call GP only undertaking the home visit if the clinical need was felt to be too complex or out with the individual SWAN's competency, i.e. the skills and experience of an individual as opposed to general competency as all have been trained for Advanced Clinical Examination. Additionally, the GP and not the SWAN would undertake a home visit if the patient had received approximately three consecutive home visits or the patient insisted on seeing a GP.

A new system of triaging home visit requests was implemented by the practice. Practice receptionists were provided with a protocol, which included a flow chart showing '*what the ANP can deal with'* (P.18 p.9). Where requests are not routine, the on-call GP determines whether or not the SWAN should make the home visit. The new way of working means that patients '*get seen by an appropriate professional in a reasonably timely fashion'* (P.18, p.5) whereas before, it was usually much later on in the day before the on-call GP would be able to leave the practice to undertake the visits.

The model involves supervision of the SWANs by the on-call GP. This is provided at the end of the day when individual cases are reviewed and there is 'back up' provided throughout the day by all the GPs as required. The supervision involves a review of the home visits undertaken during that day, '*safeguarding that actually that patient has received the right treatment'* (P.18, p.12) and that the SWAN has *'done the right thing'* (P.18, p.12). The amount of support provided varies depending on the range of competences and confidence of the SWANs and the capacity of the GPs. During the set-up period, some joint visits involving both the GP and the SWAN were undertaken and there was a higher level of checking and second opinions. As confidence developed between the GPs and the SWANs, this level of checking reduced. A practice handbook was developed which collated guidelines for the management of LTC, national and local protocols were included to ensure there was '*continuity of practice so that we were all doing the same thing and working in the same way'* (P18, p.12). Local protocols included '*prescribing procedure'* (P18, p.12). There has been no formal consultation or communication with patients about the replacement of GPs with SWANs for home visits. Instead, the model is presented and explained to patients or carers in response to individual requests for home visits.

The introduction of SWANs in the practice, and especially their role in undertaking activity previously done by a GP, was '*a step change in the practice'* (P.18, p.4). It triggered an upskilling of staff throughout the practice, including Healthcare Assistant level where they now undertake tasks, such '*doing all the patient observations, taking blood…'* (P.18, p.8), previously done by a Practice Nurse (who is now a SWAN conducting the home visits). This upskilling was considered by GPs to both increase efficiency within the practice and a sense of fulfilment for all the staff as illustrated by the comment by a SWAN, "*I'm really lucky in that I love what I do, I get paid to make people feel better"* (P.18, p.2). Simultaneously, other tasks currently undertaken by GPs have been identified as appropriate for nursing staff, such as chasing up and communicating with patients their blood and other test results. Indeed, one individual estimated that 50% of the GP workload was '*nursing duties'* (P.18, p.17) whereas another suggested "*everything that I do could be done by a Nurse Practitioner"* (P.18, p.6)

4.3.4 Unintended negative consequences

Nurse-led consultations were perceived as more time consuming than GP-led consultations and therefore could be considered less efficient. The main reason for this was that nurses spent more time at the home visit: '*they're [the patient] getting more attention and more time devoted to them'* (P.18, p.7). Additionally, because there is a resource more focussed on meeting the home visit demand, there may be a tendency for the practice to be '*too lax in saying "yes" to a home visit now'* (P.18, p.7), they may have *'created a demand and … lowered our threshold for doing home visits'* (P.18, p.7). Therefore, although the number of home visits undertaken by GPs has reduced significantly, there is a perception that the number of home visits undertaken by the practice overall has increased, and there was indeed an increase of 210 between Feb'16-Jan'17 and Feb'17-Jan'18.

While the shift in distribution of work from GPs to the SWANs was generally welcomed, potential risks were acknowledged. First, where previously GPs were struggling with the work load, a risk has now been identified that they '*end up with exhausted ANPs instead of exhausted GPs'* (P.18, p.12). Another potential risk is that although there is a perception that there would be increased efficiency if GPs only dealt with the '*more complex, difficult end of the spectrum'* (P.18, p.1), this would be increasingly challenging for them to manage as a daily workload. The extreme situation where GPs would be '*handling a clinic of very complex cases and that's it'* (P.18, p.3) was considered to be less rewarding for GPs, especially if this resulted in less continuity in the management of individual patients. Finally, some GPs reported that they thought the changes were '*hugely challenging to general practice'* (P.18, p.6) and that by using SWANs to undertake tasks previously the responsibility solely of GPs, as a profession this could be seen as '*undermining our purpose'* (P.18, p.6).

The blurring of roles of the GP and SWAN and introduction of the new role of Staying Well nurses have had an impact on '*team dynamics'* (P.18, p.4) within the GP practice. The title 'Advanced' and the increased time devoted to supervision between GPs and SWANs resulted in a perception by existing staff within the practice that the new SWAN staff *'were being singled out, given a bit better treatment'* (P.18, p.4). While GP partners focussed on the safe implementation of the primary care pilot project, in hindsight they recognised that there was a lack of focus on how it affected other staff within the practice.

Some interviewees considered that the traditionally unassuming nature of island nurses made it more difficult for individuals to use the 'advanced' nurse title and they suggested that '*it's not a title that you take on, you should take on, easily*' (P.18, p.10). It was not clear whether this was a generational, cultural or indeed a mythical factor, however it suggests that the use of specific job titles should be

considered contextually.

Although current staff throughout the practice did not report any issue about pay from a personal perspective, most recognised that '*society does not value'* (P.18, p.2) nurses as they do doctors. They suggested that as new, younger staff came through they would need to be paid '*a more appropriate salary'* (P.18, p.8) to recompense more directly for work activity rather than the distinction between doctors and nurses.

4.3.5 Planned local evaluations

The change has become increasingly embedded in the practice and no formal local evaluation was reported to be planned.

4.3.6 Sustainability and likely spread or rollout

Interviewees suggested the practice is *'a little more stable'* (P.18, p.7) because of the pilot project and is therefore better placed to face challenges such as shortage of GPs and increasing number of patients with LTCs in the short term. There is concern in the longer term around recruitment of GPs on the Island but the use of SWANs in practice is seen as a key response; *'since we can't knit more doctors then the advantage to rolling this model out is that you can safely look after the patient load with fewer doctors'* (P.18, p.5). The work of the two SWAN staff and the two practice based enhanced role nurses will become more integrated with practice staff undertaking more community-based work and SWAN staff taking on more consultations at the practice. The surgery is considering introducing a 'safety net' type protocol which would mean that '*if someone's been seen by a nurse two or three times'* (P.18, p.1) that a GP would '*do the third or the fourth visit, just to put in a medical oversight'* (P.18, p.1). Eligibility criteria and demand for home visits '*are being addressed within the practice'* (P.18, p.12). The role of the new GP contract in relation to measuring primary care activity was considered to help with future planning in that there will be '*a better, common understanding of what are the demands on primary care'* (P.18, p.18), which will be used to articulate what needs to be done *'to meet that demand'* (P.18, p.18).

Interviewees believed that although the change was challenging, that '*general practice adapts and evolves very quickly'* (P.18, p.1) and as such is well-placed as a locus of change. The bottom up nature of the primary care pilot project allowed the practice '*to have ownership of what's going on'* (P.18, p.5) and a sense that they were in control which was found to be beneficial to the implementation. Similarly, there was a belief that as '*nurses have always evolved to meet the need of the people that they're looking after'* (P.18, p.2), they were good at adapting to changes in their roles.

There was consensus amongst the interviewees that the model of using SWANs in general practice was needed, as there were fewer doctors in the care system. There was also consensus that '*the model would roll-out'* (P.18, p.1) but that it wasn't '*a solution that you can just slot in'* (P.18, p.3) nor was it possible '*to just drop them* (SWANs) *into each practice and do the same job in each practice'* (P.18, p.3). Instead, the interviewees felt that an investment of time was required, and this was described as *'almost backfilling and working alongside someone for a while'* (P.18, p.3). The need was identified to raise awareness about the SWAN role in general practice, taking account of the specific skill set, training and experience of individual SWANs, to be clear about their '*limitations and scope of practice'* (P.18, p.12). Time was required to build trusting relationships, for staff to adjust to new ways of working, and to build in *'safeguards to make sure that everybody is practicing as they should'* (P.18, p.12). As the

practice did not have a *'defined, written down scope of practice'* (P.18, p.1) for each SWAN, nor was there a strong view that this would be useful, the model relied on individual responsibility of SWANs to work within their limitations and supervision by GPs.

Interviewees considered how guidelines and protocols may be useful for rolling out the primary care pilot project to other practices. Where experience of working with nurses with enhanced roles such as SWANs was limited, interviewees felt '*there aren't really clear sort of guidelines'* (P.18, p.7) to support roll out. Those who had worked alongside SWANs in a variety of roles over longer periods of time suggested that insofar as they worked '*to the same guidelines: NICE Guidelines, SIGN Guidelines, local protocol guidelines'* (P.18, p.12), the need was more for systems to ensure that the SWANs were not *'doing things that they probably don't have the experience to deal with'* (P.18, p.10). In relation to national guidelines, although interviewees had mixed views on their usefulness, it was thought that '*having somebody working on it nationally and then people adapting it would be a better way of doing it rather than everybody just starting from scratch'* (P.18, p.7).

To help provide clarity and confidence for future employment of nurses in enhanced roles, such as SWANs and their integration into GP practices, some interviewees suggested that a register of nurses working in enhanced roles and qualified ANPs, including information about any areas of specialist training and experience would be useful.

Interviewees expressed some concerns about the future of general practice in relation to sustainable staffing. Although the main focus was on the difficulties in recruiting GPs, there was also concern that the upskilling of the nursing workforce to the SWAN role might *'deplete your pool of generalist nurses'* (P.18, p.1) and that as the SWANs themselves become recognised as '*a very useful commodity once you've got them skilled-up'* (P.18, p.5), that there will not be '*enough of them to go around'* (P.18, p.5).

Other interviewees, both GPs and SWANs, identified the perceived success of the primary care pilot project as reason to be more optimistic about general practice. As well as helping to reduce the pressure on GP workload, the pilot project was considered to be a key factor in supporting the sustainability of general practice. SWANs in particular had confidence that nurses are part of the solution, as follows, "*there is a wealth of quality experienced, enthusiastic, brilliant nurses that can do this job standing on their heads with two hands tied behind their backs, because nurses are amazing!"* (P.18, p.2). Whether it was nurses or doctors undertaking specific duties in general practice, there was a consensus that 'generalism' was a valued skill set and it '*should be cherished'* (P.18, p.1) and '*has to be made incredibly attractive for newcomers in the next couple of years'* (P.18, p.1).

4.3.7 Key findings

- Local data suggests that the total number of homes visits undertaken in the practice increased and that GPs conducted considerably fewer of these home visits after the pilot project was introduced.
- Only a small minority of patients request a home visit by a GP, suggesting that most patients accept home visits by a nurse.
- Patients were perceived to have benefited from the increased duration of visit from a SWAN than a GP.
- The model whereby GPs take home visits for the more complex cases appears to be working but whether nurses taking on 'GP work' undermines the traditional roles of these two distinctive

health professions remains unclear.

Clinical activity is routinely recorded within the GP practice's appointments booking system and patient records; this incudes staff allocated to home visits and details of investigations and treatment. In the year between 1st February 2016 and 31st January 2017, 1,436 home visits were undertaken predominantly by GPs. In the following year, 1,188 home visits were undertaken by the SWANs and 458 by GPs. This illustrates a decrease in GP home visits by 978 and an overall increase of 210 home visits undertaken in the practice.

SWANs reported that some patients initially expressed disappointment at not seeing a GP but became more positive about the SWAN by the end of the consultation. More generally within the practice, there has been a perceived *'huge shift in the balance of acceptance'* (P.18, p.14) of patients to the use of SWANs for home visits; it has '*changed to a point where people are much more accepting'* (P.18, p.14). A smaller proportion of patients have refused to accept the SWAN and continue to receive visits by a GP. However, other than anecdotal feedback, no formal feedback from patients had been gathered by the practice.

There are reports from both GPs and SWANs of patients' benefiting from increased duration of visit and better care than a GP who had more constraints on time; '*there's more patient contact there, they're spending more time with them'* (P.18, p.7). Being seen by the SWAN rather than having to wait until the on-call GP is free to leave the practice means that '*patients' needs are being met more promptly'* (P.18, p.2). Although it was felt that there was no difference in the clinical treatment of patients, as this was checked during supervision. However, differences in the way consultations were conducted were perceived by GP, and SWANs who were interviewed, and these were described as a "*nursey nursey, softly softly"* (P.18, p.2) approach where visits were '*not really a consultation, it's more a conversation'* (P.18, p.2).

Initial high levels of supervision and on-going support provided were identified as critical to the success of the implementation of the primary care pilot project. As the model became embedded, levels of trust and confidence between GPs and SWANs were perceived by both GPs and SWANs who were interviewed to have increased, resulting in reduced duration of supervision. GPs reported that '*it's worked well … there certainly haven't been any patient safety issues'* (P.18, p.1). SWANs also reported acceptance by other professionals, including hospital staff in response to referrals of patients. GPs recognised there was increased trust in the SWANs '*from the hospital end as well*' (P.18, p.4).

Despite the provision of a flow chart for triaging home visit requests, receptionists reported occasions where there was a level of uncertainty about when a GP appointment was required or, depending on '*the nature of the call, deciding whether it was something that a nurse could or should do'* (P.18, p.7.6). The variables and considerations were often not purely clinical but more to do with personal circumstances of the patient and the level of previous involvement a GP had with a particular patient. In such circumstances, the request was passed to the on-call GP for a response.

4.3.8 Key Learning

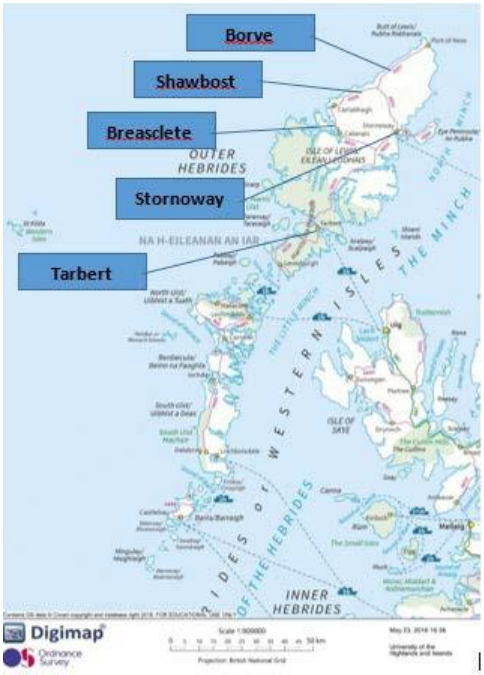
- Nurses with enhanced roles such as SWANs working within general practice make an important contribution to support and management of patients at home that was previously carried out by GPs. There are dual benefits of patient satisfaction about care provision received and releasing GP time through reduction in GP home visits.

- Supervision by GPs of SWANs conducting home visits was considered to work well, particularly in the early implementation stages. Time for support requires to be built into this model to ensure safe and confident care delivery for patients in their own homes.
- Training should be provided to administrative staff involved in triage to ensure there is consistency. Review of eligibility criteria for home visits from the practice was considered necessary.
- It is important both to raise awareness and inform patients and public of developing and changing roles within the primary care team to ensure that confidence in all aspects of care delivery including the role of SWANs and nurses in enhanced roles is accepted.

4.4 Self-management Courses for patients with LTC, minor MH problems and physical symptoms (NHS Western Isles)

Project 20 is in NHS Western Isles and is described as 'Helping Patients Help Themselves'. Pilot project activity, in the form of self-management courses, occurred mainly in the town of Stornoway, in the settlements of Borve in the north and Breasclete and Shawbost on the west coast of the Isle of Lewis, and in Tarbert, Harris. Demography changes and subsequent perceived challenges to care delivery on the island have been previously described.

Figure 4.5 Map of the Western Isles with Locations of Courses Delivered



4.4.1 Implementation

PCFMH funding was for a single GP to run self-management courses for patients in primary care, in non-medical settings such as community centres, to encourage patient, in a group setting, learning to manage long-term conditions better using psychological or psychotherapeutic techniques and to increase access to social support. There were two phases in the 'Helping Patients Help Themselves' pilot project; the first phase involved eight courses delivered between August 2016 and March 2017 with two months preparation and planning and the second phase involved seven courses delivered between August 2017 and March 2018. Courses were based on 5 core self-regulation principles – goal setting, planning, self-monitoring, feedback and relapse prevention [65] and follow the EAST framework as recommended by the UK Behavioural Insights Team [66]. Courses involved two-hour

sessions held weekly over six weeks; Week 1 Introduction to Self- Management, Week 2 Stress, Sleep, Racing Mind, Week 3 Pacing, Expectations, Week 4 Thoughts, Feelings, Beliefs, Week 5 Relationships and Communication, and Week 6 Adaptation and Moving On. The techniques used in the courses included: (CBT) Breathing and Relaxation Techniques, Mindfulness Based Stress Reduction and Mindfulness Based Cognitive techniques, Mind Body Interaction, Motivational Practices, Problem Solving, and Behavioural Activation.

The pilot project was developed by a local GP who had previous training and experience of leading self-management group courses and who was increasingly aware that a large proportion of the demand for consultations was from patients with LTCs. She also had a sense of frustration that consultations focussed on treating symptoms but never got '*down to the root cause'* (P.20, p.8). Stress was identified as a factor, which could be both a root cause and *'made worse'* by living with an LTC (P.20, p.8).

4.4.2 Expected impacts

In Phase 1, short, medium, and long-term expected impacts were as follows:

- Short term: improve depression and anxiety scores (measurable with PHQ-9 and GAD-7), improve levels of self-esteem, self-efficacy and confidence (measurable from participant survey data), reduce use of prescription drugs to manage pain, depression and anxiety and to induce sleep (reported in participant survey data), generally improve physical health (reported in participant survey data), increase patient self-management (measurable from participant survey data), and reduce GP consultations by the self-management cohort (reported in participant survey data).
- Medium term: improvements in family function and increased employability (a longer term follow up questionnaire is being undertaken in Spring 2018 which also aims to capture medium term impacts).
- Longer term: sustain short term improvements (a longer term follow up questionnaire is being undertaken in Spring 2018).

4.4.3 Actual impacts

Initially the project set out to target 50 patients in Western Isles with long-term conditions to complete the self-management course in 6 months. The target was extended by a further 30 patients in the second phase of the project. A total of 180 individuals were invited to attend or were referred to the service; 57 attended at least one session in the first phase and 60 attended in the second phase.

Posters and leaflets were distributed in GP practices to advertise the courses to patients and staff. Awareness raising meetings were held by the GP delivering the self-management course with GPs, specialist nurses and AHPs to encourage referrals. Patients with a variety of long-term conditions, both physical and psychological, were referred to the self-management course run by a GP. The GP telephoned most individuals referred to introduce the self-management course and to ask if they were willing to attend.

The six-week course was delivered in group sessions of two hours, once a week. Sessions included learning how to manage stress, breathing exercises, relaxation, sleep hygiene, pacing, feelings and beliefs, managing relationships and coping with change. Worksheets and handouts were given for patients to complete out-with the group sessions. Self-complete scores for depression, anxiety and self - management skills were taken from participants at the beginning and end of each course (PHQ-9 and

GAD-7). Participants requested a revision session at the end of the course and in response to this, the intervention was modified to add a seventh session.

4.4.4 Unintended negative consequences

In so far as no actual unintended negative consequences of the project had been reported, some participants voiced concerns of potential drawback or risk posed by the project. In relation to group work, the nature of small, rural or island communities where '*everybody tends to know everybody*' means that *'there isn't the anonymity'* (P.20, p.4) as a patient that may be expected elsewhere. Despite integrity of individuals in maintaining confidentiality amongst group participants, interviewees were aware of the fact that by simply attending a group, anonymity could be compromised. This was considered to be a potential '*drawback'* to participation (P.20, p.4).

For GPs there is some uncertainty around the availability of the option of the course for patients for whom treatment options are limited and for a cohort of patients who take up a large proportion of consultation time. However, expectations have been raised that a course may be available for individuals with LTCs in the Western Isles which poses challenges to GPs in managing patient expectations within clinical encounters.

4.4.5 Planned local evaluations

Data has been collected on an ongoing basis throughout the project which has been used for regular reports to the Joint Integration Board.

4.4.6 Sustainability and likely spread or rollout

A business case is being prepared for the Integrated Joint Board to consider how the model could be adapted for roll out and scaling up. Follow up data is being collected from group participants to assess longer-term impact of the course.

As self-management was considered a *'lifelong process'* (P.20, p.1) and the approach taken by the course was considered hugely *'successful'* (P.20, p.17), interviewees supported sustainable, equitable roll out of the model. From a health professional perspective, funding of future courses was thought to be '*a no-brainer'* (P.20, p.6) but, in addition, it was suggested that '*all our staff*' (P.20, p.6) should be incorporating support for self-management into every day practice.

Interviewees considered that *'a separate course'* (P.20, p.10) for self-management of LTCs, and not condition-specific was preferable and they identified the need for '*governance'*, '*suitable training'* and '*support'* (P.20, p.9). The non-clinical nature of venues used for the course were acknowledged as being of benefit. The courses were held during the daytime, and while this was preferable to participants who were not in employment, it was seen as disadvantageous to employees who were already taking time off work for medical appointments or ill health.

Interviewees considered how the course could be delivered equitably across the population throughout the Western Isles; '*we need it to be affordable and we need it to be done everywhere'* (P.20, p.11). Opportunities around the use of technology were highlighted, including the use of video conferencing if there were '*facilitators who are quite comfortable'* (P.20, p.15) with using the technology. However, there is a risk that remote course participants would feel a '*bit disassociated from the main venue'* which *'wouldn't be helpful at all'* (P.20, p.15). Delivering courses with very small numbers in some of the smaller islands was considered to have additional challenges.

There was a sense that individuals needed to be '*ready'* or '*receptive'* in order for the course to be effective. Some referrers were confident they could recognise the '*attitude of a patient'* (P.20, p.12) whilst others found it more difficult and that sometimes patients could '*surprise you'* (P.20, p.7). Interviewees suggested that it would be beneficial to avoid patients reaching '*crisis point before they get on this course'* and that *'it should be anticipatory in its nature'* (P.20, p.3). Although self-referral was supported in principle, this would need to be supplemented by *'screening information* to *help determine'* suitability (P.20, p.9).

The course was instigated, designed, led, and mainly administered by one individual GP. Where this had benefits in relation to continuity and consistency, this was considered not to be a sustainable nor equitable delivery model and posed challenges in mainstreaming '*something that's reliant upon an individual'* (P.20, p.11). The advantages of the course leader being a GP were recognised in relation to the skills brought to the role and to the credibility of the course. However, this was thought to be neither transformational nor sustainable and well as being '*expensive'* (P.20, p.17) by some interviewees with one expressing the view that '*we need GPs to be GPs'* (P.20, p.11). Concerns about sustainability were also described by course participants who were keen to maintain and refresh their self-management skills. These participants voiced concerns that the course might fall 'by the wayside' (P.20, p.2) and feel it 'would be a shame to waste the money that's already gone in to it' (P.20, p.2) and when there were 'a whole load of vulnerable people there' (P.20, p.3) who would benefit in future.

Interviewees identified a range of staff who could take on the role of course leader, including; LTC Specialist Nurses, Practice Nurses, Occupational Therapists. However, there was a warning that '*the reality is they're seldom released from their existing tasks'* and there was a risk that '*and unless the service or the management have decided this is what they're going to do it just doesn't happen'* (P.20, p.9). Course participants felt that having a course leader who had personal experience of an LTC was '*really important'* (P.20, p.3) the ability to '*walk the walk and talk the talk'* (P.20, p.2). They felt that there would be a risk if the role of course leader was '*added on'* to someone's job, unless they had some personal experience of what it was like to live with an LTC, either directly or indirectly. There were suggestions that volunteers could be involved in course delivery and that a third sector organisation may be an appropriate vehicle. There was a strong view that '*it needs a specialist skillset to do it'* and a *'special commitment from the person doing it'* (P.20, p.7). The challenge of replicating, reinforcing and potentially replacing the attributes of the current course leader was indeed felt to be considerable, in order to sustain future delivery of the model.

4.4.7 Key findings

- A local self-evaluation suggests that participants achieve health benefits from the course, for example, in 93% of course participants, pre- and post- course anxiety or depression scores had shown an improvement [65].
- There was a perception by healthcare professional key informants that the course had contributed to fewer GP appointments because people were better self-managing their LTC.
- The challenge of replicating the personal attributes and skills of the current GP course leader was felt to be considerable, in order to sustain future delivery of the model. However, there was recognition of the potential for course leaders to be found in other health disciplines and the third sector.

A local self-evaluation was conducted by the GP delivering the self-management course [65]. The local evaluation included self-rated participant evaluation of pre and post course depression scores using PHQ9 and GAD7, alongside a bespoke questionnaire on self-reported self-management skills, together with data on course referral and attendance. The results were as follows:

In total, 180 patients were referred to the service, 117 patients attended with 79 completing the course completion of the course was defined as attending at least four out of six sessions). 85 patients completed pre- and post-course scoring for anxiety, depression and self-management skills and included some patients who had not completed all of the course. Mean depression scores (self-reported using PHQ-9) before and after Self-management Course reduced from 13.0 to 8.7, with 78 out of 85 patients reporting less depression. Mean anxiety scores (self-reported using GAD-7) before and after Self-management Course reduced from 10.3 to 5.75, with 79 out of 85 patients reporting less anxiety. Overall, in 93% of patients, either anxiety or depression improved after attending the course. All 85 patients included in the local evaluation reported an increase in self-management skills. In addition, 89% reported that they were able to cope better overall whilst living with their LTC [65].

From this data, it is clear that the service met its self-set targets for attendance and completion rates of the course. In addition, there were clear improvements recorded for anxiety, depression and self-management. However, the findings of the local evaluation should be treated with caution due small sample size and the potential for self-report bias.

Feedback and comments from course participants collected as part of the local participant-self-evaluation conducted by the GP delivering the self-management course included; “the uselessness feeling is slowly fading”, “I haven’t taken a sleeping tablet for over a week”, “this course has kept me from completely drowning”, “this self-management course has literally been a life line for me, I really feel I wouldn’t be here today otherwise …” [65]. Course participants reported that they needed ‘*less medication’* (P.20, p.2) and fewer *‘appointments’* (P.20, p.2). Course participants also reported benefits from realising they were not on their own and from the opportunity to discuss the daily challenges they face with others who shared similar health-related experiences and understood how they felt. *‘Peer learning’* (P.20, p.1) was observed when individuals provided ‘*feed back to the others’* (P.20, p.1) about how they applied what they had learned on the course. The peer support initiated at the course was extended out with the course setting, through informal social contact, social media and the setting up of a voluntary LTC group. In addition, the revision sessions which had been identified to help embed the learning and resulting behaviour changes, also acted as a promoter of peer support.

There was consensus from interviewees who were interviewed for the SSPC evaluation that the course had *‘been hugely successful’* (P.20, p.17). Interviewees reported observable changes in course participants; “*you can actually see it”* (P.20, p.2), they're *‘more healthy, more proactive generally in their life’* (P.20, p.7), and they've got a *‘better outlook’* (P.20, p.2). Interviewees believed that course participants had an ‘*improved level of functioning’* (P.20, p.15), were ‘*easier to live with’* (P.20, p.2) and that the course had *‘changed people’s lives’* (P.20, p.3). Although some ‘*individuals may have attended the group in terms of physical long-term conditions’* (P.20, p.15), interviewees believed that the patient’s MH had *‘also improved’* as a result of the *‘self-management strategies they had learned’* (P.20, p.15).

Interviewees felt that sometimes people with LTCs can feel *'almost rejected by health services'* (P.20, p.15) and that self-management course had challenged *'negative perceptions around their conditions'* (P.20, p.15). There was also a recognition '*that many people in general practice find difficulty managing'* patients with LTCs (P.20, p.8) and that the course could be used to '*empower patients'* (P.20, p.13), provide '*information'* (P.20, p.15) and '*help them to help themselves'* in a way that could not be managed by GPs '*in a consultation'* (P.20, p.13).

GPs who had referred patients to the course reported that '*a lot of them [*patients*] consulted much less for their difficulties'* (P.20, p.10) and were '*attending the GP less often'* (P.20, p.1) and considered the intervention to be effective. They described patients as '*coping better'* (P.20, p.7) and being '*less needy'* (P.20, p.1). Observation of course participants by health professionals suggested that '*it gave them more confidence',* they were '*more self-aware'* and able to '*take control'* (P.20, p.7), they '*didn't seem so anxious'*, and were '*able to relax more'* (P.20, p.5).

The referral process involved informal triaging by GP referrers and by the course leader to ensure participants were '*ready'* (P.20, p.4) to change and *'receptive'* (P.20, p.7) to self-management techniques and this was considered to have had a positive impact on results, both in relation to attendance and completion rates and impact in relation to anxiety, depression and self-management scores.

The course leader was unanimously recognised as having a uniquely appropriate skill set; '*medical'*, '*personal'* and in '*project management'* as being genuine and '*passionate'* about the course (P.20, p.2). The course was reported as being enjoyable and a '*good laugh'* (P.20, p.3) and of a duration which meant that participants '*always felt better coming out from a session'* and not *'exhausted'* (P.20, p.3). Interviewees recognised the potential for patients with a negative mind set to '*bring the group down'* (P.20, p.6) but considered that the course leader had the facilitation skills to manage that dynamic. They found that the course was designed in a way that was considerate of '*what it is like to live with a very unpredictable health condition'* (P.20, p.3).

4.4.8 Key Learning

- There was a perception that the course success was due to the particular characteristics of the healthcare professional delivering it, which raises challenges for (i) sustaining the programme and (ii) rolling it out to other areas.
- There might be need for revision, refresher and top-up sessions so that people do not relapse, which could challenge the feasibility of sustaining the programme.
- Further research could illustrate whether or not any observed benefits are maintained in the longer term.

4.5 Phase 2 Summary

A total of four change projects were identified in the second phase of this case study for more in-depth exploration or 'deep dives', two were located in NHS Highland and two in NHS Western Isles. These projects were selected because of their progress and their potential to be 'transformative'

- Moray Firth Interface between Primary Care and Secondary Care (NHS Highland)
- CBT Mastermind Programme in A&B (NHS Highland)
- Staying Well Programme (NHS Western Isles)

- Self-management course for patients with LTC, minor MH problems and physical symptoms (NHS Western Isles).

In addition to data collected during phase 1 of this case study, focus group discussions or individual interviews were conducted with 73 key informants from the four deep dives. Key informants included a range of healthcare professionals (GPs, hospital consultants, GP practice nurses, community or district nurses, SWANs and enhanced role nurses, cognitive behavioural therapists, primary MH care worker, management teams, administrative staff and third sector representatives). Data collected in each deep dive represented a wide range of staff involved with the project; the exception to this is the CBT Mastermind Programme in A&B (NHS Highland, funded by PCFMH) as no GPs participated in the deep-dive despite multiple requests for participation.

Taken together the four tests of change project yielded valuable insights into primary care transformation within a remote and rural setting. First, the demographics, geography and internet connectivity of the Highlands and Western Isles pose significant challenges. In attempting to cover a very large rural area, key informants highlighted the heterogenous nature of primary health care, even within health board areas. Geographical spread and rurality are important barriers for accessing healthcare. In the remote and rural context, travel and accessibility were key issues in perceptions of the success and sustainability of a new model of primary care. The ITR project in the Inner Moray Firth area and the CCBT programme in Argyll and Bute represent these issues in converse. The implementation of the ITR introduced the need for patients to travel further to a location with problematic transport links. This was seen as a negative and was exacerbated for patients situated in a more rural local; the implementation of the CCBT removed the need for any travel. The convenience of online CBT was therefore seen as positive for patients situated in a more rural locale. In contrast insufficient internet and mobile phone connectivity provide barriers for tests of change which incorporate video conferencing and frequent mobile communication in NHS Western Isles. Where video conferencing was proposed as a potential solution, such as to the roll out of the self-management courses in the Western Isles, non-clinical community locations provide a challenge in relation to facilities and connectivity. Second, the characteristics of small, rural communities, in that people all know each other, were considered to influence implementation of transformation change models. Both findings suggest that any nationally recommended models of primary care will need to be sufficiently flexible to adapt and fit with remote and rural contexts.

A third important insight related to the timescales for tests of change to be developed, in particular the lack of time for preparatory work in the early stages of project activity. This included time to engage with stakeholders for coproduction of test of change and staff recruitment. While recruitment issues can be an issue in urban areas, given the general challenges of recruitment and retention in rural areas, this problem was felt to particularly impact rural projects. The importance of time and stakeholder engagement was evident in the Staying Well Programme in NHS Western Isles which illustrated that training, close supervision, protocol development and investment of time to embed the change in care were essential ingredients for this type of change in primary care. In contrast, earlier and wider stakeholder engagement, might have addressed some issues evident within the ITR project. Thus, engagement of stakeholders particularly in the early stages of project design might assist in addressing some of the challenges arising from service re-design and ensuring the success of projects.

Finally, while self-evaluation was incorporated into the selected projects for example, measuring changes in patient mental wellbeing pre- and post- a self-management course, more robust research

evidence may be useful to determine effect (e.g. comparing the effect of a self-management course with usual care). Importantly, because of evaluation strategies currently in place it remains unclear whether tests of change have led primarily to a re-distribution of workload in primary care rather than a change in total workload. Going forward, evaluation strategies must be clearly considered and supported throughout project design and implementation, this includes the need to monitor the impacts (unintended and unintended) of the project on the patient experience and health outcomes.

5. DISCUSSION

The purpose of this evaluation was to describe and understand examples of primary care transformation in remote and rural areas of Scotland. This section brings together the findings from Phase 1 and Phase 2 of this case study about recent primary care transformation in rural areas. A summary of the expected impacts of the projects is firstly presented. This is followed by a discussion of two key issues – engagement and whole systems relating to primary care transformation highlighted by this case study. Finally, key learning from the evaluation about transforming primary care in rural Scotland is presented.

5.1 Summary of the Perceived Impacts of the Projects

Healthcare professionals expected that the 20 primary care pilot projects would have positive impacts on:

- Workforce development, training and team building
- Multi-disciplinary working and workload
- Access to services and service development
- Patient health and wellbeing
- Use of technology
- Family and community health and wellbeing

The perceived impacts of the four most potentially transformative primary care pilot projects are briefly summarised below:

PCTF Moray Firth Primary Care Transformation: Interface between Primary Care and Secondary Care (NHS Highlands)

The appeared to be little (if any) prior consultation of patients, carers or healthcare professionals such as GPs and hospital consultants prior to the introduction of the ITR and this may have exacerbated some of the problems encountered for example, lack of familiarity with, and knowledge about referring patients to the ITR and may have contributed to a perception that the ITR had been imposed by the health board. There was a perception that ITRs are not appropriate for remote and rural areas because it involves patients having to travel to a central location for a procedure that would previously have been carried out in their local health centre. This additional travel time placed on rural residents represented a health inequality because having to travel posed an obstacle to accessing care. Related to the need to travel, there was some concern that the ITR represented a shift away from care in the community. In urban general practices, there was a perception from some primary care staff that workload was reduced because procedures requested by hospital consultants were now being carried about at the ITR. Some hospital consultants and nurses perceived that workload had increased due to increases in the administrative work associated with referring patients to the ITR. Nurses appeared to be most affected by the introduction of the ITR for example, district nursing and administrative staff from the district nursing team were given the responsibility to implement, staff, resource and deliver patient care in the ITR clinic. In summary, the care system as a whole does not appear to have experienced a reduction in workload as a result of the introduction of the ITR, but workload appears to have shifted, with nurses experiencing an increased workload.

PCFMH CBT Mastermind Programme, A&B (NHS Highlands)

This primary care pilot project was generally perceived to have had a positive impact. For example, it was perceived to have improved access to timely care because patients could immediately access an online CBT programme to address their MH problem and it was also perceived to have reduced the workload of MH staff because patients were self-managing their MH problem i.e. the workload of the healthcare system was reduced as opposed to being shifted within the system. The pilot project was also perceived to be particularly advantageous to people in rural areas because it provided a service that did not involve travel and it enabled people to keep their MH problem out of the public gaze. Finally, local evaluation data show that people on the CBT course rate their anxiety, depression and stress lower at the end of the course, thereby suggesting that the course yields positive health outcomes for patients.

PCTF Staying Well Programme, (NHS Western Isles)

Local data suggests that the total number of home visits undertaken in the practice went up and that GPs conducted considerably fewer of these home visits after the pilot project was introduced. This suggests that the workload of the healthcare system is not reduced but is being shifted within the system, with nurses taking on more of the work. The pilot project was perceived to have benefited patients because nurses were deemed to spend more time on a home visit than a GP. Whether health outcomes are improved however, are not known.

PCFMH Self-management 6-week programme for patients with LTC, minor MH problems and physical symptoms, (NHS Western Isles)

This primary care pilot project was perceived to have contributed to fewer GP appointments because people were self-managing their LTC. If this is supported by empirical evidence, then this represents a reduction in the workload of the healthcare system. Local evaluation data suggests that health outcomes improved for those attending the course. A negative aspect of a group-based course is that people are unable to keep their health problems private, which appears to be particularly challenging in rural areas where people know one another or their family.

5.2 Primary Care Transformation

This section briefly discusses two key issues that are pertinent to transforming primary care.

Engagement

This case study illustrates how a perceived or real failure to engage key stakeholders (patients and healthcare professionals) in service change can cause significant difficulties for healthcare professionals tasked with implementing the change. For example, the introduction of the ITR which was part of the Moray Firth Primary Care Transformation: Interface between Primary Care and Secondary Care (NHS Highlands) project evoked criticism from healthcare professionals. Although we cannot be certain if more healthcare professional engagement in designing, developing and delivering the ITR would have helped quell some of these criticisms, it is clear from the key informant interviews conducted as part of this evaluation that healthcare professionals lacked awareness and knowledge about the ITR and remained sceptical about the benefits of the ITR to patients in rural areas. The literature certainly supports engaging healthcare professionals to avoid individual level barriers to service change; NICE for example, recommend that for change to be successful, healthcare professionals will need to have an awareness and knowledge of what needs to change, be motivated to make the change, believe that the

change will be beneficial and have the skills to make the change happen [67].

Whole systems

The importance of the 'flow' of patients and information is increasingly recognised by policymakers [68] and there have been recent flow improvements programmes in Scotland [69]. This evaluation highlights the potential of many of the primary care projects in the H&Is to improve the 'flow' of information and patients within primary care and between primary and secondary care organisations. For example, the advice gateway which was part of the Moray Firth Primary Care Transformation: Interface between Primary Care and Secondary Care (NHS Highlands) project was about improving communication flow between GPs and hospital consultants and the ITR was about improving patient flow between primary and secondary care. Other projects focused on the 'care journey' and aimed to reduce bottlenecks and delays to care and support. For example, the MH: Everyone's Business was expected to improve patient access to MH support and the Self-Management Course in the Western Isles could potentially stop people flowing into the care system. This evaluation however, also highlights the potential unintended and negative impact of some primary care transformation projects on flow. For example, some key informants expressed a concern that patients would miss procedures or encounter delays (thereby impacting patient flow through the care system) requested by secondary care because of their need to travel to an ITR for a procedure that was previously carried out at their local General Practice. The unintended consequences of quality improvement projects have been highlighted in the literature [70].

5.3 Key Recommendations

Several key learning recommendations can be made from the Phase 2 primary care pilot projects: Project 3: Interface between Primary Care and Secondary Care: Inner Moray Firth Area ITR, NHS Highland; Project 12: CBT Mastermind Programme, NHS Highland (A&B); Project 18: Staying Well Programme, NHS Western Isles; and Project 20: Self-management Course, NHS Western Isles.

A whole systems approach is necessary to enhance understanding of the interdependencies with healthcare systems to prior to project' implementation. Moreover, adopting such systems approaches can usefully inform workload management and may help in assessing whether a project leads to a reduction in workload for primary care or whether it leads to a re-distribution of workload. Some healthcare professionals believed that a key issue in rural areas was privacy and thus any project being tested in rural areas may wish to assess the impact of a project on patient confidentiality and disclosure. Projects in rural areas may wish to assess its impact on people's access to services. Changes in primary care that result in patients having to travel for care are unlikely to be well-received in rural areas because public transport is either very limited or not practicable.

Nurses taking on some of the traditional work of a GP appears to evoke no strong objection from patients and carers. The experience of the pilot project involving SWANs conducting home visits instead of GPs suggests that training, close supervision, protocol development and investment of time to embed the change in care are essential ingredients for this type of change in primary care.

Some concern was expressed at the timescale for development of tests of change and for the lack of time for preparatory work to be undertaken prior to the start date for project activity. This included time to engage with stakeholders for co-production. A number of delays were experienced with staff recruitment for the projects, which impacted on project activity. While recruitment issues may be an issue in urban areas, given the general challenges of recruitment and retention in rural areas, this problem was felt to particularly impact rural projects. Project funding ought to allow adequate lead in time to ensure sufficient maturity in project planning and this is particularly salient for rural initiatives.

- Transformation is challenging in remote and rural areas due to location, scale, and geographical distances. **Rural proofing** ought to be considered when planning new initiatives so that projects are appropriate for remote and rural settings.
- Online health care programmes have the potential to improve early access to health care support and consequently impact on health inequalities in remote and very rural communities.

Going forward, it may be useful to closely monitor the impacts (unintended and unintended) of the projects on the patient experience and health outcomes since most projects had not assessed patient impact. Related to this, while some projects have conducted local self-evaluations for example, measuring changes in patient mental wellbeing pre- and post- a self-management course, more robust research evidence may be useful to determine effect (e.g. comparing the effect of a self-management course with usual care).

- Measurement of actual impacts, sustainability and spread of new models of care, both in the short-and longer-term will require additional support for data collection, extraction and analysis.
- Sustainability ought to be a key consideration in project design. For example, person-dependent projects pose a risk to sustainability.

The engagement of stakeholders in the early stages, and throughout a project may assist in addressing some of the challenges arising from service re-design and change. Co-production in project design ought to be promoted.

- Implementation of projects was facilitated when stakeholders were supported to identify problems or gaps in service delivery and involved in the design and deliver local solutions. Co-production including patient and public involvement in project design ought to be promoted.

Models of primary care that use existing evidence or are informed from earlier projects are likely to be more acceptable to stakeholders and therefore potentially pave the way for smooth implementation. Mechanisms to support recording and sharing of primary care tests of change within and between health board areas ought to be promoted to facilitate knowledge exchange.

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5.4 The Potential for Future Roll Out and Sustainability

The evaluation raises several issues relating to potential for future roll out and sustainability.

1). Automatically rolling out into remote and rural areas those primary care pilot projects that have proven success in urban areas without prior assessment of whether it is an appropriate model of care in a rural setting (the concept of rural-proofing) is likely to create a backlash against the project. For example, the Moray Firth ITR appeared to be well-received in the city of Inverness but not in rural areas and one of the main reasons why it was not particularly welcomed in rural general practices was because it removed care that was easily accessible in the community (i.e. in the local general practice) to a less accessible centralised location. Failure to consider such a rural proofing approach might also

inadvertently waste precious resources.

2). Short-term funding for pilot projects without future funding was perceived to significantly impact on the sustainability of projects, including those that were deemed the four most potentially transformative primary care pilot projects. One key informant summed it up as follows: *'you find something that works but it's working because we've put extra money into it … that doesn't mean the system, the rest of the system has the capacity now to absorb that and just take it forward.'*

3). Lack of robust evidence about the impact of the project on the primary care system, e.g. whether there was a reduction or redistribution of workload to another part of the system, and on patient experiences of care and health outcomes inhibits presenting a convincing case and argument for roll out.

4). The contribution of an individual appeared critical to the success of some projects. However, such person-dependent projects pose inherent risks to sustainability. Hence, key risks to sustainability must be identified in project design and mechanisms to prevent and/or address these proposed.

5). As retention and recruitment in rural primary care continues to remain a problem this has implications for rolling out projects into other rural areas.

5.5 SUMMARY OF KEY RECOMMENDATIONS

- Transformation is challenging in remote and rural areas due to location, scale, and geographical distances. **Rural proofing** ought to be considered when planning new initiatives so that projects are appropriate for remote and rural settings.
- Implementation of projects was facilitated when stakeholders were supported to identify problems or gaps in service delivery and involved in the design and deliver local solutions. **Co-production including patient and public involvement in project design ought to be promoted**.
- Models of primary care that use existing evidence or are informed from earlier projects are likely to be more acceptable to stakeholders and therefore potentially pave the way for smooth implementation. Mechanisms to support recording and sharing of primary care tests of change within and between health board areas ought to be promoted to facilitate **knowledge exchange**.
- **Online health care programmes** have the potential to improve early access to health care support and consequently impact on health inequalities in remote and very rural communities.
- **Sustainability** ought to be a key consideration in project design. For example, person-dependent projects pose a risk to sustainability.
- **Measurement** of actual impacts, sustainability and spread of new models of care, both in the short-and longer-term will require additional support for data collection, extraction and analysis.

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LIST OF APPENDICES

APPENDIX A. SSPC National Evaluation Framework Summary

Scottish School of Primary Care National Evaluation Framework for New Models of Care Summary

The Primary Care Transformation Fund (PCTF) has £20 million designated to new models of care in primary care, which is part of a £60 million fund covering additional aspects of care such as mental health, community pharmacy, and out-of-hours care. The Scottish School of primary Care (SSPC) has been awarded £1.25 million to help evaluate these new models of primary care. Four Health Boards across Scotland have already received funding over the last 1-3 years for specific projects on new models of care, and these have recently also received an additional year of funding (as from April 2016); a larger number of new projects that will be funded to start later this year on the basis of new bids put in by all the Health Boards in Scotland. In addition, Inverclyde has received funding to pilot new ways of working and the new GP Contract, including GP practice clusters, and this work is in progress.

Evaluation Framework

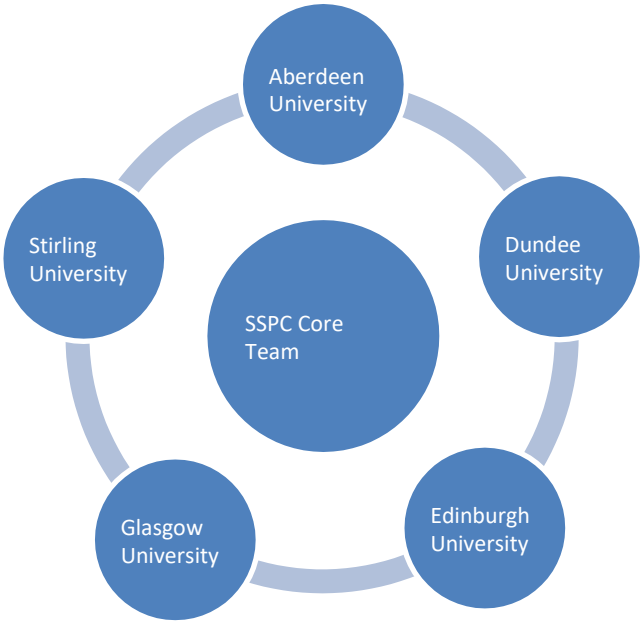
The evaluation framework proposed by SSPC consists of two phases; firstly the identification of the new models of primary care being funded by the Scottish Government (SG) across Scotland, what their components are, how they are expected to work (theory of change) and what the expected short, medium and long-term impacts or outcomes are. The second phase consists of identifying the impacts, learning, spread and sustainability.

The evaluation will be carried out at two levels, national and local. The **national** evaluation will include the Scottish Government's own theories of change and expectations of impact, and those of the funded projects at Health Board level. Evidence of Impact, learning, spread and sustainability will be mainly gathered through a limited number of selected **local** in-depth case studies ('deep dives') carried out by SSPC member Universities in different Health Board regions, together with rapid literature reviews of the best evidence for key aspects of the interventions. This will be complemented with the available evidence from the other sites not selected for detailed case study. In this way, an integrated and detailed sharing of learning will be produced which will be of **national as well as local relevance.**

How it will work

SSPC works on a hub and spokes model. The small core SSPC team have already been scoping the remit of the renewed and new bids, drawing of evaluability assessment methodology. We will suggest to the SG sites for the 'deep dive' case studies, based on our assessment of evaluability. These will be distributed across Scotland, and we will ask our SSPC members in different regions to bid for the evaluation of these local sites. The senior researchers in each academic unit will then lead the evaluation of their site with their own chosen team. However, the core team will ensure close co-ordination with the SSPC hub and also between evaluation sites, so that learning is shared and all members will contribute to the integration of findings to inform the national picture. SSPC core staff will additionally continually collect information and learning from the non-case study sites during the course of the evaluation, to complement the case study findings. Thus, a fully integrated final national report will be produced, as well as the detailed reports from the chosen local sites.

In addition, SSPC will contribute to the evidence-base for the components of the interventions by carrying out a series of literature reviews.



SSPC will also work collaboratively with other key organisations on available national performance data on patient satisfaction and 'big data' (such as unplanned hospital admissions), working in partnership with other key organisation such as central analytical services, NHS Health Scotland, and so on.

APPENDIX B. Phase 1 and Phase 2 Information Sheets

Phase 1: Interview Schedule

Scottish School of Primary Care National Evaluation Framework Questions

Phase 1: Intervention Theory and Expectations of Impact:
The key questions include:
1. What is the planned intervention/project and how does this build on previous work?
2. Has the intervention/project been designed, developed or adapted to the specific context of the local area? If so, how has this been done?
3. What are the key components of the intervention/project?
4. Are these likely to change over the life of the intervention?
5. What are the expected impacts in the short, medium, and long-term?
6. How do the stakeholders thing these impacts are going to be achieved?
7. What is the evidence to support this?
8. Who are the key stakeholders in terms of future sustainability and spread and what evaluation information do they require?

Phase 2: Impacts, Learning, Spread and Sustainability
The key questions include:
1. What impact(s) has the intervention/project/programme had, in relation to the expected impacts?
2. Has the intervention, and the expected impacts changed over time?
3. Have there been any unintended negative consequences?
4. What is the key learning that needs to be shared?
5. Which interventions seem worth scaling up and spreading?
6. How easily can these be implemented?
7. How sustainable are these likely to be in the long-term?

Introductions:

Consent form(s) signed – Recordings started	

The Model:

Name / phrase used to describe	
Rationale for intervention (theory / goal / essential elements) **Evidence**	
How is it delivered (f-2-f / group / technology)	
Where is it delivered (unique characteristics / tailoring / adaptations)	
Processes / procedures / activities	
Materials	
Who is involved in providing the intervention (expertise / specialist training)	
Enabling or support requirements	
Monitoring **Numbers / duration / of intervention delivery / quality control**	
Modifications	

Flow Chart:

Short term impact	**Medium term impact**	**Longer term impact**
• **Processes involved** • **Barriers & promoters** • **Relationships & interdependencies** • **Risks & negative outcomes** • **Contextual influences** • **Data collection methods**		

Phase 2: Interview Schedule

Introduce self. Hand out participant information sheets. Explain focus group purpose, assurance of anonymity. Gain signed consent. Start audio-recording, state project number at beginning.

Questions

- Can you introduce your role (no names) and describe your involvement in the project?
- Can I start by asking about the impact of implementing the project/model?
- What has it been like for you?
- What has it been like for other staff / stakeholders?
- Can you tell me about what you feel the impact has been for patients?
- Could you describe your understanding of the patient pathway in the new model?
- Other impacts? Reduced/ increased workload? Data collected?
- Has there been any changes made during the implementation of the project?
- Did you make any changes along the way?
- Have there been changes to the impacts on patients as the project progressed? Data collected?
- Has there been any unintended negative consequences of the project?
- If you were to give advice about how to implement this project/model again in another area what would that be?
    - What would be good for others to know?

1. What have you learned yourself from this project?

- What benefits do you see in rolling out / scaling up the project?

1. Is there anything specific about the rural context that would impact on roll out?
2. How easy do you think it would be to implement the project again / scale it up?

- What would be needed/ required to keep the project going?
- Are there any indications that these will be provided in the future?

APPENDIX C. Participant Information Sheets

Scottish School of Primary Care Transformation Evaluation

Participation information sheet *(Phase 1)*

You are invited to take part in this evaluation. This sheet is to provide you with the information you need, to see if you would like to take part in the evaluation that is being conducted by researchers at the University of the Highlands and Islands and University of Glasgow.

What is the purpose of the evaluation?
New models of primary care funded through the Scottish Government's Primary Care Transformation Fund and Primary Care Mental Health Fund in remote and rural areas will be evaluated. The first phase will involve identification of the components of the models, how they are expected to work (theory of change) and what the expected short, medium and long-term impacts or outcomes are. The second phase consists of identifying the impacts, learning, spread and sustainability.

The evaluation team
The evaluation team is based at the UHI Department of Nursing (School of Health, Social Care and Life Sciences) at the Centre for Health Science, Old Perth Road, INVERNESS. IV2 3JH.

Chief Investigator:	Dr Annetta Smith E. annetta.smith@uhi.ac.uk
Co-Investigators:	Dr Gill Hubbard E. gill.hubbard@uhi.ac.uk Dr Clare Carolan E. clare.carolan@uhi.ac.uk
Researchers:	Dr Kate Stephen E. Kate.stephen@uhi.ac.uk

The nation-wide Scottish School of Primary Care evaluation project is led by Prof Stewart Mercer, University of Glasgow.

Why you?
You have been asked to participate because you have been involved in some capacity with one of the models funded by the Primary Care Transformation Fund or the Primary Care Mental Health Fund.

Do I have to take part?
No. It is up to you to decide if you want to take part. If you do decide to participate in the evaluation you can stop at any time without giving a reason.

What if I'm not sure?
If you are not sure if you wish to take part, please read through the details in this form. Kate Stephen, will be happy to hear from you if you just want to have a chat about what's involved.

What will it involve?
Taking part in phase 1 of the evaluation involves an interview with the lead manager or a designated individual attached to the model you have been involved with.
If your model is selected for more in depth evaluation (phase 2) this will involve one or two focus groups of different stakeholders involved in the model.

What will I be asked to do?
If you agree to take part you will be asked questions around the components of the model, how it is expected to work (theory of change) and the expected short, medium and long-term impacts or outcomes. You will also be asked to consider the impacts, learning, spread and sustainability of the model.

What will happen at the end of the evaluation?
Data collected throughout the evaluation will be used to complete a report to the Scottish Government.

What about confidentiality?
Projects will be named but the data you provide will be anonymized as far as possible. You should be aware, however, that due to the nature of the evaluation and the scale of the projects involved, it may be possible for the source to be identifiable. You will be given the opportunity to review your contribution to the evaluation report. Data will be kept in a locked filing cabinet and in password-protected folders on computers at the University of the Highlands and Islands.

Whom do I contact for further information about the evaluation?
To discuss any aspect of the evaluation, in the first instance please contact Dr Kate Stephen, E. Kate.stephen@uhi.ac.uk

Please keep a copy of this information sheet for your information.
Thank you for taking the time to read this and to consider taking part in the evaluation.

University of the Highlands and Islands
Oilthigh na Gàidhealtachd agus nan Eilean

Scottish School of Primary Care Transformation Evaluation

Participation information sheet *(Phase 2)*

You are invited to take part in this evaluation. This sheet is to provide you with the information you need, to see if you would like to take part in the evaluation that is being conducted by researchers at the University of the Highlands and Islands and University of Glasgow.

What is the purpose of the evaluation?

New models of primary care funded through the Scottish Government's Primary Care Transformation Fund and Primary Care Mental Health Fund in remote and rural areas will be evaluated. The first phase will involve identification of the components of the models, how they are expected to work (theory of change) and what the expected short, medium and long-term impacts or outcomes are. The second phase consists of identifying the impacts, learning, spread and sustainability.

The evaluation team

The evaluation team is based at the UHI Department of Nursing (School of Health, Social Care and Life Sciences) at the Centre for Health Science, Old Perth Road, INVERNESS. IV2 3JH.

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Why you?

You have been asked to participate because you have been involved in some capacity with one of the models funded by the Primary Care Transformation Fund or the Primary Care Mental Health Fund.

Do I have to take part?

No. It is up to you to decide if you want to take part. If you do decide to participate in the evaluation you can stop at any time without giving a reason.

What if I'm not sure?
If you are not sure if you wish to take part, please read through the details in this form. Any member of the evaluation team will be happy to hear from you if you just want to have a chat about what's involved.

What will it involve?
The model/project you are working in has been selected for more in depth evaluation as part of phase 2. This will involve interviews and/or focus groups of different stakeholders involved in the model.

What will I be asked to do?
If you agree to take part you will be asked questions around your experiences of being involved in the project, your understanding of the experiences of other staff and of patients involved in the new model. You will also be asked your views about the future sustainability and roll out of the model.

What will happen at the end of the evaluation?
Data collected throughout the evaluation will be used to complete a report to the Scottish Government.

What about confidentiality?
Projects will be named but the data you provide will be anonymized as far as possible. You should be aware, however, that due to the nature of the evaluation and the scale of the projects involved, it may be possible for the source to be identifiable. You will be given the opportunity to review your contribution to the evaluation report. Data will be kept in a locked filing cabinet and in password-protected folders on computers at the University of the Highlands and Islands.

Whom do I contact for further information about the evaluation?
To discuss any aspect of the evaluation, in the first instance please contact Kate Stephen, Kate.stephen@uhi.ac.uk
.

Please keep a copy of this information sheet for your information.
Thank you for taking the time to read this and to consider taking part in the evaluation.

APPENDIX D. Consent Form

Scottish School of Primary Care Transformation Evaluation
CONSENT FORM

	Please initial EVERY box if you agree
I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.	
I understand that the project(s) will be named but the data I provide will be anonymized as far as possible. I also understand that due to the nature of the evaluation and the scale of the projects involved, it may be possible for the source to be identifiable but that I will be given the opportunity to review my contribution to the evaluation report.	
I understand that data from this evaluation will be kept in a locked filing cabinet at the University of Highlands and Islands and stored electronically by the University in a password protected folder.	
I consent to take part in the interview.	
I give permission to have the interview recorded.	
If I withdraw from the evaluation at any time, I consent to the retention of data collected up to the point of my withdrawal.	
I consent to anonymised data from this evaluation being shared with other members of the evaluation team led by Prof Stuart Mercer at the University of Glasgow and may be used for publication. I understand that my name will not be mentioned in the data.	

Participant Name_____

Signature_____Date_____

Name of witness (Researcher)_____

Signature_____Date_____

APPENDIX E. Expected Impacts Flow Chart and Template for Expected Impacts and Measures

Expected Impacts Flow Chart (example)

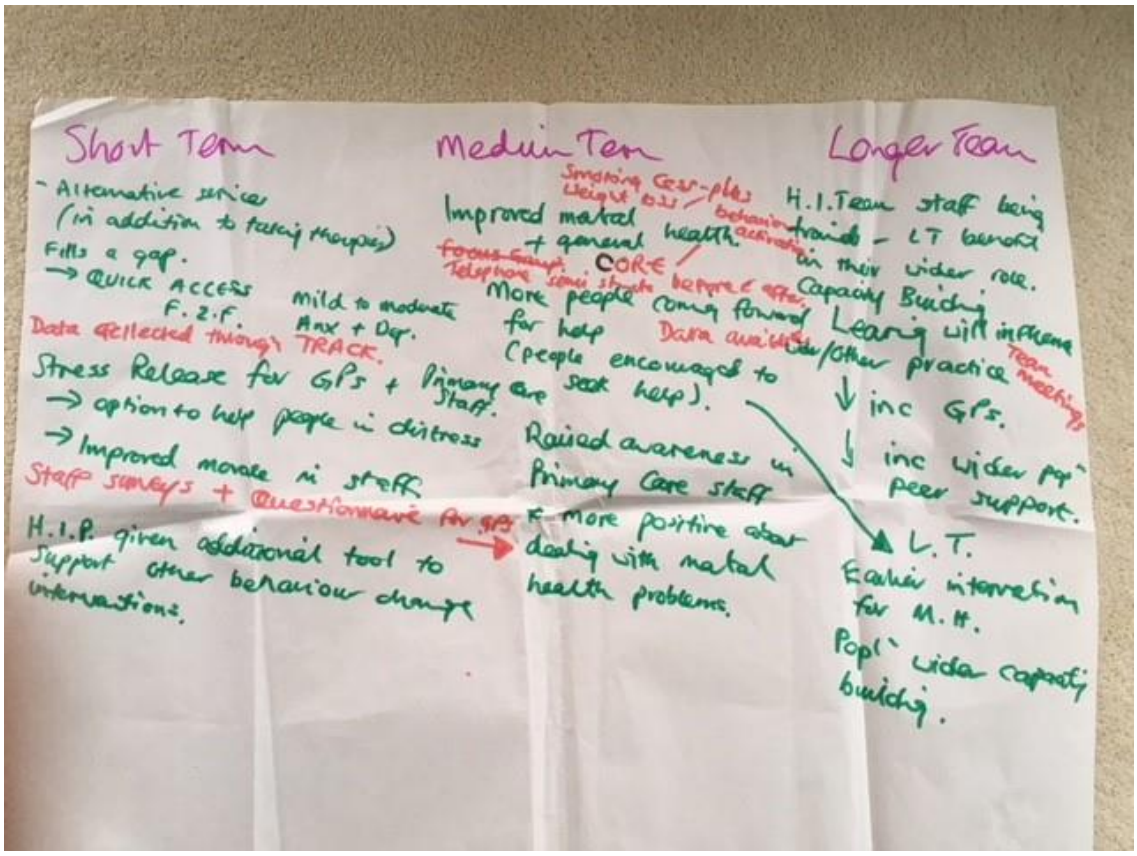

Table used to transcribe expected impacts and measures

SHORT TERM	Measure	MEDIUM TERM	Measure	LONG TERM	Measure

APPENDIX F. Pilot Project Titles and Phase 1 Interview Dates

Table Pilot project titles and Phase 1 interview dates

Ref	Pilot Project Title	Date of interview
1	PCTF Moray Firth: Cluster development	4th May '17
2	PCTF Moray Firth: Enhanced ACP	4th May '17
3	PCTF Moray Firth: Interface between Primary Care and Secondary Care	4th May '17
4	PCTF North & West: Cluster development	27th April '17
5	PCTF North & West: MDT working	16th Aug '17
6	PCTF North & West: Quality of Urgent Care centres	7th Aug '17
7	PCTF Argyll & Bute: Cluster development	11th May '17
8	PCTF Argyll & Bute: Pilot of Buurtzorg Model	11th May '17
9	PCTF Argyll & Bute: Development of Urgent Care consultations	11th May '17
10	PCFMH The effectiveness of specialist MH Pharmacist time in Primary Care	6th April '17
11	PCFMH Mental Health - Everyone's Business	11th May '17
12	PCFMH CBT Mastermind Programme	7th June '17
13	PCFMH Project Manager for Mindfulness Network and Decider Life Skills Service	2nd May '17
14	PCFMH Developing Mental Health MDTs	1st June '17
15	PCTF Empowering Localities: Locality Led Design of Multi-Disciplinary Models	unavailable for interview
16	PCFMH Fit for the Future services: A Review and Redesign	6th Oct '17
17	PCFMH Development of capacity to deliver behavioural activation support to people	25th May '17
18	PCTF Staying Well Programme	30th May '17
19	PCFMH Primary Care-led dementia diagnosis and support	18th Aug '17
20	PCFMH Self-management 6-week programme for patients with LTC, minor mental health problems and physical symptoms	7th Aug '17

APPENDIX G. Project Documents

Project Documents

Phase 1

Ref	Pilot Project Title	Description of Document and its use (1) Phase 1, (2) Phase 2	Number
3	PCTF Moray Firth: Interface between Primary Care and Secondary Care	(2) ITR data, u*sed in evaluation;* Patient satisfaction questionnaire, u*sed for background information*	(2)2
4	PCTF North & West: Cluster development	(1) Workshop Impact Assessment Questionnaire Collated Responses for Cluster Quality Leads (n=2) and Integrated Team Leaders; 13 individual questionnaire responses*, used for background information*	(1)16
7	PCTF Argyll & Bute: Cluster development	(1) A3 Plan Template; Paper on Development of GP Clusters in A&B, *used for background information*	(1)1
9	PCTF Argyll & Bute: Development of Urgent Care consultations	(1) Introduction to Social Prescribing & Pilot Project Plan*, used for background information*	(1)1
10	PCFMH The effectiveness of specialist MH Pharmacist time in Primary Care	(1) PCFMH Stage 2 Bid; Patient Information Leaflet; Service-user Involvement Report; Rating Scales overview; Referral criteria – Exclusion criteria; NHS Highland Applications to Primary Care Mental Health Fund*, used for background information*	(1)4+1*
11	PCFMH Mental Health - Everyone's Business	(1) NHS Highland Applications to Primary Care Mental Health Fund*, used for background information*	(1)1*
12	PCFMH CBT Mastermind Programme	(1) NHS Highland Applications to Primary Care Mental Health Fund*, used for background information* (2) Beating the Blues programme data, u*sed in evaluation*	(1)1* (2)1
13	PCFMH Project Manager for Mindfulness Network and Decider Life Skills Service	(1) Mindfulness Presentation; BAG Patient Workbook; Decider Skills Package overview; Survive & Thrive – Facilitators' Training; Decider Recommended Data Set and Outcome Measures; Decider Referral Form; CMHS Group Therapies Project Manager Job Description Template; Education Programme for People with Schizophrenia; 10 Priorities for Integrating Physical and Mental Health (King's Fund); Mindfulness Based	(1)3+1*

		Cognitive Therapy / Mindfulness Based Stress Reduction overview; Mindfulness Based Cognitive Therapy / Mindfulness Based Stress Reduction, Improving Outcomes for Patients; 8-week Mindfulness Course – Assessment & Referral Guidelines in AMH services; NHS Highland Applications to Primary Care Mental Health Fund*, used for background information*	
16	PCFMH Fit for the Future services: A Review and Redesign	(1) Primary Care Mental Health Transformation Review by Linda Gask – Confidential*, used in evaluation*; Policy Deployment Matrix for NHS Orkney Primary Care – Confidential, *not used.*	(1)2
17	PCFMH Development of capacity to deliver behavioural activation support to people	(1) Brief Behavioural Activation Treatment for Depression – Revised – A Guide for Patients (Draft), u*sed for background information*	(1)1
18	PCTF Staying Well Programme	(1) Staying Well patient information leaflet; Staying Well Evaluation; EQ5-D questionnaire; EORTC questionnaire; Satisfaction with Care questionnaire; Confidence (self- efficacy) questionnaire; Treatment burden questionnaire (Patient Experience with Treatment and Self-Management); The Staying Well Programme – Nurse Manual (draft); GP supervision prompt sheet; Staying Well Programme GP Supervision document; Entry to Staying Well Programme criteria. *Used for background information* (2) Staying Well data, u*sed in evaluation*	(1)11 (2)1
20	PCFMH Self-management 6-week programme for patients with LTC, minor mental health problems and physical symptoms	(2) Helping Patients Help Themselves (various draft iterations of project report); Helping Patients Help Themselves A3 Plan; Draft follow-up questionnaire; Course data, u*sed in evaluation*	(2)4
*This is one document			Total (1) 31 (2) 8

APPENDIX H. Context of the 4 H&I Health Boards

I. Geography

The 4 H&I Health Board areas cover a predominantly rural geography on the northern and western periphery of Scotland.

NHS Highland

The area covered by NHS Highland consists of 41% of Scotland's land mass [71] with an estimated resident population of 321,990, making it the largest and most sparsely populated health board in the UK [72, 73]. There are, however, over two million overnight stays by visitors to the area per annum [74]. NHS Highland provides health and social care services. NHS Highland is divided into three geographical sections; A&B, North and West (N&W) Highland, and South and Mid Highland [73].

A&B

The area covered by A&B serves an estimated population of 86,810 people [75]. A&B has 23 inhabited islands, more than any other local authority in Scotland, with around 17% of the population living on Islands [75].

N&W Highland

The area covered by N&W Highland serves a population of 80,407 [76]. Around 70% of the population live in what is defined as very remote areas (drive time of over 60 minutes to nearest large settlement) [77].

South and Mid Highland

The area covered by South and Mid Highland serves a population of 144,000 [78]. Around 40% of the population live in urban areas; the remainder of the population are almost equally divided between remote small towns, accessible rural areas and remote, and rural areas [78].

NHS Western Isles (Eileanan Siar)

The area covered by NHS Western Isles serves an estimated population of 26,950 [38]. The Western Isles consist of a chain of more than 100 inhabited and uninhabited islands located 70 kilometres west of mainland Scotland. Stornoway is the capital and only large town with a population of around 6,200 people. Approximately 30% of the total population of the Western Isles live within the Greater Stornoway area [79].

NHS Orkney

The area covered by NHS Orkney serves an estimated population of 22,000 [38]. The Orkney archipelago is located 16 kilometres north of mainland Scotland and comprises over 70 islands, of which 20 are permanently inhabited. In addition to the Orkney mainland, there are three groups of islands. The North and South Isles lie respectively north and south of the mainland. Kirkwall is the capital and the largest settlement with a population of around 9,300 [80].

NHS Shetland

The area covered by NHS Shetland serves an estimated population of 23,080 [38]. Shetland Islands are located 170 kilometres north of mainland Scotland, and comprise of around 100 islands, of which 16 are permanently inhabited. Lerwick is the capital and largest settlement with a population of around 7,500

people. Approximately 50% of the archipelago's total population live within 10 miles of Lerwick [81].

II. Population

The estimated population of Scotland in 2017 was 5,424,800 [38]. Population estimates in 2017 for NHS Highland, Western Isles, Orkney and Shetland were 321,990, 26,950, 22,000 and 23,080 respectively [38]. The population of Scotland is projected to rise by seven percent by 2039, from 5.35 million in 2014 to 5.70 million by 2039 [82]. Scotland's projected population increase is likely to be unevenly spread across the country. The population in NHS Highland is projected to remain the same by 2039 whereas the populations in NHS Western Isles and Shetland are expected to fall by 14%, and 1%, respectively and in Orkney there is a projected 2% increase in the population [82]. The median age in Scotland in 2017 was 42 years and the median age in 2017 in NHS Highland, Western Isles, Orkney and Shetland was slightly higher at 46, 48, 47, and 43 years, respectively [83]. The percentage of the population of Scotland in 2017 of working age was 64% and the percentage of the population of pensionable age was 19% [83]. The percentage of the population in 2017 of working age in NHS Highland, Western Isles, Orkney and Shetland was slightly lower at 60%, 58%, 60% and 62%, respectively and the percentage of the population of pensionable age was slightly higher at 23%, 26%, 24% and 20%, respectively [83].

III. Economic deprivation

Economic deprivation indicators suggest that the level of deprivation in NHS Highland, Western Isles, Orkney and Shetland is lower than the national average [84]. For example, the percentage of the population in Scotland classified as income deprived in 2013 was 13.2%, whereas the percentage of the population in NHS Highland, Western Isles, Orkney and Shetland classified as income deprived was lower at 10.3%, 12.1%, 7.2% and 6.4%, respectively [84]. Similarly, the percentage of children living in poverty was 15.3% in Scotland whereas the percentage of children living in poverty was lower in NHS Highland, Western Isles, Orkney and Shetland was 11.1%, 8.2%, 6.1% and 6%, respectively [84].

IV. Access to services

The Scottish Index of Multiple Deprivation's 'access' domain is derived from measures of drive times and public transport to different services, including to a General Practice. In 2013, 15% of people in Scotland lived in 15% of the most 'access deprived' areas whereas the percentage of people in NHS Highland, Western Isles, Orkney and Shetland living in 15% of the most 'access deprived' areas was 41.8%, 83.8%, 61.8%, 68.4%, respectively [84].

V. Primary care organisation

The 4 H&I Health Boards have differing organizational structures reflecting whether integration of health and social care services has been adopted with an Integration Joint Board or Lead Agency Model [85] and their unique geography:

NHS Highland

NHS Highland has adopted a Lead Agency model with the establishment of the Highland Health and Social Care Services. It has three operational units (N&W, South and Mid, and Raigmore Hospital) and together with the A&B Health and Social Care Partnership deliver services across the geographical area [73]. The operational management of A&B Health and Social Care Partnership adopts an Integration Joint Board (IJB) model [86]. Specific to primary care services there are three operational units delivering services across Highland: South and Mid Division Inner Moray Firth Operational Unit, N&W

Unit, and A&B [87].

NHS Western Isles

NHS Western Isles has adopted an Integration Joint Board model with the establishment of the Western Isles Integration Joint Board [88]. It has five locality planning groups: Barra and Vatersay; the Uists and Benbecula; Harris; Rural Lewis and Stornoway and Broadbay [89]. Primary care services are provided via the Community Health and Social Care Partnership. [90].

NHS Orkney

NHS Orkney has adopted an Integration Joint Board model with the establishment of the Orkney Health and Care Integration Joint Board [91]. It has two locality planning groups the Mainland (subdivided into the West and East Mainland) and the Isles. Primary care services are provided via Orkney Health and Care [91].

NHS Shetland

NHS Shetland has adopted an Integration Joint Board model with the establishment of the Shetland Islands Health and Social Care Partnership Integration Joint Board (IJB) [92]. It has North Isles, Whalsay and Skerries, North Mainland, West Mainland, Central Mainland, South Mainland, Lerwick and Bressay [93]. Primary Care Services are provided via the Community Health Partnership [94].

The 4 H&I Health Board areas have identified the following strategic priorities:

NHS Highland [95]

NHS Highland have prioritised a transformational programme of quality improvement and service redesign and staff identified themed areas of Models of Care, Realistic medicine, Drug Costs and Opportunities.

NHS Western Isles [96]

NHS Western Isles have three broad themes of quality of care, health of the population, and value and financial sustainability. Specifically, they have prioritised 12 areas of action:

> *integrated care, safe care, personalised care, supporting recovery, primary care, housing and community capacity, self-management, unpaid carers, the early years, reducing variation, technology and use of assets, and finally workforce planning'* [n.p].

NHS Orkney [97]

NHS Orkney have prioritised the development of services focussed on people, place and purpose [97]. Specifically, in their local delivery plan [98] they have prioritised:

> '*Three Horizons' work will support the local transformational change programme which will focus on service priorities. These include building a stronger primary care service including upgrading property and investing in IT, agreeing and implementing improvement activities* [n.p]

NHS Shetland [99]

NHS Shetland have identified the following priorities:

> *− Keeping people safe from harm, protecting vulnerable people*
>
> *− Delivering integrated health and care pathways and single point of entry to services by continuing to shift resources to primary and community care*
>
> *− Strengthening and working in partnership with individuals, their families and communities*

- *Reducing avoidable admission to and inappropriate use of hospital services*
- *Developing primary care and community responses through MDTs*
- *Supporting unpaid carers*
- *Tackling inequalities, with a focus on health inequality*
- *Prevention and early intervention*
- *Promoting health lifestyles − Improving MH and wellbeing*
- *Promoting self-management and independence* [p.19]

Each of the 4 H&I has the overarching responsibility for the provision of primary care and community health services:

NHS Highland

A total of 274 GPs work across 64 practices within NHS Highland and 96 GPs working across 33 GP Practices within A&B with a further estimated 150 locum GPs working within NHS Highland [100,101]. Additionally, practices employ practice nursing staff and Advance Nurse Practitioners (ANPs) and are supported by a variety of NHS community clinical staff such as allied health care professionals, nurse specialists etc. A detailed staffing profile breakdown was not publicly available. As of March 2018, ISD Scotland [102] reported district nurse staffing as follows: qualified district nurses (Agenda for Change (AfC) bands 5-9), staff in post = 248.6 and number of vacancies=13.8 with and nursing support (AfC bands 1-4), staff in post = 56.8 and number of vacancies= 0.

NHS Western Isles (Eileanan Siar)

A total of 30 GPs working across 9 practices within NHS Western Isles with a further estimated 15 locum GPs working within NHS Western Isles [103]. Additionally, practices employ practice nursing staff and ANPs and are supported by a variety of NHS community clinical staff such as allied health care professionals, nurse specialists etc. A detailed staffing profile breakdown was not publicly available. As of March 2018, ISD Scotland [102] reported district nurse staffing as follows: qualified district nurses (AfC bands 5-9), staff in post = 31.1 and number of vacancies = 1 with and nursing support (AfC bands 1-4), staff in post = 4.9 and number of vacancies= 1.

NHS Orkney

A total of 35 GPs working across 6 practices within NHS Orkney with a further estimated 9 locum GPs working within NHS Orkney [104]. Additionally, practices employ practice nursing staff and ANPs and are supported by a variety of NHS community clinical staff such as allied health care professionals, nurse specialists etc. A detailed staffing profile breakdown was not publicly available. As of March 2018, ISD Scotland [102] reported district nurse staffing as follows: qualified district nurses (AfC bands 5-9), staff in post = 26.0 and number of vacancies = 2.4 with and nursing support (AfC bands 1-4), staff in post = 7.6 and number of vacancies= 0.

NHS Shetland

A total of 27 GPs working across 10 practices within NHS Shetland [105]. Additionally, practices employ practice nursing staff and ANPs and are supported by a variety of NHS community clinical staff such as allied health care professionals, nurse specialists etc. A detailed staffing profile breakdown was not publicly available. As of March 2018, ISD Scotland [102] reported district nurse staffing as follows: qualified district nurses (AfC bands 5-9), staff in post = 29.7 and number of vacancies=5.5 with and nursing support (AfC bands 1-4), staff in post = 0.5 and number of vacancies = 1.5.