



Scottish School of Primary Care

# National Evaluation of New Models of Primary Care in Scotland

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## Acknowledgements

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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 universities involved, nor the study funder, the Scottish Government. They are based on the information provided by the identified key informants who participated in the case studies, and may not necessarily represent the views of other potential key informants who were either not identified by the recruitment strategy or who declined the invitation to participate.

## Forewords

### *The Scottish Perspective*

Primary Care touches all of our lives. In the UK, it is more often not only the first point of contact with health care, but the only contact. But good Primary Care goes beyond first-contact care alone. It is focussed on people, rather than diseases, provided over time to defined populations who are able to access comprehensive care when they need it. And when these needs extend beyond this, good Primary Care ensures that it is thoroughly and carefully co-ordinated. Primary Care is the bedrock on which our NHS is built and is sustained, but the challenges that all major health systems now face require it to adapt and reform.

Whilst health, and now social care, in Scotland has embarked on these reforms, the Scottish School of Primary Care has worked alongside those undertaking these tests of change to evaluate the impact of this ambitious programme. This learning, developed through the application of academic rigour and independence, is critical to the process of ensuring Scotland consolidates a sustainable model of universal and comprehensive provision for our citizens and remains at the forefront of international Primary Care. I am grateful to all of those who contributed to this work and to the Scottish School of Primary Care for producing this extensive and thorough evaluation.

**Gregor Smith, Deputy Chief Medical Officer for Scotland**

### *The International Perspective*

Better treatment options, increased expectations from citizens, an ageing population, more patients with multimorbidity, widening health inequalities, and a need for more community based prevention strategies, challenge modern Western health care systems. This has led to a rediscovery of the need for people-centred and relationship- oriented strong primary care systems, alongside an increased need for integrated, seamless collaboration between primary care, hospitals and social care.

Scotland has launched ambitious reforms in primary care and general practice to address these needs, and thus Scotland has become an important role model for reforms in many European countries, including Denmark. This wide-ranging and detailed evaluation of new models of primary care by the Scottish School of Primary Care (SSPC) is important from an international perspective as it offers valuable 'transferable learning' from Scotland's successes, challenges and possible failures, in its ambitious journey of primary care transformation. Producing this comprehensive and in-depth evaluation within a short time-frame, whilst including such a large number of 'tests of change' is a major achievement by SSPC. In addition to the substantial volume of empirical evidence gathered, there are also new reviews, and analyses of findings from other countries. Synthesis of all these sources of evidence has been distilled into key learning outcomes. We can all learn important lessons about 'how to implement change' from this report.

Notwithstanding the immediate importance of the findings to policymakers, managers and front-line staff striving to implement new ways of working in primary care, it is my sincere hope that it is only

the beginning of an ongoing, long term, focused collaboration between the Scottish Government and the SSPC. There is a clear need, as surfaced in this report, for the further strengthening of infrastructure and capacity for much needed primary data, and for programmes of applied research required to generate the evidence-base to guide the journey of primary care transformation. This journey - in Scotland and other countries - is likely to take many more years before it reaches solid ground. Therefore, we all need further detailed evaluations of different core elements of the Scottish reforms, including evidence about the process and effectiveness of the recent major changes in the GP contract, including quality improvement within GP Clusters, as well as the 'extrinsic' leadership role of GPs in the new integrated authorities.

This report is a 'must read' and an inspirational source of knowledge for all Europeans involved in primary care. However, it also shows the strong need for further applied clinical and health services research in Scotland and in other countries, the findings of which should be communicated internationally in peer reviewed journals and in other fora for scientific collaboration. By following this line, Scotland can continue to be a leading power in the development of European primary health care.

Congratulations to Scotland and thank you to SSPC for this huge body of work.

**Frede Olesen. Professor, DrMedSci, Aarhus University, Denmark.**

## KEY MESSAGES

**Findings:** In total, 204 projects were identified across Scotland of which 137 spanned a wide range of different types of tests of change. The remainder involved Musculoskeletal Physiotherapy (36) and Advanced Nurse Practitioners (31). By the end of the two-year funding period, 58% were reported as fully implemented, 34% partially implemented and 6% had not started (2% unknown). Thirty-four tests of change were selected for in-depth investigation (deep dives) in selected case studies. Tests of change that included *all three* levels of People (patients), Workforce and System, appeared to be more fully implemented than those targeting only one or two levels. However, patient or public involvement was absent in most tests of change. In addition, only 1 in 10 included a focus on health inequalities.

Although most of the projects were implemented or partially implemented, sustainability was felt to depend on future funding. Most were too small to be considered for spread and roll-out, and many teams felt unsupported in terms of data availability and evaluation. Unintended consequences included a perceived increase in GP workload due to the need for training and clinical supervision of new members of the multidisciplinary team. There was no clear pattern of any particular types of tests of change being more successful than others. Second-order analysis revealed ten themes that underpinned successful implementation irrespective of the type of project. From these, we have developed an implementation framework, which considers context and the key required activities in project implementation.

### Key Recommendations:

- **Recommendation 1:** Primary care transformation should focus on a smaller number of larger projects, conducted over a longer period of time, with agreed goals and outcomes and sufficient support for robust quantitative evaluation.
- **Recommendation 2:** Role clarity, role support, governance, and clear communication channels are required as the primary care landscape becomes more complex. Strengthened support for collaborative leadership and multidisciplinary team working is required at all levels.
- **Recommendation 3:** Patient, carer, and community involvement is essential. The aim should be participation in the co-design of projects and service developments, rather than 'information campaigns' after the changes have been made.
- **Recommendation 4:** Further work is required on how primary care can best address, or mitigate the effects of, health inequalities. This should build on existing evidence, and learning from the 'GPs at the Deep End', but include vulnerable groups living in less deprived areas.
- **Recommendation 5:** Rural proofing of health services should be considered as a systematic approach to ensure the needs of rural populations are considered in the planning and delivery of health services.
- **Recommendation 6:** The success of primary care transformation requires a step change in workforce planning, capacity, capability and leadership to address workforce and capability challenges across all clinical disciplines.
- **Recommendation 7:** A strategic, integrated approach to the evidence required to guide the ongoing transformation of primary care is required. Monitoring and evaluation should be accompanied by dedicated funding for high priority applied research in primary care in Scotland to fill the many evidence-gaps.
- **Recommendation 8:** Consideration should be given to a large-scale demonstrator digital primary care transformation project with clear co-designed and co-produced outcomes and rigorous evaluation.

## Abbreviations

A&A	Ayrshire & Arran
ACCs	Acute Care Collaborations
ACP	Anticipatory Care Planning
ANP	Advanced Nurse Practitioner
CBT	Cognitive Behavioural Therapy
CPD	Continuous Professional Development
D&G	Dumfries & Galloway
EHCH	Enhanced Health in Care Home
GG&C	Greater Glasgow & Clyde
GP	General Practitioner
MCP	Multispecialty Care Provider
MH	Mental Health
MM	Multimorbidity
MSK	Musculoskeletal
NHS	National Health Service
PACs	Primary and Acute Care system
PCFMH	Primary Care Fund for Mental Health
PCTF	Primary Care Transformation Fund
SG	Scottish Government
SSPC	Scottish School of Primary Care
UEC	Urgent and Emergency Care
WTE	Whole Time Equivalent

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## EXECUTIVE SUMMARY

### Background

Over recent years, the Scottish Government (SG) has progressed a raft of major new policy developments that aim to transform health and social care, with primary care being at the heart of these changes. In 2015, SG established a Primary Care Development Fund [26], which included £30 million to test new models of care through a Primary Care Transformation Fund (PCTF) and the Primary Care Fund for Mental Health (PCFMH). ‘Tests of change’ began in every territorial health Board in April 2016, funded until March 2018. The Scottish School of Primary Care (SSPC) – a multidisciplinary consortium of Scottish universities with expertise in academic primary care ([www.sspc.ac.uk](http://www.sspc.ac.uk)) - was commissioned by SG to evaluate the progress of these tests of change funded by the PCTF and PCFMH, plus any other innovative primary care projects identified that had the potential to be transformative.

### Aims and Objectives

The overall aim of the evaluation, as requested by the SG, was to ‘tell the story of primary care transformation in Scotland’ in terms of the tests of change that were being piloted over the period funded. The specific objectives of the evaluation were to:

1. Identify the location and types of tests of change carried out across Scotland and their progress during the funding period (national scoping).
2. Using a case study approach, conduct in-depth investigation (deep dives) of what was working well and why, in selected case sites (Health Boards) and across Scotland in two professional groups – Advanced Nurse Practitioners (ANPs) and Musculoskeletal (MSK) Physiotherapy.
3. Integrate the findings from the case studies to inform the key overall learning relating to successful implementation.

In this overview report, we present a set of recommendations for future work based on learning from the research which was undertaken to meet the above objectives.

### Approach

We used a ‘hub and spokes’ approach, with the SSPC core team leading the national scoping and coordinating the case studies, which were led by senior academics in five of the SSPC member Universities. These were:

- University of Glasgow (NHS Ayrshire & Arran, NHS Lanarkshire, and MSK Physiotherapy case studies)
- University of the Highlands and Islands (NHS Highland, NHS Eileanan Siar, NHS Orkney and NHS Shetland case studies)
- University of Stirling (ANP Case study)
- University of St Andrews (NHS Tayside case study)
- 

The main overall report, which draws together the findings from the case studies is available here ([www.sspc.ac.uk/reports/](http://www.sspc.ac.uk/reports/)) along with the six full case study reports ([www.sspc.ac.uk/reports/](http://www.sspc.ac.uk/reports/)), which including detailed reviews of the international evidence on primary care transformation, and factors influencing implementation of ANP and MSK Physiotherapy. As an additional output from the evaluation, the SSPC core team also developed a Primary Care-Implementation Framework ([www.sspc.ac.uk/reports/](http://www.sspc.ac.uk/reports/)).

The evaluation involved a two-phase approach, the first exploring the planning and expected impacts of the tests of change, and the second exploring actual or perceived impacts, learning, spread and sustainability. This included any unintended negative consequences. The key sources of data were (a) interviews with key informants and (b) national and local documents.

In phase one, we interviewed 155 key informants, and reviewed 661 national and local documents. In phase two, we interviewed a further 191 key informants and reviewed additional documentation relevant to the selected deep dives. Full details of the approach and methods employed are given in the main report ([www.sspc.ac.uk/reports/](http://www.sspc.ac.uk/reports/)). We also conducted international literature reviews on primary care transformation, and ANP and MSK Physiotherapy implementation, and reviewed the findings of recent UK reports on new models of primary care which are available here ([www.sspc.ac.uk/reports/](http://www.sspc.ac.uk/reports/)). A quantitative evaluation using routine NHS data was planned as part of the current evaluation, but due to considerable delays in accessing the data, is now being taken forward as a separate study by the University of Edinburgh, which will report in Spring 2020.

## Findings

**Objective 1: National Scoping.** In total, 204 tests of change in primary care were identified across Scotland during the scoping phase, of which the majority (137) spanned a wide range of different types of tests of change. The remainder involved MSK Physiotherapy (36) and ANPs (31). Most of these tests of change had received PCTF/PCFMH funding, though Health Boards differed in how they used the funds. Some funded a large number of new small projects entirely from these funds, others pooled the funding from various sources to focus on a smaller number of larger, often ongoing projects.

When classified according to the SG's Primary Care Outcomes Framework [29], 54 of the 204 tests of change focused on the People level (e.g. informed patients), 159 on Workforce level (e.g., new or changed roles), and 144 on System level (e.g., new ways of organising care). Seventy-three focused on one level only, 105 on two levels, and 24 on all three levels. In terms of the expected impacts, in relation to the SG's Primary Care National Outcomes[29] most tests of change focused on improving and integrating the workforce and enhancing the public experience. Only one in 10 projects included reducing health inequalities as an intended outcome, despite this being a key focus of the funding call.

By the end of the scoping exercise of the 204 tests: 118 were implemented as planned; 70 were partially implemented; 12 had not started or had been stopped, and 4 could not be assessed.

Around half of the tests of change that focused on only one or two of the three levels (People, Workforce and System) had been implemented by this time, whereas three-quarters of tests that focused on all three levels had been implemented.

**Objective 2: Case Studies/ Deep Dives.** Thirty-four tests of change were selected for in-depth investigation. Most of the tests of change were not based on a specific 'theory of change'; interviewees generally referred to the SG's own high-level vision for primary care. Almost all respondents regarded a main outcome as being a reduction in GP workload, though few expected this

to happen within the life of the funded projects. In most cases, successful implementation of the test of change itself was considered the key goal within the funding period.

As indicated above, the (small number) of tests of change that included *all three* levels of People, Workforce and System, appeared to be more successfully implemented, and examples were described in the deep dives. However, in general, there was limited patient or public involvement or consultation in the planning, design, and delivery of tests of change. Similarly, very few of the deep dives had a focus on health inequalities, though there were notable exceptions to this. Although most of the projects selected for the deep dives were successfully implemented, a ubiquitous view was that sustainability depended on future funding. Most tests of change were too small to be considered for spread and roll-out, and many felt unsupported in terms of evaluation. There was no clear pattern of particular types of tests of change being more successful than other. Unintended consequences included a perceived increase in GP workload due to the need for training and clinical supervision of new members of the multidisciplinary team, such as ANPs.

**Objective 3: Key Learning.** By comparing the key findings of each deep dive, ten overall themes were identified.

1. **Short-term funding is a double-edged sword.** The availability of such funding facilitated the tests of change but the short-term nature impacted negatively on forward planning and sustainability and in some cases led to a reluctance to embrace change.
2. **Building upon or starting anew?** Tests of change that built on previous work and where pre-existing relationships were functional, were implemented more effectively than those that were entirely new.
3. **Top down versus bottom up.** Tests of change that involved front-line staff in the design of new services and had good project leadership were implemented more effectively than those that were 'imposed' from above.
4. **Forward planning.** Tests of change that had a clear rationale and documentation of the steps taken to develop and implement the project were implemented better, and were more likely to become sustainable in the future.
5. **Time to train.** Staff training and clinical and managerial management from within GP practices facilitated implementation, but this was challenging due to current workload pressures on GPs and practices.
6. **Leadership and governance.** National leadership was important in establishing criteria for new roles and responsibilities (e.g. ANPs), but local governance issues regarding clinical supervision, remuneration, and accommodation were also key issues that needed resolving.
7. **System, workforce, people.** Tests of change with perceived early impacts more commonly targeted all three levels: People (e.g., public information and/or engagement campaigns), Workforce (e.g., capitalised on previous relationships and/or developments and invested in staff engagement, training and support), and System (e.g., dedicated funding and protected staff time).
8. **Data and evaluation.** Those charged with overseeing the implementation and evaluation of the tests of change expressed a need for support in designing evaluations, in identifying outcome measures, and in establishing systems for collecting data.
9. **Demonstrating impact.** This was hampered by the short-term nature of the tests of change and the limited support for data collection, extraction and analysis in order to monitor

quantifiable impact.

10. **Core outcomes.** There is a need to identify a core set of outcome measures and to continue to evaluate primary care transformation journeys over the next five to ten years in order to evaluate their actual impacts, sustainability and spread.

As an additional output of the evaluation, the SSPC core team developed a **Primary Care-Implementation Framework** ([www.sspc.ac.uk/reports/](http://www.sspc.ac.uk/reports/)). Drawing on the data from the case studies this is a pragmatic framework and could be developed into a very useful online tool to guide those charged with implementing new models of care.

### **Conclusions and Recommendations.**

Since we started this evaluation of new models of primary care, there have been a number of further developments in primary care in Scotland. These developments include the memorandum of understanding (MoU) established between Scottish Government, The Scottish GPs committee of the BMA, integration authorities and NHS Boards in April 2018 which sets out how each party will work together towards supporting, enabling and delivering the new GP contract and the new models of primary care. This includes the development of locally agreed Primary Care Improvement Plans, and the use of the associated Primary Care Improvement Fund.

The rapid development of change in many different areas of primary care policy in Scotland over the last few years presents challenges to the implementation of these very policies. Embedding these changes within services, so that they can contribute in a cohesive way to future integrated primary care development, will be essential in the next phase of primary care transformation. Based on the findings and implications of our evaluation, and the developments alluded to above, we have identified a number of areas which appear to be priorities for future work on primary care transformation, which we hope will be of relevance to policy-makers, policy-implementers, and clinicians tasked with embedding change at the front-line of the NHS.

#### **Planning, Funding and Time**

The lead in time from the SG's initial call for proposals for PCTF and PCFMH funding, to submission, decision, and project commencement was too short. This, plus the differing approaches taken by different Boards, is likely to have encouraged a '*let a thousand flowers bloom*' approach and probably limited the quality of submissions and projects. The duration of the funding (24 months maximum) was also too short, and for some acted as a deterrent rather than an incentive. It also limited the ability of project leads to plan and share experiences and learning, before, during and after the completion of the tests of change.

-  **Recommendation 1:** Although the approach taken in the PCTF/PCFMH fund led to some useful learning, the findings suggested that the next phase of primary care transformation should take a more 'mission-oriented approach', with a focus on a smaller number of larger projects, conducted over a longer period of time, with agreed goals and outcomes and sufficient support for robust evaluation. Decisions on committing future resources in this area should take into account the ten themes identified in the current evaluation. The SSPC-Implementation Framework can provide pragmatic support on the 'nuts and bolts' of planning and implementing such projects and should be made available as an online resource.

## Relationships, Roles and Engagement

The complexity of the landscape in integrated primary care grew considerably during the period of the evaluation as the GP contract evolved and Integration Authorities were established. Moving forward, relationship development and maintenance within and between teams and sectors will be crucial. This was notably absent in some tests of change. Engagement and involvement of patients and communities is also a vital aspect of this. In addition, the limited number of tests of change that focused on health inequalities, despite a clear request to do so by the SG, strongly suggests that this is an area of great challenge. 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. This involves a four stage process: ‘what are the direct or indirect impacts of the policy on rural areas?’; ‘what is the scale of these impacts?’; ‘what actions can you take to tailor your policy to work best in rural areas?’; ‘what effect has your policy had on rural areas and how can it be further adapted?’ [34].

- ✚ **Recommendation 2:** Role clarity, role support, governance, and clear communication channels are required as the primary care landscape becomes more complex. Strengthened support for collaborative leadership and multidisciplinary team-working is required at all levels.
  
- ✚ **Recommendation 3:** Involvement and participation of patients and communities in the future development of new ways of working in primary care is essential, especially for projects or service developments that directly affect patient care, and should be a condition of funding being granted. The aim should be to include patients, carers, and families in the co-design of projects and service developments, rather than ‘information campaigns’ after the changes have been made.
  
- ✚ **Recommendation 4:** Further work is required on how primary care can best address, or mitigate the effects of, health inequalities. This should build on existing evidence. Learning should be shared from the experience of the ‘GPs at the Deep End’ group, which should be regarded as an important asset and resource for broader work in inequalities, including vulnerable patients with complex needs living in less deprived areas, (for example, in remote and rural areas, where ‘pocket deprivation’ is common).
  
- ✚ **Recommendation 5:** The needs of remote and rural populations require that transformation be addressed in a way that reflects rural geography, population sparsity and distances from secondary and tertiary services. Rural proofing of health services should be considered as a systematic approach to ensure the needs of rural populations are considered in the planning and delivery of health services.

## Training and Environment

As set out in the Health and Social Care workforce plan part 3, high quality training, with local and national leadership, and adequate clinical supervision is required to develop the multidisciplinary primary care workforce further. This requires a supportive learning environment and suitable physical and digital environments within and beyond GP practices. The environment also includes broader issues including support for staff wellbeing. Current GP workload pressures are limiting the time available for teaching and clinical supervision, and also making it harder for

staff who wish to undertake training for new roles to get the required protected time. The SG overview of Primary Care Improvement Plans highlights the weakness of local workforce planning across PCIPs, as well as suggesting the need for further national efforts on workforce capacity, capability and leadership.

- ✚ **Recommendation 6:** The success of primary care transformation over the next few years will require a step change in the development of national and local efforts in workforce planning, capacity, capability and leadership to address workforce and capability challenges across all clinical disciplines. The forthcoming SG integrated workforce plan represents an opportunity to move these areas forward at pace.

### Data, Evaluation and Outcomes

A clear message from the current evaluation was the need for more data and evaluation support at a local level. Crucial elements include data availability, collection, analysis, and interpretation. Expansion of the Local Intelligence Support Teams (LIST; NHS National Services Scotland), progress of the Scottish Primary Care Information Resource (SPIRE), the launch of 'Improving Together Interactive (iTl)' website, and the establishment of a Primary Care Evidence Collaborative, are all welcome developments. The SG is also currently developing a ten-year Primary Care Monitoring and Evaluation Strategy. In addition to evaluation and monitoring, a focused academic programme of applied research is also required to fill the many evidence-gaps identified in the current evaluation and related literature reviews. Without this, future primary care policy is likely to be poorly evidenced and therefore potentially both less effective in improving patient care and more wasteful. Many of these issues, particularly data availability for planning development and evaluation across primary, secondary and social care, are linked to the need to develop better national digital infrastructure for primary care.

- ✚ **Recommendation 7:** A strategic, integrated approach to the generation, dissemination, and implementation of the evidence required to guide the ongoing transformation of primary care is required. The SG's Primary Care Monitoring and Evaluation Strategy should be accompanied by a Scottish Primary Care Research Strategy, with dedicated funding for high priority applied research in primary care in Scotland. Such research should be co-designed and co-produced by academics, Integration Authorities, practices, patients and the third sector.
- ✚ **Recommendation 8:** The rapid development of a national digital platform, as set out in Scotland's Digital Health and Care Strategy, *Enabling, connecting and empowering* [5] has the potential to address many of the issues of data availability and use as well as evaluation and the generation of evidence. This could help to speed up transformation. Consideration should be given to a large-scale demonstrator digital primary care transformation project with clear co-designed and co-produced outcomes and rigorous evaluation. This could be established in both a rural and an urban area, to ensure that the differing contextual needs of both are addressed.

# 1 INTRODUCTION

## 1.1 Primary Care in Scotland

The Scottish Government (SG) has embarked on a number of major policy developments aimed at enhancing the quality of care and ultimately the health and wellbeing of the people of Scotland. Primary care is at the heart of this transformation [1, 2]. Key changes include the integration of health and social care by legislation and the resultant launch of 31 Integrated Joint Boards (IJBs) in April 2016 to facilitate integration [3] and the introduction of a new General Medical Services (GMS) contract for General Practitioners (GPs) in Scotland in 2018. The new GP contract in Scotland aligns with the ambitions of integration, and aims to support GPs to work as expert clinical generalists as part of an expanded multi-disciplinary team (MDT) [4]. A memorandum of understanding was established between Scottish Government, The Scottish GPs committee of the BMA, integration authorities and NHS Boards in April 2018. For the first time, this sets out how each party will work together towards supporting, enabling and delivering the new GP contract and new models of care consistent with the national clinical strategy and health and social care delivery plan. Scotland's 2018 Digital Health and Care Strategy sets out an ambition to improve services, support person-centred care and improve outcomes [5]. There is also a current review of the primary care estate which will provide a baseline for needed modernisation in the future. GP clusters were introduced in 2016 and were incorporated into the new GP contract in 2018 [6]. This requires practices to work together to improve quality of care based on the health care needs of their local populations [7].

The SG is investing £250 million in general practice and primary care [8]. It has also put other measures in place to support the new GP contract and the Health and Social Care Partnerships (HSCPs) such as the provision of data analysts (LIST) to help provide health intelligence to HSCPs and cluster quality leads [9]. Chief Officers of IJBs are also developing their important role as leaders of system wide change across health and social care [10]. Following the publication of 'Improving Together'[11] NHS Health Improvement Scotland (HIS) has led on the collation and development of resources for GP clusters, culminating in the recent launch of the Improving together Interactive website this year, which brings together resources from a wide range of organisations [12].

SG also has an ambition to increase the number of GPs in Scotland by 800 over the next decade. They have pledged to also increase the number of district nurses, community pharmacists, and advanced practitioners [13]. It has committed £3 million to train an additional 500 Advanced Nurse Practitioners (ANPs) across primary and secondary care [13]. There are plans to increase the number of Musculoskeletal (MSK) Physiotherapists in primary care offering direct access to patients, and to increase paramedic provision to work in the community, aligned to GP clusters [13]. Other changes include the provision of 250 Community Links Workers in areas of high deprivation, and wider clinical roles for Occupational Therapists, Dieticians, Primary Care Mental Health Practitioners, Optometrists, and others [13].

This policy direction in primary care and integrated health and social care is underpinned by Scotland's Chief Medical Officer's vision of 'Realistic Medicine' [14]. This encourages improvement and innovation and calls for a new approach to care that is centred around the patient, based on shared- decision making, and manages risk with an aim to reduce harm, waste, and unnecessary variation in practice and outcomes.

## 1.2 Why These Changes Are Necessary

Scotland, like the rest of the UK and most other countries, is experiencing a growth in the number and proportion of older people [15]. Scotland also has historically wide inequalities, including in health, with substantial difference in life expectancy and health-related quality of life between rich and poor [16]. Ageing and inequalities are both underpinned by multimorbidity (MM) (the co-existence of two or more long-term conditions (LTCs) within an individual) [17]. More than half of people aged over 65 years in Scotland have multimorbidity [18]. MM develops at a younger age in people living in more deprived areas of Scotland [18, 19].

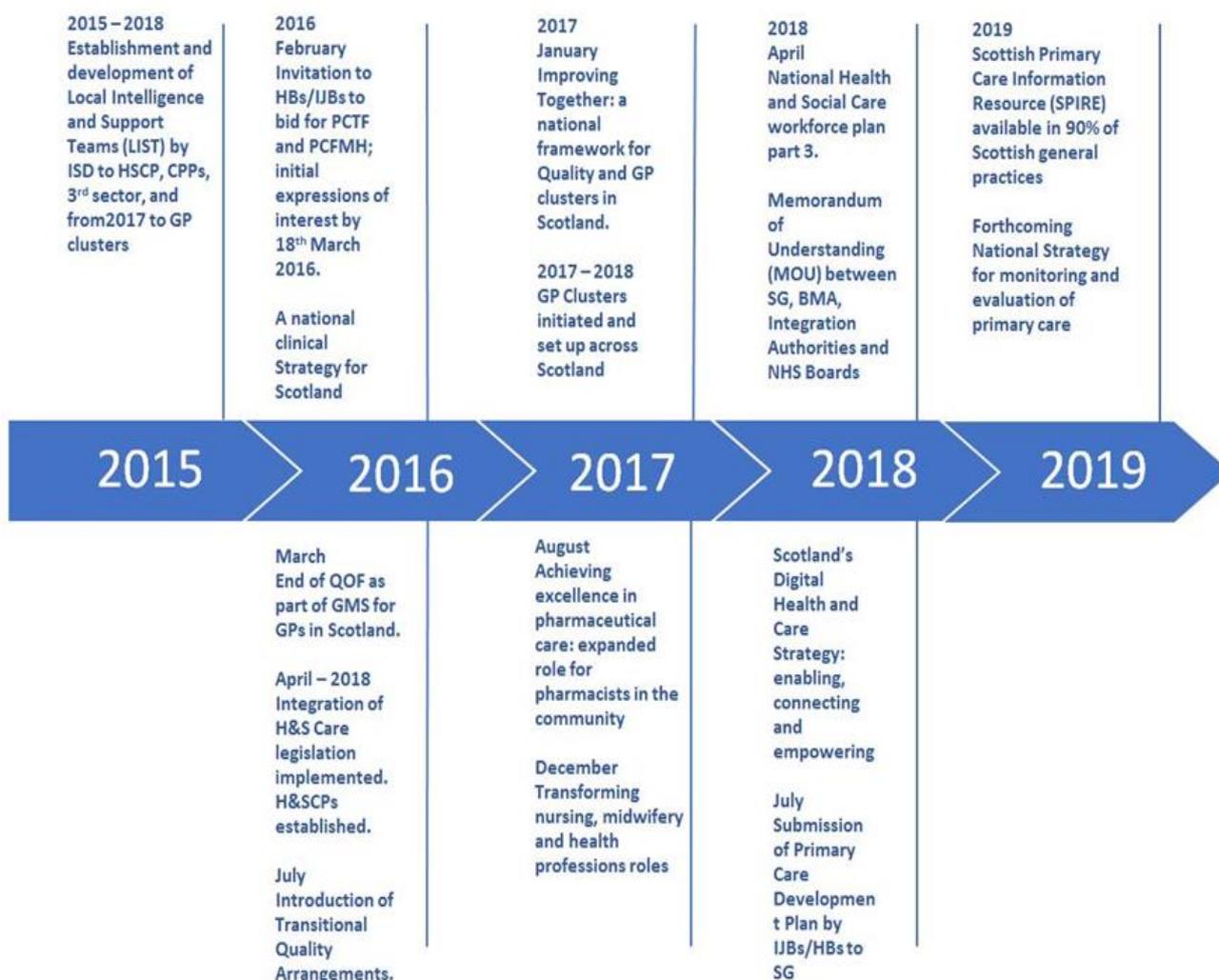
MM results in a high burden on patients, leading to lower quality of life and higher death rates, and adds considerable strain to the health and social care system, with higher consultation and hospital admission rates [20]. MM is expected to rise further in coming years, given the predicted increase in ageing in the population of Scotland, with the number of people aged 65 years or older expected to increase by 59%, from 0.93 million to 1.47 million by 2037 [19]. Similarly, if inequalities continue to widen [20], MM is likely to rise even further in deprived areas over future years.

Mental health (MH) is a major public health challenge in Scotland, and approximately 1 in 3 people are estimated to be affected by a mental illness in any one year [21]. Only 1 in 3 people in Scotland who would benefit from a MH intervention currently receive it [22]. MH and physical health problems frequently co-exist [18] and most people with MH problems also have one or more physical LTC [19,20].

Given these challenges and demographic changes in the population, it is perhaps unsurprising that there has been a substantial rise in workload and complexity of patient needs in primary care over the last decade [23, 24]. This increasing demand on primary care is also related to a number of other system-related factors such as: screening programmes and preventative medication; the lowering of thresholds for diagnosis and management of conditions by clinical guidelines; policy drivers that encourage the move of hospital services to primary care; pressured District Nursing Services that are less able to support GP practices; increase in referral thresholds to other services such as mental health and social services; and difficulties relating to the primary care and secondary care interface [24] (Figure 1.1).

General Practice now has growing problems in maintaining and developing its workforce in Scotland [25]. Fewer GPs in Scotland now work full time; 37% in 2017 compared to 51% in 2013 [25]. Moreover, over a third of GPs (36%) and more than half of practice nurses (55%) are aged over 50 years [25]. Almost a quarter of GP Practices (24%) reported vacancies in 2017 compared to 22% in 2015 and 9% in 2013 [25].

**Figure 1.1 Significant changes in Primary Care in Scotland over last 4 years**



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### 1.3 Primary Care Transformation Fund and Primary Care Fund for Mental Health

In 2015, the SG established a £60 million Primary Care Development Fund [26], which included £20.5 million to test new models of care through a Primary Care Transformation Fund (PCTF). A £10 million Primary Care Fund for Mental Health (PCFMH) was also established, as was funding for community pharmacy (£16.2 million), digital services development (£6 million), and other developments including a GP recruitment and retention programme (£2.5 million) [26]. In February 2016, the SG invited Scottish Health Boards to submit joint bids for PCTF and the PCFMH to establish projects testing new models of primary care, starting from April 2016 (Appendix A. Invitation to bid from the Scottish Government). Initially, the funding was for 12 months, with a further 12 months of funding at the discretion of the SG (although all projects did get the second year of funding). The funding to each Health Board was based on the Scottish resource allocation formula (commonly referred to as NRAC) which is based on a weighted capitation based on the number of people resident in each NHS Board area with adjustments for age, gender, morbidity, deprivation, and the excess costs of providing services in different geographical areas. Following revisions of submitted proposals, the SG released funding to the health boards in July 2016. Ahead of the release this funding to other health boards, Inverclyde in NHS Greater Glasgow & Clyde (GG&C) was awarded funding in September

2015 to begin to pilot primary care tests of change and GP Clusters before the other areas to gain early learning.

#### **1.4 SSPC Evaluation of Primary Care Transformation tests of Change**

The Scottish School of Primary Care (SSPC) is a multidisciplinary consortium of Scottish universities with expertise in academic primary care ([www.sspc.ac.uk](http://www.sspc.ac.uk)) and was commissioned by the SG in September 2015 to carry out an independent evaluation of the new models of primary care being tested throughout Scotland. The number of primary care tests of change funded by the SG (in April 2016) was much larger than originally discussed when the evaluation was first commissioned September 2015, when it was envisaged that 6-10 large projects would be funded from the PCTF, and these would be evaluated by SSPC. In addition, SG also requested in the first quarter of 2016, that SSPC should include projects funded by the PCFMH as well as the PCTF, and any other projects identified that were innovative and thought to be potentially transformational. Given this much larger scale, it was agreed with the funder that the evaluation would provide an overview of primary care tests of change across all Scottish NHS Health Boards (national scoping), followed by case studies in selected Health Boards or topics, with in-depth exploration ('deep dives') on selected tests of change. This report gives an overview of the key findings, and more detailed reports on the different case studies undertaken are available here ([www.sspc.ac.uk/reports/](http://www.sspc.ac.uk/reports/)).

SSPC was also requested by SG to carry out an early evaluation of the Inverclyde tests of change, which was conducted by our core team (between 1 October 2016 and 31 March 2017), the findings of which have been published [27]. Several other strands of work were carried by SSPC in collaboration with the SG during the commissioned evaluation period, which readers may find relevant to the current report (Appendix B. Scottish School of Primary Care concurrent work 2016-2018. and Appendix C. Development of a Strategic Level Outcomes Framework for Primary Care).

## 2 AIM AND APPROACH

### 2.1 Aim and Objectives

The overall aim of the evaluation, as requested by the SG, was to ‘tell the story of primary care transformation in Scotland’ in terms of the tests of change that were being piloted over the period funded. The specific objectives of the evaluation were to:

1. Identify the location and types of tests of change carried out across Scotland and their progress during the funding period (national scoping).
2. Using a case study approach, conduct in-depth investigation (deep dives) of what was working well and why, in selected case sites (Health Boards) and across Scotland in two professional groups – Advanced Nurse Practitioners (ANPs) and Musculoskeletal (MSK) Physiotherapy.
3. Integrate the findings from the case studies to inform the key overall learning relating to successful implementation.

In this overview report, we present a set of recommendations for future work based on learning from the research which was undertaken to meet the above objectives.

### 2.2 Scope of the Evaluation

As requested by the SG the evaluation included (but was not limited to) tests of change funded by the PCTF and the PCFMH. As the number of primary care tests of change was large, it was also agreed with the SG that the evaluation would provide an overview of the progress of the primary care tests of change across all Scottish NHS Health Boards, followed by a series of detailed case studies within which in-depth exploration (‘deep dives’) would be undertaken of tests of change that were likely to yield useful learning

For the purposes of this evaluation, SSPC defined primary care transformation as:

*“Any project, which may be a new initiative or one that builds on previous/existing work, that is testing a new way of delivering, or facilitating the delivery of, primary care services or improving the integration/interface between primary care and other services (such as other health sectors, social care and third sector).”*

We used a ‘hub and spokes’ approach, with the SSPC core team leading the national scoping and coordinating the case studies, which were led by senior academics in five of the SSPC member Universities. These were:

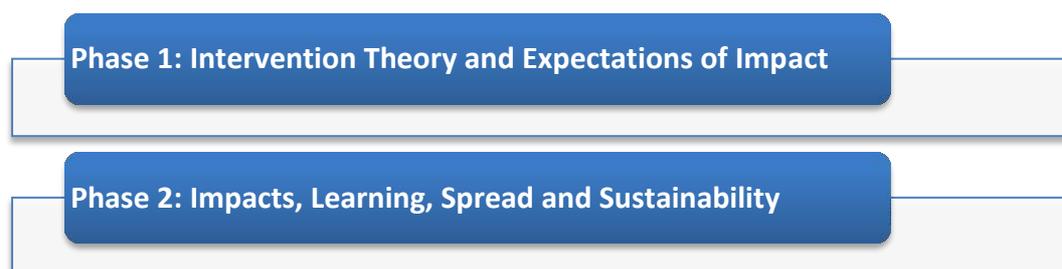
- University of Glasgow (NHS Ayrshire & Arran, NHS Lanarkshire, and MSK Physiotherapy case studies)
- University of the Highlands and Islands (NHS Highland, NHS Eileanan Siar, NHS Orkney and NHS Shetland case studies)
- University of Stirling (ANP Case study)
- University of St Andrews (NHS Tayside case study)

### 2.3 Evaluation Design

The evaluation approach was based on the SSPC Evaluation Framework which was agreed with the

SG in July 2016. It comprised two distinct but complementary phases (Figure 2.1), derived from the widely known Ten Step approach [28]. The first phase focused on identifying all primary care tests of change across Scotland, what their components were, how they were expected to work, and the expected short, medium and long-term impacts or outcomes. The second phase focused on identifying the actual impacts, learning, and likely sustainability and spread. (For details of the interview questions in each phase see appendices D and E.)

**Figure 2.1 SSPC Evaluation Framework**



### **2.3.1 Phase 1: National Scoping of Primary Care Tests of Change**

The first phase (carried out by the core SSPC evaluation team between September and October 2016) involved identifying, as far as possible, all primary care tests of change across all 14 territorial Scottish NHS Health Boards and tracking their current progress on implementation ('scoping'). The results of this informed the selection of primary care tests of change for the case studies that contributed to the overall evaluation. These were discussed and agreed with the SG and comprised:

All tests of change in areas served by seven territorial boards:

- NHS Ayrshire & Arran
- NHS Highland, NHS Eileanan Siar (Western Isles), NHS Orkney and NHS Shetland
- NHS Lanarkshire
- NHS Tayside

Two themed tests of change across the whole of Scotland including NHS 24

- Advanced Nurse Practitioners (ANPs)
- Musculoskeletal (MSK) Physiotherapy

The SSPC core team repeated the national scoping twice (April - May 2017 and April - May 2018), in all health board areas except those in the selected four regional case studies, as these were scoped by their respective case study team. Similarly, two other case study teams carried out the national scoping of the selected thematic tests of change. Research teams based in SSPC member universities started work on the case studies in March 2017 and ended in May 2018. The individual case study reports with further details are available at [www.sspc.ac.uk/reports/](http://www.sspc.ac.uk/reports/).

A system was used to assess the progress in relation to implementation of each test of change, whereby, in consultation with test of change leads, each was assigned one of three classifications:

implemented as planned; partially implemented; not started or implementation had been stopped. The partial implementation category included tests in which time and other resources were being spent in planning and setting up the test of change but the new model was not yet functioning. It should be noted that this categorisation was not based on objective quantitative measures. However, key respondents were asked whether they agreed with our assessment of progress and in the few cases where there was disagreement, this was resolved by further discussion. Thus despite the qualitative nature of the enquiry, we are confident of its accuracy, at the time of evaluation. The outcome of this classification was a key consideration in the selection of 'deep dives' explored in Phase 2 of the case studies.

### **2.3.2 Phase 2: Case Studies 'Deep Dives'**

The selected deep dives in each case study were conducted between January 2018 and the end of May 2018.

## **2.4 Data Collection**

The main sources of data used in both phases of the evaluation were (1) interviews with key informants involved in the planning, implementation of primary care tests of change across Scotland and (2) national and local documents relevant to primary care transformation.

### **2.4.1 Key informant interviews**

A 'snowball approach' was used to identify and recruit potential key informants whereby each interviewed individual was asked to suggest others who they felt could provide useful information. Thus, the inclusion of key informants developed iteratively. The core SSPC evaluation team developed interview topic guides for both phases of the evaluation (Appendix D. Phase 1 Interview Topic guide and Appendix E. Example of Phase 2 Interview Topic Guide (example)), and these were used as templates by the individual research teams undertaking the different case studies.

Potential key informants were initially sent an invitation to participate in the study by email, which included a Participant Information Leaflet and Consent Form (Appendix F. Participant Information Sheet (example) and Appendix G. Consent Form (example)). Once agreement had been reached and arrangements made for the interview, the key informant was sent a copy of the interview schedule outline to facilitate the opportunity to obtain considered views.

Before each interview, the key informant signed the study consent form. If the key informant had agreed, the interview was audio recorded, otherwise notes were made by the researcher. Recorded interviews were transcribed verbatim. Key informants were sent feedback following transcription, to check for accuracy, and any additional comments obtained were incorporated into the data for analysis. An opportunity to comment on the final draft of the case study was then given to lead key informants.

### **2.4.2 Documentary evidence**

A range of publications were obtained from relevant NHS health boards and related organisations'

websites and from key informants as contact was established. These included Strategy and Delivery Plans, reports and presentations relating to primary care transformation and individual new ways of working; minutes of meetings, and early results of local data collection and evaluation.

## **2.5 Data Analysis**

Preliminary analysis of data from all sources used a thematic framework approach based on the research questions posed in the SSPC Evaluation Framework. All research teams used an iterative approach to data analysis and interpretation involving more than one researcher.

In phase one, documents were read and key data extracted to collect information on the vision and plans for transformation of primary care and on anticipated outcomes. A summary report was compiled outlining the main new ways of working/tests of change being implemented in every territorial health board in Scotland, and (separately) in relation to ANP and MSK Physiotherapy.

Tests of change were also identified from the interview data and summarised to describe their key features. Such features included a description of the new way of working and the context in which it was being introduced. Funding source, along with duration and a description of governance arrangements were collated where identified. Details of any local evaluation work shared were summarised including the type of data being collected, and whether any measures of success or quality standards had been agreed. This approach was carried out by the members of core research team of SSPC and the six SSPC case study teams. From these data sources, the stage of implementation of each new model of care was categorised as above.

In phase two, data were analysed using a thematic approach based on identifying themes arising from the questions posed in the SSPC Evaluation Framework.

## **2.6 International Literature Review**

The empirical research was complemented by three literature reviews carried out by research teams who undertook one or more case study contributing to this evaluation. The focus of these were:

- Primary Care Transformation (conducted by the University of Glasgow research team who conducted the NHS Ayrshire & Arran (A&A) case study and NHS Lanarkshire case study)
- ANPs (conducted by the University of Stirling research team who conducted the ANP case study)
- MSK Physiotherapy (conducted by the University of Glasgow research team who conducted the MSK case study).

Full details of these reviews and their findings can be found here [www.sspc.ac.uk/reports/](http://www.sspc.ac.uk/reports/).

## **2.7 Ethical Approval**

Ethical approval was obtained from NHS Health Boards or University as required. Details can be found in each case study report.

### 3 NATIONAL SCOPING FINDINGS

This chapter reports the findings of the national scoping exercise, carried out to identify the number of tests of change throughout Scotland, and describes their focus, anticipated outcomes, and implementation stage. Findings are based on reviewing 661 documents and 155 key informant interviews. The documents reviewed included academic papers, strategic and modelling plans, project records, news bulletins, delivery plans and meeting agendas. Key informants represented individuals involved in developing primary care transformation policy at national and regional levels, as well as individuals involved at an operational level in 14 territorial and NHS 24. Key informant interviews were mainly conducted in one-to-one, face-to-face meetings, with further email and/or telephone communication if clarification was required.

#### 3.1 Identified Tests of Change

A total of 204 primary care tests of change were identified across the health boards as being planned or underway. These related to a wide range of different tests (137) carried out at health board, cluster or GP practice level, and two national tests, ANP (comprising of 31 tests) and MSK Physiotherapy (comprising of 36 tests). The way in which key informants described tests of change varied across the health boards varied, so that for example, the introduction of digital technology was described as several separate activities in one health board, whereas in another health board it was categorised as one 'all encompassing' test of change. This clearly raises challenges for how evaluation is conducted and the aggregation of the findings of any evaluation.

Although the PCTF and the PCMHF were the major sources of funding for many, some NHS Health Boards, such as Ayrshire & Arran, Lanarkshire and Tayside adopted a wider strategic approach by combining PCTF and PCMHF with other funding streams to support the development and implementation of larger work streams which contributed to their vision for primary care in the future. Each of these work streams comprised multiple tests of change. Within this approach, some tests were distinct, time-limited projects where activity was restricted to the duration of the funding. For example, the Community Transport scheme for less mobile elderly in NHS Tayside was discontinued, despite anecdotal evidence of being popular, due to a lack of ongoing funding. Taking a different approach to funding, NHS GG&C apportioned each GP Cluster an equal allocation of the funding to support local transformation projects. This led to numerous small tests of change, particularly in relation to mental health e.g. Alcohol Brief Interventions, Learning Disabilities, Physical Health in Mental illness, Interface Working, Resilience, Wellbeing but at the time of scoping was generically described as Cluster Development.

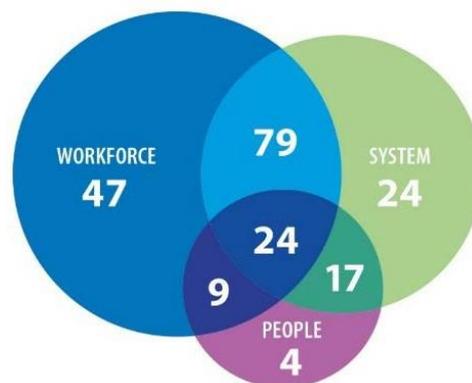
Some tests of change were implemented in a single practice (such as Staying Well Advanced Nurse (SWAN) in NHS Eileanan Siar and Weight Monitoring for Clozapine Prescribing in NHS Lanarkshire). Some were implemented in a single GP Cluster (such as APP in GP practice in a cluster of 9 practices in NHS Greater Glasgow & Clyde and the 'What matters to me' project in the Western Cluster of NHS Borders). Some were implemented

across a group of GP Clusters (such as House of Care in NHS Lanarkshire and Cluster Development in NHS Highland & Island). Others were implemented across the whole health board (such as Ayrshire Urgent Care in NHS Ayrshire & Arran and the Physiotherapy Musculoskeletal Advice and Triage Service (MATS)).

### 3.2 Focus of the Tests of Change.

Some of the tests of change aimed to respond to the broader organisational changes required in primary care transformation (such as House of Care in NHS Lanarkshire and Welfare Rights in GP practice in NHS Tayside), whereas others responded to local needs to address gaps or relieve pressures on services (such as Staying Well Advanced Nurse (SWAN) on the Isle of Lewis in NHS Eileanan Siar, and MSK Physiotherapy for patients with learning disabilities in NHS GG&C). Some built on existing developments and relationships, such as the Staff Wellbeing Service in NHS Tayside, and the Healthy and Active Rehab Programme (HARP) in Ayrshire & Arran - which built on learning from a pre-existing pan-Ayrshire cardiac rehabilitation service. The focus for each test of change was classified according to the SGs Primary Care Outcomes Framework levels [29] (Figure 3.1).

**Figure 3.1 The focus of the Test of Change in relation to the Primary Care Outcomes Framework**



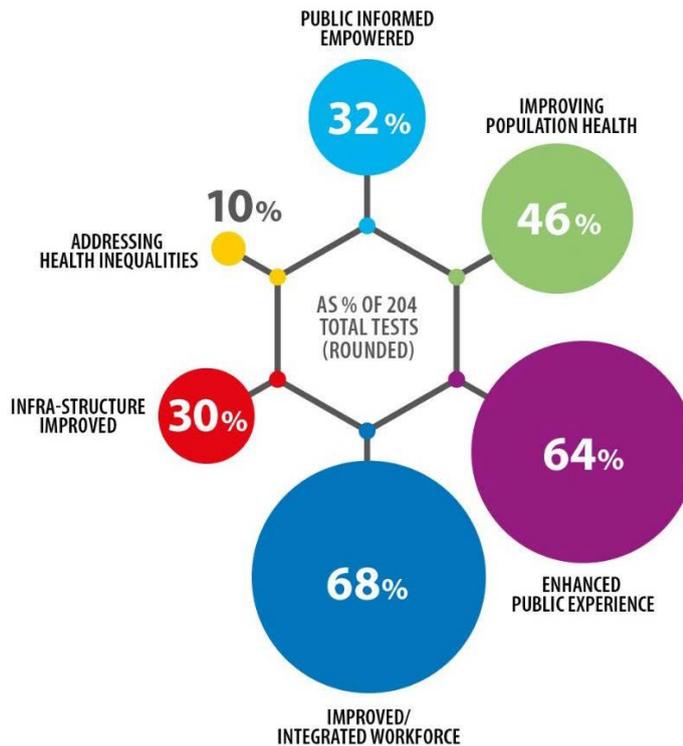
- 54 focussed change at the People level (e.g. knowing which health professional to see) such as Eyecare Ayrshire in NHS Ayrshire & Arran and the Mental Health and Wellbeing: Listening service: "Do you need to talk" in NHS Tayside
- 159 focussed change at the Workforce level (e.g. new or changed roles) such as the MSK Physiotherapy Spinal Service in Primary Care in NHS Borders and the Developing and Sustaining Practice Phlebotomy test in NHS Lothian.
- 144 focussed change at System level (e.g. ways of working) such as Primary Care-led Dementia Diagnosis and Support in NHS Eileanan Siar and Digital Programme: Tablet device for mobile support for Practice in NHS Lanarkshire.

Twenty-four tests of change (12%) invested resources (e.g. money and/or time) across all 3 levels (workforce/system/people) such as Pharmacy First in NHS Ayrshire & Arran and Welfare Rights in GP practice in NHS Tayside.

### 3.3 Anticipated Outcomes of the Tests of Change

The majority of key informants reported that it was too soon to give measurable impacts of the identified tests of change; however, some longer-term anticipated outcomes were described. These have been categorised in relation to the SGs six Primary Care National Outcomes [29]. Most tests of change had more than one anticipated outcome (Figure 3.2).

**Figure 3.2 Anticipated Outcomes of the Tests of Change in relation to Scotland's Primary Care National Outcomes**



- 139 (68%) related to achieving a primary workforce which was expanded, more integrated and better co-ordinated with community and secondary care including the national ANP and MSK Physiotherapy tests of change, One team - Locality based MDT in NHS Dumfries & Galloway, and Interface between Primary and Secondary Care in NHS Highland.
- 130 (64%) related to improving the experience of primary care including the Digital programme in NHS Lanarkshire; Community Care Mental Health Hub in NHS Grampian, and General Practice Links Worker for frail elderly in NHS Grampian.
- 93 (46%) related to primary care services better contributing to improving population health such as Self-management Support Programme in NHS Eileanan Siar and Online Cognitive Behavioural Therapy Mastermind course in NHS Highland & Islands.
- 66 (32%) related to ensuring the public is more informed and empowered when using primary care e.g. the House of Care tests in both NHS Ayrshire & Arran and

NHS Lanarkshire.

- 61 (30%) related to improvements in infrastructure (physical and digital) e.g. Florence: home BP monitors project in NHS Forth Valley and Web-based MSK Solutions Tool for GPs and AHPs in NHS Tayside.
- 20 (10%) related to addressing health inequalities including the Welfare Rights within GP Practice in NHS Tayside, MSK Advanced Practice Physiotherapist in the SHIP project in NHS GG&C) and Links Worker tests of change in NHS A&A and NHS Grampian. Also anticipating to address health inequalities to some extent were the Third Sector Area Coordinators in NHS Fife, House of Care signposting of local services in NHS Lanarkshire and the Midlothian Wellbeing service.

### **3.4 Test of Change Implementation Progress**

Overall progress of the 204 tests of change over the two-year period of funding was staged using a implementation stage system. Four tests of change could not be staged due to lack of information, and of the remaining 200:

- 118 were working well, implemented as planned
- 70 were in the planning stages, not yet fully implemented
- 12 had not got off the ground/ implementation had been stopped).

Tests of change that focused on only one or two of the three levels (People, Workforce and System) appeared to have similar implementation success rates (46% implemented) whereas those that focused on all three levels appeared to be more fully implemented (71% implemented). The details of the outcome of the implementation staging system for all identified tests of change are tabulated in Appendix J. Indication of Reported Progress for all 204 tests of change (as of January 2018) As pointed out in Chapter 2, this categorisation was not based on objective quantitative measures of progress. However, key respondents were asked whether they agreed with our assessment of progress and in the few cases where there was disagreement, this was resolved by further discussion. Thus despite the qualitative nature of the enquiry, we are confident of its accuracy, at the time of evaluation.

Progress in different health boards was reportedly affected by several factors, including the approach taken to the use of funds; degree of collaboration and leadership needed, recruitment, appointment and training of staff to undertake new roles; and what date funds became available for use in real terms. These factors were explored in greater depth in the deep dive studies reported in the following chapter. At scoping level, no one single factor predicted successful implementation. The tests of change which were reported as being implemented or partially implemented seemed to have clarified core factors such as a defined purpose, a step-wise implementation and an agreed method of evaluation, so that the availability of funding was a timely facilitator e.g., Pharmacy First and Eyecare Ayrshire (NHS A&A) and Welfare Rights (NHS Tayside). Other tests of change seemed to rely more heavily on the determination and enthusiasm of local health care professionals and stakeholders to achieve implementation, such as the Community Hub Leg Ulcer Skin Service (NHS Tayside) and the Self- management Support Programme (NHS Eileanan Siar).

A few tests were stopped before implementation commenced, e.g. plans to implement Activities of Daily Living Smartcare in Inverclyde stopped when it was found that investment in the new software would not give additional value. In NHS Ayrshire & Arran the Community Phlebotomy was stopped because of a lack of sufficient demand whilst, in contrast, the community transport scheme for less mobile elderly by NHS Tayside was not implemented following a pilot of the scheme due to lack of ongoing funding, despite being popular with patients (although the cost-effectiveness of the project was not assessed).

### **3.5 Selection of the ‘Deep Dive’ within the Case Studies**

The outcome of the implemented staging system was key in consideration of the selection of the ‘deep dives’ for in-depth exploration in the next phase of the evaluation, based on the likelihood of obtaining the greatest learning. In relation to the territorial case study sites, specific tests of change were then selected based on degree of innovation and feasibility of access to evaluation data and key informants, and in terms of giving a geographical spread. In relation to ANP and MSK Physiotherapy, specific tests of change were selected which had differences in approach or context, such as historical development of roles, links with universities and geographical differences affecting services. The case study based in Inverclyde has previously been reported (January 2018)[27].

#### **3.5.1 Advanced Nurse Practitioners**

Of the 204 different types of identified tests of change, 31 (15%) related to ANPs. All but one (NHS Eileanan Siar) of the territorial health boards had one or more of the ANP tests of change. One test of change, the West of Scotland ANP Academy, involved a number of health boards, and the others were primary care ANP roles in different care settings including GP Practices, OOH, community services, prison services, care homes and community hospitals (see Appendix H. Identified ANP roles). ANP training was underway in NHS24 to provide a nurse telephone triage service and self-care advice.

#### **ANP Academies**

The West of Scotland ANP Academy involved Ayrshire & Arran (A&A), Dumfries & Galloway (D&G), GG&C, Lanarkshire, NHS24<sup>1</sup> as well as the Scottish Ambulance Service. Working in close collaboration with their general practices, the Academy aimed to provide leadership to support ANP education and governance. Two tiers of the Academy were envisaged, including: a network of support, learning and professional development, and a leadership group taking an overarching view of advanced practice. Although NHS Lothian was not involved in an ANP Academy, it had collaborated with Edinburgh Napier University to extend an ANP Masters level programme to include primary care as a specialty. At the time of scoping in late 2017, there had been some discussion about adding a north and east academy to cover other regions in Scotland and to pilot an Advanced Care Academy in Grampian was part of this expansion (see [www.sspc.ac.uk/reports/](http://www.sspc.ac.uk/reports/) for more details).

#### **ANP Roles**

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<sup>1</sup> Scotland's 24/7 digital health and care service

It was not possible to quantify the number of ANPs in primary care settings in Scotland as some boards reported the total number employed whilst others reported the number of Whole Time Equivalent (WTE) posts. However, there were ANPs meeting the national criteria for this role [30] in 13 of the 14 territorial health boards, and training was underway to meet national criteria in NHS Eileanan Siar (Western Isles) and NHS 24 (see Appendix H. Identified ANP roles(b)). The range of activities undertaken by the ANPs was diverse and included telephone triage, diagnosis and treatment of minor illness, management of long-term conditions and undertaking home visits in general practices. In general, ANPs were undertaking clinical tasks traditionally undertaken by GPs.

### **3.5.2 Musculoskeletal (MSK) Physiotherapy**

Of the 204 identified tests of change, 36 related to MSK Physiotherapy. All but one (Shetland) of the 15 health boards had one or more of the MSK tests of change. One test of change, NHS24 MSK Advice and Triage Service (MATS) was used by a number of health boards and the remainder were distributed across all but one of the territorial health board (Shetland).

#### **NHS24 MATS**

NHS 24 introduced this service to take telephone callers through a nationally endorsed triage protocol and then either offer self-management advice or refer to local services. The service is run by call operators, supported by a team of clinicians. This service began in some health boards as early as 2010, and at the time of the evaluation was being rolled out in all but four territorial health boards.

#### **MSK Physiotherapy roles**

The other MSK Physiotherapy tests related to the implementation of Advanced Practice Physiotherapists (APPs) in GP practices as an alternative to the GP as the First Point of Contact (FPOC) for patients with MSK problems. It was hoped this would free up GP time, improve patient outcomes, decrease secondary care waiting lists, and be cost effective.

All but 2 of the 14 territorial health boards had implemented these roles, or were in the early stages of developing them, having taken different approaches to inputs and expected outputs from these roles (Appendix I. Identified Musculoskeletal Physiotherapy Tests of Change). Differences in the pace of progress of implementation between health boards related to rurality, funding, patient populations and staffing. This resulted in an uneven landscape of services, which did not appear to be matched to population need.

## 4 CASE STUDY DEEP DIVE FINDINGS

This chapter describes the findings from all the case study deep dives, and integrates the learning from these into overall key themes. The findings of this chapter are based on interviews with 191 key informants (157 participated in individual interviews and 34 in focus group discussions) and review of a further 66 documents relevant to the selected deep dives. Key informant interviews included NHS managers, clinicians and non-clinical primary care staff which included GPs, GP Practice Managers, GP Practice Nurses, Community Nurses, Primary Mental Health Care Workers and Administration Staff. Key informants also included ANP Education Staff, ANPs and ANP Trainees, Physiotherapists and Managers of NHS 24/MATS, Optometry and Pharmacy Staff, Hospital Consultants, members of the management teams and members of third sector organisations for people with long term conditions. This chapter provides an overview of those findings; the individual case study reports can be accessed at [www.sspc.ac.uk/reports/](http://www.sspc.ac.uk/reports/).

The aim of the deep dives was to gain a deeper understanding of the challenges and enablers to implementation, impacts, evaluation, learning gained, and the factors affecting sustainability and spread of the selected tests of change. Tests of change were selected which were thought to be innovative or transformational, at a stage where there would be learning to gain, and the stakeholders and documents were likely to be accessible to the research teams. Of the identified 204 tests of change, 34 were selected for the deep dives after discussion with the Scottish Government Primary Care Division. These were being tested in health boards serving A&A, H&I, Lanarkshire and Tayside and the ANP and MSK Physiotherapy tests throughout Scotland.

### 4.1 Ayrshire and Arran Case Study

Four tests of change were selected for deep dives:

**Table 4.1 Ayrshire & Arran Case Study Selected 'Deep Dives'**

Case Study Name	Test of Change Name	Test of Change Brief Descriptor
Ayrshire & Arran	Eyecare Ayrshire	An optometry service that redirected patients with eye problems from general practices to optometry practices located in the community
	Pharmacy First	Provided first point of care to patients with uncomplicated urinary tract infections (UTIs) and with impetigo
	Healthy and Active Rehabilitation Programme (HARP)	Provided a holistic rehabilitation service to multi-morbid patients, dealing with all their conditions rather than focusing on only one
	House of Care	Promoted self-management support and new ways of working in general practice

The findings are based on of interviews with 21 key informants.

#### 4.1.1 Key findings

**Eyecare Ayrshire** appeared to be bedding in successfully in NHS A&A. Qualitative evidence from key informants suggested that it was building on previous relationships and on the model from another health board. However, there was a lack of quantitative data, and the demographic characteristics of the patients using the service was thus unclear as the data were not available. The model of patient redirection to local optometrists and pharmacists should ensure local, accessible and free services for patients, which – at least in theory – should reduce inequities in health care access. However, again, evidence is required to support this. A challenge to the long-term sustainability of the service may be the level of reimbursement required by optometrists to meet the increasing patient demand and potential complexity of some of the presenting cases. The growth of independent prescribing amongst optometrists may also impact on the service, as a competing demand on their time. Work is also required to assess the level of patient knowledge and satisfaction with the service.

Key informants expressed similar views about **Pharmacy First** and **Eyecare Ayrshire**, perhaps unsurprisingly as both aimed to redirect patients from general practices to locally available community-based health care providers (pharmacists and optometrists respectively). Although there was a lack of monitoring data and patient experience data, respondents felt that the service was embedding successfully into the local health care system and would, therefore, expand and address a wider range of conditions. However, one barrier might be that all pharmacists in a local pharmacy needed to undergo training in order to provide seamless and continual prescribing support for patients. Future expansion was also likely to depend on the development of standardised referral pro-formas and an electronic, rather than a paper-based, system.

**HARP** was different from the other deep dives as a secondary care service delivered in a primary care setting. Patient-centred, rather than condition-centred, it acknowledged that rehabilitation services can address patient complexity in terms of multiple chronic diseases. While funding from all three HSCPs resulted in buy-in from across the health board, it also enhanced uncertainty in relation to sustainable funding and expansion. HARP also had a robust internal evaluation, undertaken by professionals delivering the service in collaboration with independent staff in NHS AA, allowing the collection of quantitative and qualitative data to measure short-term impact on other services and on participating patients.

The implementation of **House of Care** was still in its early stages in NHS A&A. Although training workshops had been run, and were well received, there had been only sporadic progress since then. Thus the deep dive could not provide any further information.

#### 4.1.2 Key learning

- Implementation of tests of change was facilitated by dedicated funding but the short-term nature of this impacted negatively on future sustainability.
- Tests of change with perceived early impacts on improving access targeted three levels: people (public information/engagement campaigns), workforce (capitalised on previous relationships/ developments and invested in staff engagement, training and support) and system (dedicated funding and staff time).
- Support for data collection, extraction and analysis was needed, all of which required robust IT systems to capture activity in single services and allow sharing of information

across services. These were under-developed and there was generally a lack of monitoring data across services, with the exception of HARP, which had built in its own evaluation from the beginning.

- To measure the actual impacts, sustainability and spread of new models of care will require further evaluation of primary care transformation journeys over the next five to ten years.

## 4.2 Highlands and Islands Case Study

Four tests of change from NHS Highland and NHS Eileanan Siar were selected for deep dives:

**Table 4.2 Highlands & Islands Case Study Selected 'Deep Dives'**

Case Study Name	Test of Change Name	Test of Change Brief Descriptor
Highlands & Islands	Moray Firth Interface between Primary Care and Secondary Care (NHS Highland)	There were 2 strands to this: <ul style="list-style-type: none"> <li>• A community-based Investigation Treatment Room for carrying out routine tests requested by a hospital out-patient consultant (traditionally, these would have been carried out in GP practices),</li> <li>• An advice gateway to improve GP and hospital consultant communication with a view to preventing inappropriate referrals.</li> </ul>
	Cognitive Behavioural Therapy Mastermind Programme in Argyll and Bute (NHS Highland)	A community-based Cognitive Behavioural Therapy Mastermind programme for individuals with mild to moderate depression and anxiety. Mastermind uses the 'Beating the Blues' programme made up of eight online sessions.
	Staying Well Programme (NHS Eileanan Siar)	A primary care test of change based in one GP practice on the Isle of Lewis. It involved 'Staying Well' Advance Nurses Practitioners (SWANS) engaged in anticipatory and preventative clinical support for patients with long-term conditions.
	Self-management course for patients with long term conditions, minor mental health problems and physical symptoms (NHS Eileanan Siar)	A primary care test of change which involved a GP delivering a 2-hour session, six week self-management course for people with long-term conditions, minor mental health problems and physical symptoms who were referred by a GP, specialist or practice nurse.

The findings are based on evidence from 73 key informants.

#### 4.1.3 Key findings

**Moray Firth Interface between Primary Care and Secondary Care.** This community-based Investigation Treatment Room (ITR) test of change appeared to have been implemented with little consultation or communication with staff or patients, which resulted in considerable disharmony. Data on ITR activity showed rapid uptake of the service, and 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. No data were available to assess if the introduction of the ITR had impacted on the workload of GP practices but practices from in and around Inverness (close to the ITR) were more positive about this than those representing more rural village areas. Both primary and secondary care staff reported patients complaining about having to travel considerable distances for a service that previously had been provided locally. Consequently, some practices and hospital consultants chose not to use the ITR and reverted to the previous system. This reportedly caused confusion in relation to referral eligibility and procedures, and consequently the implementation of the new service. There was also a perception that the ITR had changed how consultants and GPs worked together to treat a patient. Consultants referred directly to the ITR, thereby removing the GP from this aspect of the patients' care management, which some believed would have a negative impact on the provision of generalist medicine and holistic care. 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. Given this controversy, there was no information available on the advice gateway at the time of interviews.

**Online Cognitive Behavioural Therapy (CBT) Mastermind Programme** was perceived to have reduced mental health staff workload and to have facilitated patient access to immediate help for their mental health problem (at times whilst waiting for appointments to see mental health care professionals). It was also seen as advantageous for patients in rural areas who wished to keep their mental health problems private. It improved access, which was considered a particularly important issue for people living in remote and rural areas. Local 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 than at the start. There was a perception that GP referrals could be higher and that the online programme would benefit from further publicity.

**Staying Well Programme** was reported to have increased levels of trust and confidence between GPs and ANPs. It developed a new system of triaging home visit requests whereby 'routine' home visits were allocated by the reception staff (using a protocol) to a SWAN and more complex cases to the on-call GP. Supervision by GPs of ANPs conducting home visits was considered to work well in setting up the service. Local data suggested that the total number of home visits undertaken increased but that GPs conducted considerably fewer of these themselves. ANP home visits tended to be longer than GPs, and patients were considered to have benefitted from the longer visit. The project showed the potential for reducing rural GP workload.

**Self-management Course** project reportedly contributed to fewer GP appointments because people were better at self-managing their LTCs. No formal evaluation was shared by the key informants. Replicating the personal attributes and skills of the current GP course leader was thought to challenge the sustainability and spread of this new service model. However, there was recognition of the potential for course leaders to be identified in other health disciplines and the third sector.

#### 4.1.4 Key learning

- The context of remote and rural settings added particular challenges to primary care transformation.
- Implementation was facilitated when projects built on previous work and when stakeholders were supported to identify problems or gaps in service delivery and to design and deliver local solutions.
- Implementation was challenged by poor engagement and buy-in from staff involved in their implementation, problems recruiting staff, lack of project leadership, lack of time, and existing large workloads.
- Online health care programmes have the potential to improve early access to health care support and consequently impact on health inequalities in very rural communities.
- Measurement of actual impacts, sustainability and spread of new models of care, both in the short-term and longer-term will require additional support for data collection, extraction and analysis.

### 4.3 Lanarkshire

Two work streams comprising 12 tests of change were selected for the deep dives:

**Table 4.3 Lanarkshire Case Study Selected 'Deep Dives'**

Case Study Name	Test of Change Name	Test of Change Brief Descriptor
Lanarkshire	Digital Programme	This comprised 5 tests of change: <ul style="list-style-type: none"> <li>• repeat prescriptions online</li> <li>• training and support for staff</li> <li>• self-check in machines for appointments</li> <li>• electronic patient call notice boards</li> <li>• video conferencing equipment.</li> </ul>
	House of Care	This comprised 7 tests of change: <ul style="list-style-type: none"> <li>• self-management training courses</li> <li>• peer support (with families and carers)</li> <li>• House of Care training</li> <li>• implementation of House of Care</li> <li>• amendment of IT systems for House of Care</li> <li>• signposting local support</li> <li>• appointment of clinical champions and project management</li> </ul>

The findings are based on 21 key informant interviews and further review of documents.

#### 4.1.5 Key findings

**House of Care (HoC)** test of change received considerable interest from GP practices. However, uptake was slow and only seven practices out of an initial 21 had implemented it at the time of data collection (May 2018). Some key informants noted that HoC was influential in encouraging practices to adopt innovative techniques to utilise existing resources, empowering patients and improving patient confidence resulting in patients taking ownership of their health (e.g. weight loss among diabetic patients). Some key informants perceived HoC to be a catalyst to introducing interventions aimed at improving patient self-management and wellbeing. However, sustainability and spread relied heavily on its time and cost-saving strategies and ongoing support from practitioners.

Key informants reported that the **Digital Health** tests of change had helped to reduce pressure on frontline staff and practitioners. For instance, patient self-check-in machines helped to reduce queues and were more efficient for hard of hearing patients. Key informants cited the advantages of the use of online repeat prescriptions, which have helped in reducing the pressure on frontline staff. Furthermore, they redesigned their practice website to accommodate online repeat prescriptions, which appeared to have reduced some of the pressure on GP. All six practices that participated in this evaluation reported some measures to sustain the digital services.

Although the focus of **HoC** and **Digital Health** were quite different, evaluation identified some similar facilitators and challenges to implementing them. Such facilitators included good staff training and managerial support within the practices. Challenges included under-developed IT systems, poor communication, inadequate and brief training, and technical problems with devices. The uptake of Digital Health greatly exceeded that of HoC. One of the possible reasons for this could be that Digital Health was perceived as relieving workload pressures whereas HoC was perceived as increasing them, at least in the short term. However, early small scale evaluations by NHS Lanarkshire suggested some initial positive outcomes for both HoC and Digital Health in practices where these had been implemented.

#### 4.1.6 Key learning

- Implementation of the tests of change was facilitated by staff training, and clinical and managerial leadership within the practices.
- Implementation was challenging at times due to competing demands on practitioners' time and poor response from patients.
- While key informants described good patient satisfaction, there was limited objective evidence to confirm this.
- The early perceived positive impacts of HoC included the introduction of patient self-management and wellbeing, as well as encouraging practices to adopt innovative techniques to use existing resources.
- The early perceived positive impacts of Digital Health included reducing the pressure on frontline staff and practitioners as well as patients (e.g. patients with hearing impairments).
- Actual impact was difficult to assess due to the timescale from implementation to demonstrate effect.
- Future sustainability and spread requires support to identify a core set of outcome measures that could be used to determine the benefits of the programme.

- For both HoC and Digital Health the impact on health inequalities and implications for deprived populations remain uncertain.
- To measure the actual impacts, sustainability and spread of new models of care will require further evaluation of primary care transformation journeys over the next five to ten years.

#### 4.4 Tayside

Three tests of change were selected for the deep dives:

**Table 4.4 Tayside Case Study Selected 'Deep Dives'**

Case Study Name	Test of Change Name	Test of Change Brief Descriptor
Tayside	Community Leg Ulcer Clinic	A bespoke nurse-led service to provide optimal, evidence-based, treatment for venous leg ulcers
	Welfare Rights in Primary Care	This extended the welfare rights advice provided in a council setting to a primary care setting, by welfare rights officers
	Primary Care Staff Wellbeing	Extended the existing service to cover all 66 GP practices in NHS Tayside

The findings are based on 28 key informant interviews and review of 56 documents.

##### 4.1.7 Key findings

**Community Leg Ulcer Clinic** key informants reported positive outcomes including better adherence to guidelines and improved healing rates. Data collected, though limited, supported these conclusions. The main facilitators to implementation of this test of change were said to be the leadership and project management provided by the project team. The project team's motivation, determination and perseverance to change the status quo was considered to be essential to its success, as was a belief that the new way of working would improve care. Detailed documentation of the project rationale, developmental processes and implementation were considered essential ingredients for sustainability. The reported main challenges to implementation were the management effort and time required to develop new channels of communication and protocols for sharing clinical information across community, hospital and general practice teams. Difficulties with IT systems and communicating with IT support about the needs of the project also presented challenges to the implementation of the project. The interviewed key informants believed that the Community Leg Ulcer Clinic was potentially sustainable and could be rolled-out but this would require further funding.

**Welfare Rights in Primary Care** had begun in Dundee in January 2015 prior to the PCTF. By the end of 2017, the project had been rolled out to 5 GP practices, and by April 2018 to 8 practices. Interviewed key informants believed that the project had already demonstrated positive outcomes,

e.g. increased efficiency of benefit claims, and provided a useful example of how primary care and social care services can be integrated. The main facilitators to implementation were the clear rationale for the model, careful consideration of the project components, and detailed documentation of all the aspects of work (such as existing evidence, project aims and ways of achieving these). These components were considered to be crucial when the test of change was introduced to the Welfare Rights team, HSCP and GP practices. Implementation of the model was reported to have been initially challenging as both the access to the GP practices and patients' medical records was perceived to be difficult. The project was felt to be sustainable due to 1) patient demand and 2) acceptance of the service by the GP practices where welfare rights advisors provided the service. Mainstream funding was considered necessary for future expansion of the work.

**Primary Care Staff Wellbeing** test of change had extended the existing NHS Tayside secondary care service to all 66 GP practices in NHS Tayside. Implementation was overseen, managed, and evaluated, by a local project team comprising staff from the NHS Tayside Staff Wellbeing Service. During the project, 12 GP practices responded positively to the invitation to participate and asked the Professional Lead for Staff Support to meet practice staff, introduce the Staff Wellbeing Service in person, run a group session in Mindfulness and inform staff about Values Based Reflective Practice. Two of those practices organised subsequent group sessions following the introductory sessions. A total of 268 primary care staff attended group sessions, and 33 primary care staff referred themselves to the service for one-to-one sessions. The participant experience feedback was positive (based on 34 responses) and indicated that the project was well-received, increased awareness of the Staff Wellbeing Service amongst primary care staff and provided primary care staff with coping strategies and relaxation techniques. The interviewed key informants believed the Primary Care Staff Wellbeing project was sustainable only with further funding as it created additional work for the Staff Wellbeing Service. Additionally, sustainability would require GP practices to make time for staff to participate in group sessions.

#### **4.1.8 Key Learning**

- Implementation of the tests of change was facilitated by dedicated funding, however the short time-scale of funding created problems achieving the expected impacts of the new ways of working, and uncertainty regarding future funding, in some cases, led to an unwillingness to change, and in other cases impacted negatively on future planning beyond the existing funding period.
- Detailed documentation of the rationale for the project and the steps undertaken to develop and implement the project was essential for implementation and sustainability.
- In addition to strong local leadership and project management experience, motivation, determination and perseverance to transform the status quo was necessary to transform care – this required a belief that the new ways of working would improve care.
- The lack of ability (time, skills and expertise) of service providers to undertake evaluation created problems providing adequate evidence of clinical and cost-effectiveness of the new way(s) of working. Those charged with overseeing the implementation and evaluation of the tests of change expressed a need for support in designing evaluations, in identifying outcome measures, and in establishing systems for collecting data.

## 4.5 Advanced Nurse Practitioners (ANP)

Five tests of change were selected for deep dives:

**Table 4.5 Advanced Nurse Practitioner Case Study Selected 'Deep Dives'**

Case Study	Test of Change Name	Test of Change Brief Descriptor
Advanced Nurse Practitioner	NHS Ayrshire & Arran	ANP providing care relating to out of hours and general practice
	NHS Greater Glasgow & Clyde	ANP providing care relating to nursing home liaison, learning disabilities, care home liaison, out of hours, and general practice
	NHS Highland	ANP providing care relating to out of hours, general practice, home visits, care homes and community hospitals
	NHS Lothian	ANP providing care relating to out of hours, general practice and an Immediate Care Clinic
	NHS Shetland	ANP providing care relating to out of hours, hospital care and general practice

Findings were based on 24 semi-structured interviews and 1 focus group discussion (with 5 participants) and review of two local evaluations.

### 4.1.9 Key findings

In general, interviewed ANPs and ANP trainees were highly motivated, self-directed, and self-aware. They viewed their professional identity in nursing and not as a substitute or '*mini GP*'. They wanted to be recognised for the unique contribution that the combination of nursing and advanced clinical decision-making competencies and experience brought to their role. They recognised that the new role needed to be developed with consideration of the primary care and community multi-disciplinary team skill mix.

**Results from four evaluations were described:** **NHS GG&C** stated that two ANPs working in a practice in Inverclyde had taken on 32% of the home visits previously undertaken by GPs therefore releasing GP time and enabling increased availability and length of some GP appointments from 10 to 15 minutes. In **NHS Lothian**, ANPs were working as part of the Collaborative Working for Immediate Care (CWIC) which had been evaluated in a small survey and demonstrated enhanced service user journey, positive service user feedback, and appropriate onward referrals with improved timeliness of care. **NHS Shetland** had 5 ANPs in a large practice and reported improved access to primary care and positive service user feedback, although the details of the survey were not made available. **NHS Highland** reported that ANPs had undertaken 40% of the workload in OOHs urgent care services compared to 60% by GPs. Additionally, 2000 ANP patient cases in NHS Highland had been reviewed which concluded that ANPs had made appropriate clinical decisions, achieved

clear criteria for hospital admission, provided excellent person-centred care, made purposeful attempts to keep people well in their own home, and had good standards of record keeping.

**Changes over time** - These related to education and governance arrangements. There was increasing acknowledgement of the specialty of primary care and therefore, the need to ensure that ANP education and development reflected this in academic and work-based learning. Additional education and development for those unfamiliar with the primary care context had been introduced in NHS Lothian. There was also recognition of the need for a dedicated ANP education lead, as well as for appropriate levels of study leave during training. The reported challenges of Continuous Professional Development (CPD) suggested that greater peer support and more use of technology to support virtual networking was required. The need for a structured approach to CPD and maintenance of competencies was recognised, as was the need to monitor this as part of governance frameworks.

**Sustainability and spread** - There were concerns about sustainability for two reasons 1) ANPs, once trained, could change posts readily so that the local investment is lost, and 2) the pool of ANP trainee recruits was largely drawn from community and primary care nurses, many of whom were over 45 years of age. Similarly, with a limited number of suitably qualified and experienced ANPs available, scaling up ANP role implementation was dependent on the provision of suitable ANP education and development. National leadership, a robust definition of an ANP and collaboration across primary care, communities and universities were helping to promote better understanding and more consistent education for ANPs. However, insufficient understanding of advanced nursing by GPs and others, along with inconsistent standards of clinical supervision, study leave, and triaging of appointments were seen to be hampering development. Going forward, it was recognised that careful consideration is required in terms of governance and the maintenance of competencies.

#### 4.1.10 Key learning

- ANPs with appropriate competencies and confidence have the capability to help address current GP workforce and workload challenges by taking on elements of GP caseload.
- Where nursing experience and advanced clinical decision-making were utilised and integrated into MDTs, it was felt that ANPs added value to those elements of the GP role undertaken.
- ANP roles in primary care appeared well received by some patients, GPs and nurses.
- ANPs required considerable time in terms of training, support, study-leave and GP clinical supervision.
- The Academy model provided a platform for collaboration between health boards, general practices and higher education institutions.
- There are currently insufficient supervisors, both GP and ANP, to increase training significantly in the short to medium term.
- Due to uncertainties over future ANP numbers, scarcity of clinical supervisors, and the current workload in primary care, it remains unclear as to whether sufficient numbers of ANPs can or will be recruited and trained to significantly impact on the GP workforce crisis.
- There is a clear need for better quantitative monitoring, possibly at a national level, of the developing roles, sustainability and impact of ANPs in primary care over the next five years.

## 4.6 Musculoskeletal (MSK) Physiotherapy

Six tests of change were selected for deep dives:

**Table 4.6 Musculoskeletal Physiotherapy Case Study Selected 'Deep Dives'**

Case Study	Test of Change Name	Test of Change Brief Descriptor
Musculoskeletal Physiotherapy	NHS Highland	Direct access to Advanced Practice Physiotherapist in GP practice and a Direct Access Clinic (the latter was a small-scale service offering 12 appointments per week for MSK issues, accessed following an appointment with a GP or signposting by a GP receptionist).
	NHS Lothian	Direct access to Advanced Practice Physiotherapist in GP practice, a MSK Pathways Advanced Practice Physiotherapist who specialises for particular conditions e.g. back pain, and Exercise Specialists employed to progress rehabilitation routines following completion of appointment and advice provided by Advanced Practice Physiotherapists.
	NHS24	MSK Advice Triage Service was accessed by the public by telephone and operated from 9am until 5pm on weekdays. A trained call handler guided callers through a survey lasting no longer than 10 minutes, then either provided the caller advice or referred to a health care provider such as a doctor or Community Physiotherapist.

Findings are based on 24 key informant interviews and review of 83 documents.

### 4.1.11 Key findings

**NHS Highland** and **NHS Lothian** had both implemented services to allow patients with MSK symptoms to visit an Advanced Practice Physiotherapist (APP) based within a GP practice for an initial consultation. Working as the first point of contact, APPs were able to offer more timely appointments than a GP and, in some cases same day appointments. This was reported to reduce GP time on MSK-related problems. NHS Lothian also offered a MSK Pathways Integrated Low Back Pain APP. This involved a Spinal Specialist APP triaging patients who sat in between primary and secondary care. This role sought to support GP practices as well as secondary care physiotherapy and orthopaedics by reducing the rate of onwards referral. At the time of reporting, this new model of care was in the early stages of implementation and therefore no evidence of intended outcomes being met was available. Other Pathway APPs targeting shoulder and elbow conditions, and foot and ankle pain were also in the process of being implemented.

The successful implementation of APPs in primary care was perceived to be driven by buy-in of patients and staff, support from management and clinicians, and appropriate training of staff. This service was reported to have impacted positively on patients (allowing them timely access to

Physiotherapy), and supplementary documentary evidence provided by key informants showed good patient satisfaction and a reduction in the number of onward referrals in NHS Highland and NHS Lothian. Key informants in both health boards communicated that sustainability and expansion relied on appropriate funding of resources, recruitment and retention of staff, availability of accommodation in which new models of care could be undertaken and more robust IT systems for information sharing. Key informants believed that this test of change had resulted in greater equity for patients in accessing both Physiotherapy and GP appointments, particularly in rural communities.

Other MSK primary care tests of change in **NHS Highland** included telephone consultation. This involved Physiotherapists calling patients over the phone as opposed to face-to-face consultation. This was aimed at improving the patient experience, reducing GP contact for MSK related conditions and increasing patient self-management. Alongside other new models of care this was reported by key informants to have reduced MSK-related GP appointments and resulted in a reduction in needless prescriptions.

Success of the **NHS 24 MSK Advice Triage Service (MATS)** was largely driven by the approach adopted by the health board to implement it. In NHS Highland, the service was viewed negatively by some patients, GPs and Physiotherapists due to it replacing a well-liked paper-based system used by GPs to refer patients to secondary care Physiotherapy. In NHS Lothian, NHS 24 MATS was received more favourably and it was implemented to supplement rather than replace existing systems or services. MATS was reported as undertaking constant internal evaluation in the form of real time performance monitoring. This was supported by an MSK expert panel who acted as a liaison between health boards and the MATS service, reporting back faults and difficulties and advising on changes. Small-scale local evaluations were also said to be carried out by an internal partnership and engagement team within NHS 24 who conducted and analysed both qualitative and quantitative evaluation. These were not made available to the case study team. Sustainability and expansion of these new models of care were thought to be possible if they were properly supported by staff and patients, and properly funded. The service was thought to impact negatively on equity of access in NHS Highland due to having an older population who were believed to be less comfortable with using telephone triage systems and preferred face-to-face consultation with familiar clinical staff. Moreover, key informants believed that their population of sessional workers, who did not speak English as their first language, had difficulty expressing themselves fully through telephone consultation.

#### **4.1.12 Key Learning**

- Implementation of new models of care was facilitated by peer support, appropriate resourcing (funding and accommodation) and patient buy-in.
- New models of care were delivered in two main ways: Advanced Physiotherapy Practitioners (APP) and Musculoskeletal Advice and Triage Service (MATS).
- Support for data collection, extraction and analysis was needed, all of which required robust IT systems, on-going appropriate funding and good communication between health boards.
- To measure the actual impacts, sustainability and spread of new models of care will require further evaluation of primary care transformation journeys over the next five to ten years.

## 4.7 Second-Order Themes from the Deep Dives

Many of the themes relating to the successful implementation of the tests of change in the different case sites were similar, although there were often contextual differences. The key findings of each deep dive were compared and general 'second-order' themes were drawn from the data. These resulted in 10 themes as listed below:

- 1 **Short-term funding is a double-edged sword.** The availability of the funding facilitated the tests of change (couldn't have happened without it) but the short-term nature also impacted negatively on forward planning and sustainability and in some cases led to a reluctance to embrace change.
- 2 **Building upon or starting anew?** Tests of change that built on previous work and where pre-existing relationships were functional were implemented more effectively than those that were entirely new.
- 3 **Top down versus bottom up.** Tests of change that involved front-line staff in the design of new services and had good project leadership were implemented more effectively than those that were 'imposed' from above.
- 4 **Forward planning.** Tests of change that had a clear rationale (or logic model) and documentation of the steps taken to develop and implement the project (a clear plan) were implemented better, and were more likely to become sustainable
- 5 **Time to train.** Staff training and clinical and managerial management from within GP practices facilitated implementation, but this was challenging due to current workload pressures on GPs and practices.
- 6 **Leadership and governance.** National leadership was important in establishing criteria for new roles and responsibilities (e.g. ANPs), but local governance issues regarding clinical supervision, remuneration, and accommodation were also key issues that needed resolving.
- 7 **System, workforce, people.** Tests of change with perceived early impacts targeted all three levels: People (e.g., public information and/or engagement campaigns), Workforce (e.g., capitalised on previous relationships and/or developments and invested in staff engagement, training and support), and System (e.g., installation of infrastructure such as digital equipment and new processes).
- 8 **Data and evaluation.** Those charged with overseeing the implementation and evaluation of the tests of change expressed a need for support in designing evaluations, in identifying outcome measures, and in establishing systems for collecting data.
- 9 **Demonstrating impact.** This was hampered by the short-term nature of the tests of change and the limited support for data collection, extraction and analysis in order to monitor impact.
- 10 **Core outcomes.** There is a need to identify a core set of outcome measures and to continue to evaluate primary care transformation journeys over the next five to ten years in order to evaluate their actual impacts, sustainability and spread.

## 5 SCOTTISH SCHOOL OF PRIMARY CARE IMPLEMENTATION FRAMEWORK

This chapter builds on the key findings of the evaluation and presents a pragmatic framework for implementing new models of care (Figure 5.1). Using different case study ‘deep dives’ that contributed to the SSPC national evaluation of primary care transformation, (including the Inverclyde pilot study [27]) the framework illustrates important considerations relating to **context** and actions during **pre-implementation** and **implementation** stages that influence **outcomes**.

### 5.1 Context

Context is pertinent to *the design of the new model of care to be tested* in terms of its key components. Context refers to the set of external circumstances that forms the setting or backdrop for the test of change including values, geography, demography, evidence base and relationships.

#### 5.1.1 Values

Values define how those within an organisation are expected to behave and act in achieving its overarching purpose and aspirations.

#### 5.1.2 Geography

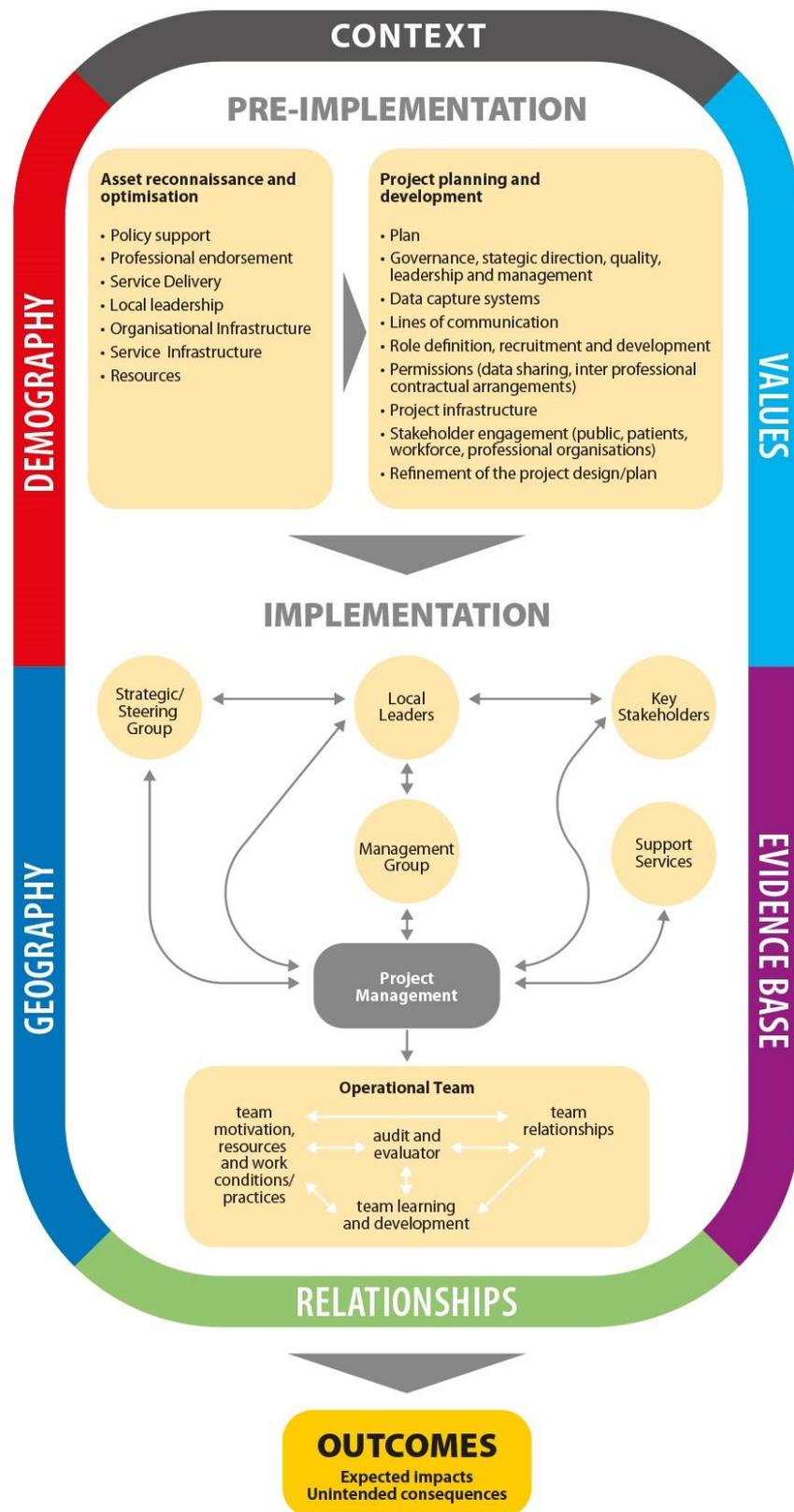
Geography encompasses not only the **physical features** of the area in which a test of change is located, but also the **human interactions** within these, including the distribution of populations and resources, economic activities and cultures.

#### 5.1.3 Demography

Demography describes a **population** in terms of statistics such as births; age distributions; educational attainments; employment status; size and structure of households; income; incidence of disease and mortality rates.

In the present evaluation, the importance of **values** and the **geographical and demographical context** was exemplified in tests of change that were implemented in relatively densely populated areas as well as remote and rural areas e.g. centralised community treatment/investigation rooms.

Figure 5.1 Scottish School of Primary Care Implementation Framework



## Box 5.1 Context illustration in relation to Values, Geography and Demography

The NHS Highland centralised community-based Investigation Treatment Room established for tests and investigations requested by secondary care consultants which were traditionally undertaken in GP Practices. It was reported that this had been done with scant consultation with service users and providers. This was against the thrust of one of the organisation's stated **values** – i.e. to listen.

Ultimately, the service was more readily implemented in the urban areas of Inverness than the remote and outlying rural areas. For the latter, unfavourable feedback related not only to the long distances (**physical features**) that patients were required to travel to the new centralised service but also to limited/poor public transport (**human interaction**) that added to the challenges faced by patients, particularly frail elderly patients who were more likely to have multimorbidity and to require multiple attendances (**demography**). Consequently, implementation was patchy as some hospital consultants, GPs and patients chose not to use the service but instead continued with the previous arrangement whereby tests/procedures were carried out locally in GP practices.

In NHS Highland, the aim of implementing a MSK physiotherapy service in GP practices was to improve access. However, it was believed that the **culture** in rural farming communities meant that people only sought treatment for serious conditions that affected their livelihood (**economic activities**).

Implementing the NHS24 MSK telephone triage service was considered to be more challenging in areas with large older populations and areas with significant populations of seasonal workers whose first language was not English. In both cases, it was believed that patients were more comfortable with a face-to-face consultation with a service provider. Tests of change that redirected patients to an alternative service provider, such as community pharmacist (Pharmacy First) or optometrist (Eyecare Ayrshire) in NHS Ayrshire & Arran were reported to have been more readily accepted because patients were still able to have a face-to-face consultation.

### 5.1.4 Evidence-base

Evidence base not only refers to **what should be done** (based on the best available evidence from research, clinical experience and patient values), but also to **how it should be done** (based on previous and current operational experiences).

In the present evaluation, the choice of **what** new models of care to test and **how** it should be operationalised was based on the views of managers and practitioners rather than empirical research (due to dearth of robust evaluations based on relevant outcome data) or patient values.

Patient/public consultations, where they existed, tended to be undertaken after implementation rather than before or during).

### 5.1.5 Relationships

Relationships not only refers to the way in which people and departments within a single and multiple organisations communicate and interact with each other but also to how they communicate and interact with their service users and wider communities.

In the present evaluation, the importance of the context in relation to **evidence-base** and **relationships** was exemplified by the relative success of the implementation of welfare rights advisors in primary care.

#### Box 5.2 Context illustration in relation to Evidence-base and Relationships

In NHS Tayside, the decision to co-locate welfare rights advisors in GP practices (**what should be done**) and its operational processes (**how it should be done**) was based on evidence from other UK sites where it was well established. The project team in Dundee, where it was tested, spent 2014 studying the established model in Edinburgh. Initially, the main concern was how to develop good **relationships** with GP practices. The Dundee model was first tested in a GP practice where there were good pre-existing working relationships and gradually rolled out to others. It took time to build relationships with GPs and healthcare professionals but once achieved Welfare Rights Advisors were seen as a trusted part of the practice. Practice staff saw the benefits to their workloads given that they could directly refer to an advisor in the practice, and welfare rights advisors saw the benefits of being able to submit well informed cases for benefits on behalf of patients. The reported total financial gain (income for patients from successful benefit applications) was just above £2 million pounds (£2,033,500) for the period from April 2016 to December 2017.

Other examples of tests of change that modelled operational processes on similar work included the Healthy and Active Rehabilitation Programme (HARP) for people with multimorbidity in NHS Ayrshire & Arran built on the experience of the pre-existing local service for cardiac rehabilitation (**evidence-base**). This coupled with the good reputation of the rehabilitation staff was believed to have facilitated implementation of HARP (**relationships**). By contrast, whilst the NHS Tayside Primary Care Staff Wellbeing test of change aimed to roll out an existing secondary care staff service to primary care, implementation was hampered by the absence of pre-existing **relationships** with primary care staff

## 5.2 Pre-implementation

Pre-implementation actions are undertaken in the planning phase of a new model of care— i.e. after the choice and design of test has been made but **before implementation**. It comprises two phases:

- assets reconnaissance and optimisation
- project planning and development

### 5.2.1 Asset reconnaissance and optimisation

This phase concerns identifying, assessing and maximising existing drivers, structures, systems, practices and capital. In the context of the primary care tests of change, these included:

- **policy support** (i.e. the extent to which it aligns contemporary national and local strategic plans/guidelines)
- **professional endorsement** (i.e. the extent to which it aligns with contemporary strategic ambitions of relevant professional groups)
- **service delivery** (i.e. the extent to which it builds on existing/recent service models that establish good working links and practices within and between organisations)
- **local leadership** (i.e. the extent to which it aligns with pre-existing ambitions of key individuals within the organisation who could potentially champion it)
- **organisational infrastructure** (i.e. the extent to which it could be situated within the existing organisational infrastructure, including contractual arrangements, management, governance and professional development, data access and sharing)
- **service interface systems** (i.e. the extent to which it fits within existing structures and procedures for communicating/interacting with colleagues within and across organisational boundaries)
- **resources** (i.e. the extent to which it could be supported by existing funding, property/ accommodation, and staff numbers, competencies and time).

### Box 5.3 Pre-implementation illustration in relation to Asset Reconnaissance and Optimisation

In NHS Lanarkshire, House of Care (HoC) aimed to improve care planning, by increasing involvement from patients, carers, families and the voluntary sector. It further aimed to encourage and support the involvement of patients in managing their long-term conditions and making decisions about their care needs in collaboration with their health care providers. These ambitions had both national [2, 14] and local **policy support** [31] and aligned well with recommendations of ‘The Report of the Independent Review of Primary Care Out of Hours Services’ [32] (**professional endorsement**), many of which were applicable to primary care in general –i.e. not only out-of-hours services [33]. It was reported that some GP practices were already executing aspects of HoC in advance of the implementation of HoC, (**service delivery**) and that the collaborative skills and **local leadership** of key members of the team ( e.g. practice manager), were important features of aligning the HoC programme with the local community. Successful adoption of HoC was considered to have been facilitated by well-supported **local clinical leadership** that enabled individuals and communities to co-create the necessary conditions for care planning and system-wide change.

Ahead of the invitation to bid for primary care transformation funding, the SG Primary Care Division had urged NHS Lanarkshire to develop a board-wide programme. Consequently, NHS Lanarkshire formed a Primary Care Transformation Programme (PCTP) Board (**organisational infrastructure**). Initial work involved in-depth review of services and systems, including **interface systems** and **resources**, to establish root causes of current challenges to service delivery.

#### 5.2.2 Project planning and development

This phase concerns developing new conditions for the particular test of change including:

- **plan** (i.e. first documenting the overall aim and specific objectives then all the steps and resources required to achieve these, including operational maintenance measures).

### Box 5.4 Pre-implementation illustration in relation to Project Planning

In NHS Tayside, detailed project rationale (**aim and objectives**), documentation and implementation plan (**steps and resources required**) were considered essential when negotiating new ways of working with local stakeholders. These were considered essential for implementation and spread of both the Welfare Rights advisers in GP practices and the Community Leg Ulcer Clinic tests of change.

There was considerable variation in the time dedicated to the pre-implementation planning and development phase. For example, the NHS Ayrshire & Arran community phlebotomy service, which intended to include hubs in large towns complemented by a peripatetic service around

smaller towns, was still in the planning phase whereas the less complex model in NHS Highland had been implemented relatively quickly but this possibly resulted in unintended negative consequences (see Box 5.1).

Variation was not only related to the complexity of the tests but also to the extent to which they required additional developmental work relating to:

- **governance, strategic direction, quality, leadership and management** (i.e. incorporating or developing structures and arrangements -including relevant local champions where possible- that makes explicit its fit within existing organisational infrastructure )
- **data capture** (i.e. defining essential operational and monitoring information and identifying/establishing mechanisms to ensure its collection)
- **lines of communication** (i.e. developing/making explicit systems and procedures required to ensure appropriate interface between relevant stakeholders)

#### Box 5.5 Pre-implementation illustration in relation to Project Development (Governance, Strategic Direction, Quality, Leadership and Management)

The Inverclyde New Ways of Working Pilot Governance Group was set up to oversee the **governance** arrangements of its primary care transformation programme and associated tests of change projects. Its members included HSCP directors and managers, GP Lead, and representatives from the LMC and from NHS GG&C departments of Finance, IT, Pharmacy and Staff Partnership. The New Ways of Working Pilot Core Group was set up to provide **strategic direction** and oversee the **management** of the New Ways of Working Pilot and the different work streams associated with each new test of change. Its membership included HSCP managers, a GP Lead, an ISD Data Analyst, and a SG Improvement Advisor. Wider representation was provided by others who were invited to attend meetings of the Core Group depending on the agenda to be discussed. Crosscutting support was provided to each test of change in relation to Finance, IT (**data capture systems**), **Quality** and **Leadership**, Education and third sector patient/carer representatives. The interactions between these groups and their constituent members facilitated **lines of communication** between key stakeholders.

Additional considerations were important to complex tests of change, particularly those that involved service providers assuming new roles and/or working in different settings. Attention to these inevitably required relatively longer pre-implementation developmental work than less complex tests of change:

- **role definition, recruitment and development** (i.e. identifying the type(s) of professional(s)/worker(s) required and producing/agreeing the respective job description(s))

- **permissions** (i.e. identifying and setting up the required contracts and agreements for its operation and monitoring)
- **project infrastructure** (i.e. identifying/establishing work setting/space, equipment, IT systems, support services).

Box 5.6 Pre-implementation Illustration in relation to Project Development (Role Definition, Recruitment and Development, Permissions, and Project Infrastructure)

The planned introduction of a test of change whereby paramedics would undertake GP home visits in Inverclyde (in NHS GGC) was delayed by 6 months. Some of this was attributed to the need to agree job descriptions (**role definition**), and contractual obligations (**permissions**); the latter involved discussions about priorities, in terms of responding to home visits or accidents and emergencies. Agreements were also required on where the paramedics would be physically located and how to access data sharing systems (**infrastructure**). Time was also required for **recruitment** and training paramedics (**role development**) for this new role. The paramedic training included mentoring by both GPs and A&E doctors.

In contrast, the advanced nurses undertaking home visits in the stead of GPs for non-complex patients in NHS Western Isles did not have a *'defined, written down scope of practice'* (**role definition**). *Consequently, there was variation in practice that relied on the responsibility of individuals to work within their own competencies under GP supervision.*

- **stakeholder engagement** (public, patients, workforce, professional organisations)

Box 5.7 Pre-implementation Illustration in relation to Project Development (Stakeholder Engagement)

Some of the negative unintended consequences of inadequate **stakeholder engagement** prior to the implementation of the NHS Highlands centralised community-based Investigation Treatment Room (ITR) have already been illustrated. Another was that there was a perceived deterioration in communication and relationships between some secondary care consultants and GPs when consultants directly referred patients to the ITR. It was felt that it removed the GP from key aspects of patient care, which some believed had a negative impact on the provision of generalist medical and holistic care.

- **refinement of the project design/plan** (i.e. modification to the design of planned intervention to take account of the outcomes of the above developments/consultations)

### Box 5.8 Pre-implementation Illustration in relation to Project Development (Refinement)

A number of the initial case study tests of change underwent subsequent **refinement** prior to implementation. In NHS Western Isles, the original intention of developing advanced nurse roles was to test if these upskilled practitioners could support patients with long-term conditions through anticipatory care planning and management. However, this evolved during the project planning and developing period so that ultimately the tested role was to manage list of all patients requesting a home visit, which included undertaking home visits of non-complex patients. This had occurred against the background of challenge of GPs meeting demand for home visits and mounting awareness that the anticipated outcomes of the original plan were not going to be realised within the dedicated project timescales and resources.

## 5.3 Implementation

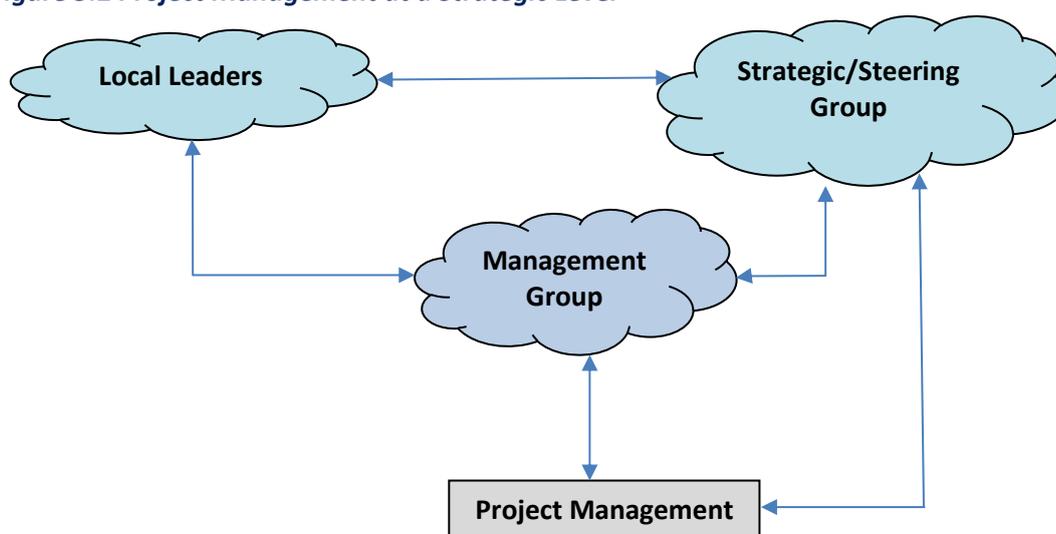
Implementation actions are *ongoing throughout the life of the new model of care*. Central to these is **project management** and how this interacts and manages communication and relationships at a number of levels including:

- strategic
- support
- key stakeholders.
- operational

### 5.3.1 Project management at a strategic level

Project management at a strategic level may involve interaction with a strategic/steering group, management group, and local leaders (Figure 5.2).

**Figure 5.2 Project Management at a Strategic Level**



Different approaches were adopted to manage the tests of change at a strategic level. Some tests were incorporated into health board-wide (NHS Ayrshire & Arran, NHS Lanarkshire and NHS Tayside) or HSCP-wide (Inverclyde HSCP) infrastructures. Within these, project managers/leads were overseen by a **steering group** (see Box 5.5 for example). Other tests of change had less formal project management and/or strategic direction arrangements e.g. a single practitioner planned and delivered the ‘Helping Patients Help Themselves’ self-management project in NHS Western Isles.

**Box 5.9 Implementation Illustration of Project Management at a Strategic Level**

The ANP and MSK physiotherapy tests of change had national leads. Support from the national manager was reported to have facilitated the implementation of ‘Beating the Blues’ CCBT on-line programme in NHS Highland.

Dedicated ANP Leads for primary care were employed in 6 health boards: NHS A&A, NHS GG&C, NHS Grampian, NHS Highland, NHS Lanarkshire and NHS Lothian). Other health boards had a senior nurse who oversaw ANP implementation (NHS Fife). Despite this, there remained uncertainty about the number of ANPs in Scotland. Arrangements for providing strategic direction were generally in the developmental stage, though NHS Shetland had developed a governance framework for supporting the development of advanced practice roles at a strategic level.

Whilst there were MSK leads in all health boards, there were differences in their remits in terms of managing new models of primary care and supporting infrastructure for providing strategic direction. For example, reporting MSK activity directly to HSCPs or to integrated joint boards. Arrangements for providing strategic direction were patchy. Consequently, there was uncertainty about the number of APP in Scotland and recognition of that there was variation in how these roles were evolving between and with health boards.

**5.3.2 Project management with support services and key stakeholders**

Depending on the nature of the project, its management at a strategic level may also involve interaction with support services (such as Human Resources, IT, Administration and external contractors) and key stakeholder (such as general public, patient groups, voluntary sector, other health services and social care organisations) (Figure 5.3).

**Figure 5.3 Project Management with Support Services and Key Stakeholders**



Again, there were differences between and within health boards in the extent to which individual tests of change had formal arrangements/structures to facilitate input from support service and key stakeholders. In general, those who had adopted a programme approach to implementing primary care transformation had created infrastructures intended to provide crosscutting support to individual tests from support services and key stakeholder (see Box 5.5 for example).

**Box 5.10 Implementation Illustration of Project Management with Support Services and Key Stakeholder**

In the NHS GG&C, the Inverclyde HSCP assigned project lead met weekly with a core team comprising member of:

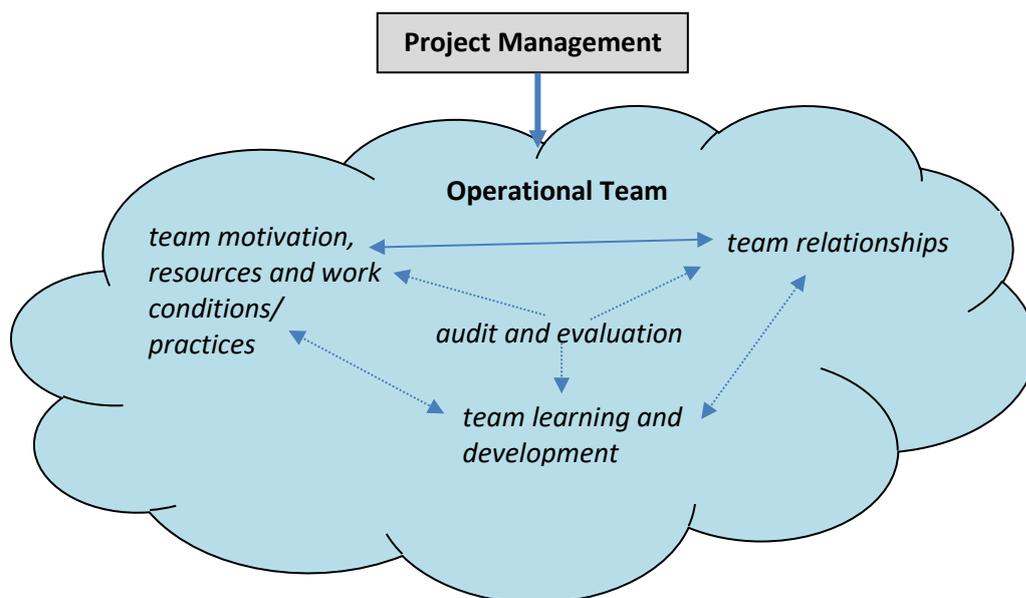
- local **support services** (such as Finance, IT, education, Leadership and Quality Improvement, HSCP managers/facilitators). Additional support was provided by a member of the **ISD Local Intelligence Support Team** and **SG Improvement Advisors**
- **key stakeholders** (such as HSCP directors and managers, GP Lead, and representatives from the LMC)

**5.3.3 Project management at an operational level**

Project management requires effective interaction with those involved in implementing the project/test of change such as GPs and their staff and other professionals involved in identifying and referring eligible patients. For some tests of change this also included interaction with services users, particularly those that relied on them changing their behaviour.

The focus of the interactions include a number of activities including managing team relationships; team motivation, resources and working conditions; team learning and development (all of which can be facilitated by audit and evaluation)(Figure 5.4).

**Figure 5.4 Project Management at an Operational Level**



## Box 5.11 Implementation Illustration of Project Management with Operational Team

Key activities of the project management team for the NHS Tayside Community Leg Ulcer Clinic included:

- securing and equipping clinics (**resources and work conditions**)
- recruiting GP practices to test the new service (**team motivation**)
- developing and implementing robust patient referral criteria and care pathways for primary and secondary care practitioners (**team relationships and work practices**)
- developing standard operating procedures for assessment and treatment at the clinic (**team working practices**)
- recruiting and training clinic staff based on a clinical competency framework (**team learning and development**)
- conducting and feeding back results from early audits, which suggested increased adherence to clinical guidelines and improved healing rates to clinic staff, GP practices and secondary care dermatology teams(**team relationships and motivation**)
- conducting and feeding back results of an early (not scientifically robust), **evaluation** based on service users and service providers views , which suggested positive patient experiences and reduced pressures on the wider dermatology care services, to clinic staff, GP practices and secondary care dermatology teams (**team motivation, work relationships, working practices**)

NHS Lanarkshire made considerable investment in recruiting and training GP practice staff in both the pre-implementation and implementation phases of the House of Care test of change (**team motivation and development**). However, without identification of resources to pay practices for associated additional workload and improved administrative and IT support (**work condition** and **team relationships**). To mitigate this, the project management team sought to re-engage staff by emphasising that implementation of the HoC reflected their organisational values and **work practices** relation to improving patient self-management and empowerment (**team motivation**).

An extensive public information and engagement campaign were undertaken for the Eyecare Ayrshire and Pharmacy First tests of change.

## 5.4 Summary

By looking at the new models of primary care in Scotland through the lens of the SSPC Implementation Framework, it has been possible to gain insight into why some could be implemented quicker than others, and why some appeared to work better in some areas than others. Thus, it lends itself as an evaluation framework for new models of care. It could also be used as the basis of an online learning resource that could be initially populated with examples from SSPC national evaluation then added to on an ongoing basis by others testing similar and new models of care (Appendix K. SSPC-Implementation Framework – example screen shots).

## 6 CONCLUSIONS AND RECOMMENDATIONS

This report has documented the progress of more than 200 new models of primary care tested across Scotland over a two-year period from April 2016. In addition, 34 'deep dives' were conducted in selected case studies in Health Boards case sites - Ayrshire and Arran, Lanarkshire, Tayside, Highlands, Orkney, Shetland, and Eileanan Siar (Western Isles), and nationally across two themes (ANPs and MSK-Physiotherapy). The findings indicate that although good progress was made in most of the tests of change, important issues relating to patient and community involvement, health inequalities, rurality, sustainability, and unintended consequences were surfaced which need to be addressed in the future.

Transformation is an iterative journey, and the short-term nature of the funding for the tests of change limited what was achievable. This was also true of this evaluation, which by necessity, was largely qualitative and descriptive, giving a snapshot of achievements across a large number of innovations. A quantitative evaluation using routine NHS data was planned, but due to considerable delays in accessing the data, is now being taken forward as a separate study by the University of Edinburgh, which will report in Spring 2020.

Since we started this evaluation of new models of primary care, there have been a number of further developments in primary care in Scotland. These developments include the memorandum of understanding (MoU) established between Scottish Government, The Scottish GPs committee of the BMA, integration authorities and NHS Boards in April 2018 which sets out how each party will work together towards supporting, enabling and delivering the new GP contract and the new models of primary care. This includes the development of locally agreed Primary Care Improvement Plans, and the use of the associated Primary Care Improvement Fund.

The rapid development of change in many different areas of primary care policy in Scotland over the last few years presents challenges to the implementation of these very policies. Embedding these changes within services, so that they can contribute in a cohesive way to future integrated primary care development, will be essential in the next phase of primary care transformation. Based on the findings and implications of our evaluation, and the developments alluded to above, we have identified a number of areas which appear to be priorities for future work on primary care transformation, which we hope will be of relevance to policy-makers, policy- implementers, and clinicians tasked with embedding change at the front-line of the NHS.

### 6.1 Planning, Funding and Time

The lead in time from the SG's initial call for proposals for PCTF and PCFMH funding, to submission, decision, and project commencement was too short. This, plus the differing approaches taken by different Boards, is likely to have encouraged a '*let a thousand flowers bloom*' approach and probably limited the quality of submissions and projects. The duration of the funding (24 months maximum) was also too short, and for some acted as a deterrent rather than an incentive. It also limited the ability of project leads to plan and share experiences and learning, before, during and after the completion of the tests of change.

 **Recommendation 1:** Although the approach taken in the PCTF/PCFMH fund led to some useful learning, the findings suggested that the next phase of primary care transformation should take a

more ‘mission-oriented approach’, with a focus on a smaller number of larger projects, conducted over a longer period of time, with agreed goals and outcomes and sufficient support for robust evaluation. Decisions on committing future resources in this area should take into account the ten themes identified in the current evaluation. The SSPC-Implementation Framework can provide pragmatic support on the ‘nuts and bolts’ of planning and implementing such projects and should be made available as an online resource.

## 6.2 Relationships, Roles and Engagement

The complexity of the landscape in integrated primary care grew considerably during the period of the evaluation as the GP contract evolved and Integration Authorities were established. Moving forward, relationship development and maintenance within and between teams and sectors will be crucial. This was notably absent in some tests of change. Engagement and involvement of patients and communities is also a vital aspect of this. In addition, the limited number of tests of change that focused on health inequalities, despite a clear request to do so by the SG, strongly suggests that this is an area of great challenge. 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. This involves a four stage process: ‘what are the direct or indirect impacts of the policy on rural areas?’; ‘what is the scale of these impacts?’; what actions can you take to tailor your policy to work best in rural areas?’; ‘what effect has your policy had on rural areas and how can it be further adapted? [34, 35,36].

-  **Recommendation 2:** Role clarity, role support, governance, and clear communication channels are required as the primary care landscape becomes more complex. Strengthened support for collaborative leadership and multidisciplinary team-working is required at all levels.
-  **Recommendation 3:** Involvement and participation of patients and communities in the future development of new ways of working in primary care is essential, especially for projects or service developments that directly affect patient care, and should be a condition of funding being granted. The aim should be to include patients, carers, and families in the co-design of projects and service developments, rather than ‘information campaigns’ after the changes have been made.
-  **Recommendation 4:** Further work is required on how primary care can best address, or mitigate the effects of, health inequalities. This should build on existing evidence. Learning should be shared from the experience of the ‘GPs at the Deep End’ group, which should be regarded as an important asset and resource for broader work in inequalities, including vulnerable patients with complex needs living in less deprived areas,(for example, in remote and rural areas, where ‘pocket deprivation’ is common).
-  **Recommendation 5:** The needs of remote and rural populations require that transformation be addressed in a way that reflects rural geography, population sparsity and distances from secondary and tertiary services. Rural proofing of health services should be considered as a systematic approach to ensure the needs of rural populations are considered in the planning and delivery of health services.

### 6.3 Training and Environment

As set out in the Health and Social Care workforce plan part 3, high quality training, with local and national leadership, and adequate clinical supervision is required to develop the multidisciplinary primary care workforce further. This requires a supportive learning environment and suitable physical and digital environments within and beyond GP practices. The environment also includes broader issues including support for staff wellbeing. Current GP workload pressures are limiting the time available for teaching and clinical supervision, and also making it harder for staff who wish to undertake training for new roles to get the required protected time. The SG overview of Primary Care Improvement Plans highlights the weakness of local workforce planning across PCIPs, as well as suggesting the need for further national efforts on workforce capacity, capability and leadership.

 **Recommendation 6:** The success of primary care transformation over the next few years will require a step change in the development of national and local efforts in workforce planning, capacity, capability and leadership to address workforce and capability challenges across all clinical disciplines. The forthcoming SG integrated workforce plan represents an opportunity to move these areas forward at pace.

### 6.4 Data, Evaluation and Outcomes

A clear and consistent message from the current evaluation was the need for more data and evaluation support at a local level. Crucial elements include data availability, collection, analysis, and interpretation. Expansion of the Local Intelligence Support Teams (LIST; NHS National Services Scotland), progress of the Scottish Primary Care Information Resource (SPIRE), the launch of 'Improving Together Interactive (iTi)' website, and the establishment of a Primary Care Evidence Collaborative, are all welcome developments. The SG is also currently developing a ten-year National Primary Care Monitoring and Evaluation Strategy [37]. In addition to evaluation and monitoring, a focused academic programme of applied research is also required to fill the many evidence-gaps identified in the current evaluation and related literature reviews. SSPC has proposed a programme of innovative applied research over the next 5-10 years which would complement monitoring and evaluation of primary care transformation [38, 39]. Without this, future primary care policy is likely to be poorly evidenced and therefore potentially both less effective in improving patient care and more wasteful. Many of these issues, particularly data availability for planning development and evaluation across primary, secondary and social care, are linked to the need to develop better national digital infrastructure for primary care.

 **Recommendation 7:** A strategic, integrated approach to the generation, dissemination, and implementation of the evidence required to guide the ongoing transformation of primary care is required. The SG's Primary Care Monitoring and Evaluation Strategy should be accompanied by a Scottish Primary Care Research Strategy, with dedicated funding for high priority applied research in primary care in Scotland. Such research should be co-designed and co-produced by academics, Integration Authorities, practices, patients and the third sector [37,38, 39].

 **Recommendation 8** The development of a national digital platform, as set out in Scotland's Digital Health Strategy 2018 [5] has the potential to address many of the issues of data availability and use as well as evaluation and the generation of evidence. This could help to speed up transformation. Consideration should be given to a large-scale demonstrator digital primary care transformation project with clear co-designed and co-produced outcomes and rigorous evaluation. This could be established in both a rural and an urban area, to ensure that the differing contextual needs of both are addressed.

Finally, we believe that Scotland also has an important role to play internationally in the strengthening of primary care, which remains a global priority [40]. Many countries – including mainland Europe - are testing new models of primary care in response to similar population challenges as Scotland faces [41]. International collaboration and comparative analyses could help answer some of the key evidence and implementation gaps that currently exist in primary care.

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## **8 LIST OF APPENDICES**

A – Letter of invitation to bid for PCTF/PCFMH from Scottish Government to NHS Health Boards

B – The concurrent work of the SSPC

C – The Development of the Outcomes Framework

D – Interview Topic Guide Phase 1

E – Interview Topic Guide Phase 2 (example)

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K – Example screen shots of the SSPC – Implementation Framework

## Appendix A. Invitation to bid from the Scottish Government

Population Health Improvement Directorate

Primary Care Division & Mental Health & Protection of Rights Division

T: 0131-244 2305

E: Richard.foggo@gov.scot

T: 0131-244 3531



—

/02/2016

Copied to Primary Care Leads and all GPs

Dear Colleagues

PRIMARY CARE TRANSFORMATION FUND

**PRIMARY CARE FUNDING FOR MENTAL HEALTH SERVICES**

### **Primary Care Transformation Fund (PCTF)**

1. Following David Thomson's letter of 11 August 2015, this letter sets out further detail on how the Primary Care Transformation Fund (PCTF) will be used to support and deliver the re-design of primary care across Scotland.
2. This work aims to build towards a future where primary care is delivered through multi-disciplinary teams with general practitioners, other health professionals and social care partners working across clusters of practices, integrated into health and social care partnerships.
3. PCTF investment will be underpinned by two key principles:
  - A vision for the future role of the GP which will see them focus on complex care; undifferentiated presentation and quality and leadership; and
  - A multi-disciplinary approach to patient care which will involve the right mix of expertise and services required to ensure that patients are provided with the most appropriate treatment in the most appropriate setting, when they need it.

4. Whichever further new models of working practice are proposed to be delivered locally, we expect the PCTF to be used initially to support the development of general practice clusters and accommodate our intention to support a network of Urgent Care Resource Hubs in each health board area.
5. These will help establish the basic framework on which we will build a transformation in the delivery of primary care services across Scotland both in-hours and out-of-hours. We recognise however, that networks of centres delivering urgent care during the out of hours period already exist; we also recognise that a range of new models of care such as primary care practice cluster working already exist in some areas. The PCTF investment will support the spread of those approaches and the development of further innovation by existing clusters.

### Priorities

6. Scotland continues to face significant health inequalities and it is crucial that any new models of care help us to address those challenges. It is therefore expected that every proposal will make clear how it intends to address health inequalities.
7. Whilst practice clusters and urgent care resource hubs are likely to be largely determined on a geographic basis, we recognise that there will be specific challenges within local populations and we would want to ensure that new models of care can drive improvements in those areas. We would therefore particularly welcome proposals that focus on:
  - equity of access to services;
  - children and young people;
  - the frail and elderly; and
  - supporting those with mental health challenges.

### Outcomes

8. Short term outcomes should include increased patient satisfaction with GP services (in hours and out of hours); reductions in avoidable unscheduled care, A&E attendances, hospital admissions and delays to discharge; better anticipatory care plans; and increased number of multi-disciplinary team appointments.
9. Medium term outcomes should include same or next day appointments with appropriate health professionals for complex care, undifferentiated illness and palliative care; increase in longer appointments for those who need them based on clinical need; and a shift in the balance of appointments between GPs and other primary care professionals leading to improved job satisfaction and morale for all professionals.
10. Long term outcomes should be that patients' have better health outcomes and are better able to manage their health conditions in a setting that is most appropriate to their needs.
11. We would welcome proposals with a specific focus on transforming primary care services in-hours or round the clock. Expressions of interest to support the recommendations in the Out-of-Hours Review

have previously been sought and are currently being developed with health boards by Primary Care Division.

#### Primary Care Funding for Mental Health (PCFMH)

12. Whilst there has been considerable progress in developing services and improving access, there is a need to transform our approach to mental health services to address the shortfall between need and demand for children and young people; the variation in access to services more generally across Scotland and the inequity of treatment between physical and mental health. Evidence demonstrates that there is a clear link between health inequalities, physical health and mental health challenges, especially for those with long term conditions.
13. It is estimated that approximately 90% of mental health problems are treated at primary care level, with 1 in 3 of a GP's patients requiring mental health treatment. The transformation of primary care therefore offers a real opportunity to develop new models of managing mental health problems within primary care, which will support the transformation of services to enhance access to appropriate services for patients, and support for clinicians.
14. In addition to the PCTF, the Cabinet Secretary for Health, Wellbeing and Sport announced additional funding to support mental health services within primary care. We would welcome proposals which will support the transformation of treatment of mental health in primary care daytime and urgent care environments.

#### Priorities

15. The key principle underpinning investment in the mental health funding will be the re-design of primary care services to ensure that those who need mental health support can access it when they need it.
16. Transformation of the provision of primary care mental health services will require a focus on:-
  - prevention;
  - early years;
  - parity between physical and mental health;
  - geographical equity of access; and
  - community support to encourage supported self-management through the provision of information and support from peer workers, carers and the Third Sector.

#### Outcomes

17. Better management of mental health at primary care level should ensure a range of outcomes:
  - people with a range of mental health problems are supported sooner by the most appropriate professional first time

- improved screening for mental health problems in primary care populations;
- the most effective use of specialist mental health services to meet patient need when they need it;
- improved experiences for patients, carers and primary care staff;
- people better supported to self-manage any future or on-going support requirements; and
- ultimately improved outcomes in both physical and mental wellbeing.

#### Funding and process

18. We have agreed maximum notional amounts for 2016-17 for both the PCTF and the Mental Health Primary Care Fund based on the NRAC formula. We are now inviting Health Boards, working with Integrated Joint Boards, to submit outline proposals which can be funded within those notional amounts of £XXX for the PCTF and £XXX for the Mental Health Primary Care Fund. You can submit separate bids for the 2 Funds or one combined bid. Your proposal should be for a maximum of 2 years and must have a clear exit plan.
19. There is no guarantee within the Funds that these amounts will be made available nor that every board will receive funding.

#### Outline proposal

20. At this stage, we are looking a one page outline (template attached) covering:-
  - what you propose to do and with which partners;
  - why (covering both the challenges to be addressed by the proposal and the rationale for why this proposal),
  - what outcomes you expect your proposal to deliver,
  - exit plan.
21. Given the interrelationship between primary care and mental health support, proposals, can and should be flexible – applications can be to one fund or the other, or to both.
22. The budget for 2017-18 will be subject to the normal Parliamentary budget process and we anticipate funding being at a lower rate in 2017-18 which you will want to reflect in your proposal.
23. We are keen to promote cross-Board working where that is supportive of the outcomes, in particular between smaller Boards and/or where there are common issues. We will retain some of the funding centrally to support the additional costs involved in such proposals.
24. Once we have received outline proposals, we envisage meeting representatives from the Health Board and local Health and Social Care Partnerships to discuss proposals further. This would enable us to build up a picture of what is being proposed across the programme as a whole so we can quickly identify obvious gaps and explore how to address them with partners to ensure a suitable spread of high-quality projects.

#### Stage 2 proposal

25. After those meetings, if your proposal appears to address relevant outcomes and fits within our national priorities for primary care and/or mental health, we will invite you to submit a more detailed proposal. We will offer improvement advisor support to help you develop the bid in accordance within specific criteria which proposals must address. These will build on the outline proposal and will be required to describe in detail:-

- the challenges to be addressed;
- the main benefits and outcomes to be achieved for patients and staff; for those with a particular focus on mental health, mental illness, and mental wellbeing for all;
- the rationale for the design of the response and within the key principles for the relevant fund
- how the proposal will address those challenges and deliver outcomes within the relevant priorities and how it will add value to existing service provision;
- an evaluation plan to develop and measure indicators for each outcome;
- how the proposal will involve partnership-working with stakeholders (could include other health boards, health and social care partnerships/IJBs, local government, the third sector, independent sectors, patients/users/carers, clinical/professional staff);
- governance, leadership and management arrangements to ensure continuous focus and drive on primary care transformation and/or mental health improvement (in-hours or in-hours and out-of-hours) as part of integrated and strategic health and social care planning;
- value for money
- long-term operational and financial plans for sustainability – both funds are time-limited and any proposal must set out how the changes tested will be mainstreamed to make them sustainable or identify other sources of funding;
- a commitment to be actively engaged in an improvement approach to testing, sharing learning and progressing locally and across Scotland.

#### Other support

26. We will support development and delivery through primary care and mental health improvement practice which will be established as part of the PCTF and we will provide improvement expertise to develop a culture of change and continuous improvement that has a sustainability and beyond the individual projects that we fund. We will also facilitate a network across all projects and more broadly to share experience and learning.

27. To support evaluation, compatible data collection will be required and test sites will be expected develop a local evaluation plan within a common evaluation framework of high level outcomes. We are funding the Scottish School of Primary Care in part to support the development of the evaluation framework and assist with identification of appropriate indicators.

#### Governance

28. The Scottish Government is accountable for the allocation of resources and the delivery of the strategic aims and objectives of the national programme and we will establish a National Advisory

Group to advise and support us in the development and delivery of the programme. This group will comprise internal and external members – including representatives of health boards, health & social care partnerships, RCGP, BMA, RCN, the Royal College of Psychiatrists, representatives of the mental health nursing profession and the third sector etc - and would have regard to wider governance of Scottish Government transformational change programmes (eg 2020 Vision). This group would provide access to a range of expertise (operational and clinical) – as well as policy colleagues within health directorates. The patient view will also be a key part of how we develop this work.

29. Delivery of projects at a local level will require local partnerships to coordinate and deliver the tests of change appropriately. This would include, for example, a local project group to oversee delivery, collate and assess learning. A local project group will be established to support the work on the ground. A representative from Scottish Government will also sit on that group to provide the national perspective and act as a conduit between the local and national groups.

#### Next Steps

30. If you intend to submit a bid to the PCTF or the Mental Health Primary Care Fund – either by developing new work or building on an existing programme of work – we would welcome discussing this with you and your partners.
31. Initial expressions of interest for this work addressing the criteria set out above should be submitted to the Primary Care Transformation Team ([Lynn.Henni@Gov.scot](mailto:Lynn.Henni@Gov.scot)) by 18<sup>th</sup> March 2016. This should be in the format of the attached template:
32. I have copied this letter to Primary Care Leads and GPs as key delivery partners. You may want to work with them in formulating your response.
33. We look forward to working with you as we progress this transformational work.

Yours sincerely



**RICHARD FOGGO DEPUTY  
DIRECTOR, PRIMARY CARE  
DIVISION SCOTTISH  
GOVERNMENT**



**DEPUTY DIRECTOR,  
MENTAL HEALTH AND PROTECTION OF RIGHTS  
DIVISION  
SCOTTISH GOVERNMENT**

**PENNY CURTIS**

## **Appendix B. Scottish School of Primary Care concurrent work 2016-2018.**

The Scottish School of Primary Care (SSPC) – a multidisciplinary consortium of Scottish universities with a strong track-record in academic primary care (see [www.sspc.ac.uk](http://www.sspc.ac.uk)) - was commissioned by the SG in September 2015 to carry out an independent evaluation of the new models of primary care being tested (tests of change) throughout Scotland. The SG stipulated that the evaluation should include all primary care projects that had the potential to be transformational, irrespective of funding source. However, tests of change funded by the community pharmacy fund were excluded, as the SG commissioned the Schools of Pharmacy at the University of Strathclyde and Robert Gordon University to evaluate these. The findings of this separate evaluation were submitted to the funder in September 2018 (D. Stewart and M. Bennie, personal communication). The SG requested that SSPC, as part of its national evaluation, carry out an early evaluation of the Inverclyde project. This was undertaken by the SSPC core team, between 1 October 2016 and 31 March 2017, and our report is available online [http://www.sspc.ac.uk/media/media\\_573766\\_en.pdf](http://www.sspc.ac.uk/media/media_573766_en.pdf).

Other early work of the SSPC core team following SG funding involved the development of a National Evaluation Framework to guide the evaluation (explained in detail in the chapter 5). This framework was discussed with the funder, and was critically appraised by two international experts in the field of policy and healthcare evaluation, Professor Sanjeev Sridharan, Director of the Evaluation Centre for Complex Health Intervention, and Professor Renee Lyons, Institute of Health Policy, Management and Evaluation, University of Toronto.

SSPC also organised a one-day workshop in March 2016 on ‘Quality after QOF’. This brought together key senior stakeholders from a broad range of relevant organisations, including the SG to discuss the issues around the new GP contract in Scotland, in particular the role of GP Quality Clusters. External speakers included academic and primary care leaders from Denmark, England, Switzerland and Wales. Feedback on the day was extremely positive. The full report is available online(i)[[http://www.sspc.ac.uk/media/media\\_480045\\_en.pdf](http://www.sspc.ac.uk/media/media_480045_en.pdf)]. This was complemented by a SSPC literature review on ‘What Did We Learn from 12 years of the QOF?’ led by Professor Bruce Guthrie [ii].

SG funding for the national evaluation also included up to 20 SSPC Briefing Papers, the first 10 of which were made available on the SSPC website by September 2016 [iii]. These are short documents on clinical topics, which summaries the problem, the evidence-base for interventions, the experience (if any) of implementing such approaches in the NHS, and how clusters could use the topic as a focus for quality improvement. These have proven to be a very popular resource with Cluster and Practice Quality Leads.

The SSPC core team also contributed to the development of the SG Outcomes Framework for Primary Care [iv]. This began in August 2016, and SSPC hosted a meeting in November 2016 of senior SG staff involved in different areas of policy relation to primary care transformation. Twenty- nine policymakers, advisors and analysts, from 17 policy areas within SG attended. The process of this work and the role of SSPC in it explained further in Appendix C.

In May 2017, SSPC organised a one-day workshop, funded by the Robert Wood Johnson Foundation, entitled ‘Learning Together’ which shared international experience on new models of

primary care [v]. This included key stakeholders from Scotland, including the SG, and external speakers from Australia, Canada, Denmark, Finland, the Netherlands, Norway and Wales. This led to the generation of the 'Edinburgh Consensus Statement', which all participants endorsed, and was published in an international peer-reviewed academic journal [vi].

- i. Scottish School of Primary Care. Quality after QOF: Report - A workshop hosted by the SSPC. 2016 [http://www.sspc.ac.uk/media/media\\_480045\\_en.pdf](http://www.sspc.ac.uk/media/media_480045_en.pdf) (accessed 26th Nov 2018)
- ii. Guthrie, B., Tang, J., What did we learn from 12 years of QOF? A literature review. Scottish School of Primary Care 2016. [http://www.sspc.ac.uk/media/media\\_486342\\_en.pdf](http://www.sspc.ac.uk/media/media_486342_en.pdf) (accessed 26<sup>th</sup> Nov 2018)
- iii. Scottish School of Primary Care Briefing Papers 2018  
[http://www.sspc.ac.uk/publications/briefing\\_papers/](http://www.sspc.ac.uk/publications/briefing_papers/) (accessed 26<sup>th</sup> Nov 2018)
- iv. Scottish Government. Primary Care Outcomes Framework. 2018  
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- v. Blane DN, Gillies JCM, Mercer SW, Smith GI. 'Learning together': sharing international experience on new models of primary care. *Scandinavian Journal of Primary Health Care* 2018, DOI: 10.1080/02813432.2018.1426152
- vi. Scottish School of Primary Care. 'Learning Together': Sharing international experience on new models of primary care; policy, delivery, and evaluation. 19<sup>th</sup> July 2017  
[http://www.sspc.ac.uk/media/media\\_538658\\_en.pdf](http://www.sspc.ac.uk/media/media_538658_en.pdf) (accessed 13<sup>th</sup> February 2019).

## Appendix C. Development of a Strategic Level Outcomes Framework for Primary Care

Between August and October 2016, representatives from NHS Health Scotland, SSPC, and the SG Health and Social Care Analysis Division (HSCA) met with 34 individuals working across 17 different SG policy areas. The purpose of these meetings was to gather information about planned work relating to primary care transformation and any evaluation plans. Following these meetings, the SSPC organised and hosted a half-day policy meeting in November 2016, planned and co-led with NHS Health Scotland and the SG Primary Care Division. The key aim of this meeting was to feedback the findings from the individual policy meetings and to discuss and identify ways that different policy areas within SG and national partners might come together to help achieve primary care transformation. Four key questions were discussed:

- Is there a shared understanding of policy contributions to primary care transformation?
- Can better integrated working within Scottish Government be achieved?
- What parts of transformation should be nationally driven and what should be locally determined?
- What sort of targets and indicators are needed to support primary care transformation?

The meeting was attended by 29 policymakers, advisors and analysts from over 17 SG policy areas, and a report of the event was produced by NHS Health Scotland. There was acknowledgment amongst attendees of the time primary care transformation would take, and the need for a long-term evaluation strategy to help measure progress towards the [primary care outcomes and vision](#).

Following the meeting, it was agreed that Dr. Ruth Dryden of NHS Health Scotland would be based one day a week in the SG Primary Care Division to support the development of this work and provide additional national resource for Primary Care Evaluation planning. This included developing high-level logic models based on policy documents and the interviews and meetings conducted, and bringing together national partners to discuss how they could support this work in a more coordinated way. The resulting Primary Care Evidence Collaborative (PCEC) is a network, coordinated by NHS Health Scotland, of organisations in Scotland who have a responsibility and shared commitment to improve the quality, relevance, timeliness, co-ordination and use of evidence for primary care policy and practice. SSPC was involved in the planning and establishment of the PCEC, and is a member. The organisations involved include:

- NHS Health Scotland
- SSPC
- Scottish Government – Primary Care Division
- Scottish Government – Health and Care Analysis Division
- Scottish Government – Integrated Care
- Healthcare Improvement Scotland
- National Services Scotland
- NHS Education for Scotland

- Alliance for Health and Social Care Scotland
- International Foundation for Integrated Care

The first official PCEC meeting was held on 16 January 2017. At the 2<sup>nd</sup> meeting on 21 March 2017, it was agreed to form a subgroup to develop the logic models into an outcomes framework. The framework was co-produced by a sub-group of the PCEC, consisting of representatives from: NHS Health Scotland; SSPC; The ALLIANCE; and SG HSCAD. Dr. Ruth Dryden received additional input from colleagues in Healthcare Improvement Scotland; sought feedback on the model from the Person-Centered Stakeholder group at the SG in June 2017; and also presented it and received feedback from policymakers and professional advisors in the SG Primary Care Division on a number of occasions. The Outcomes Framework was published by the SG in May 2018 ([Outcomes Framework for Primary Care](#)) and remains a 'live' document, subject to ongoing amendments and developments.

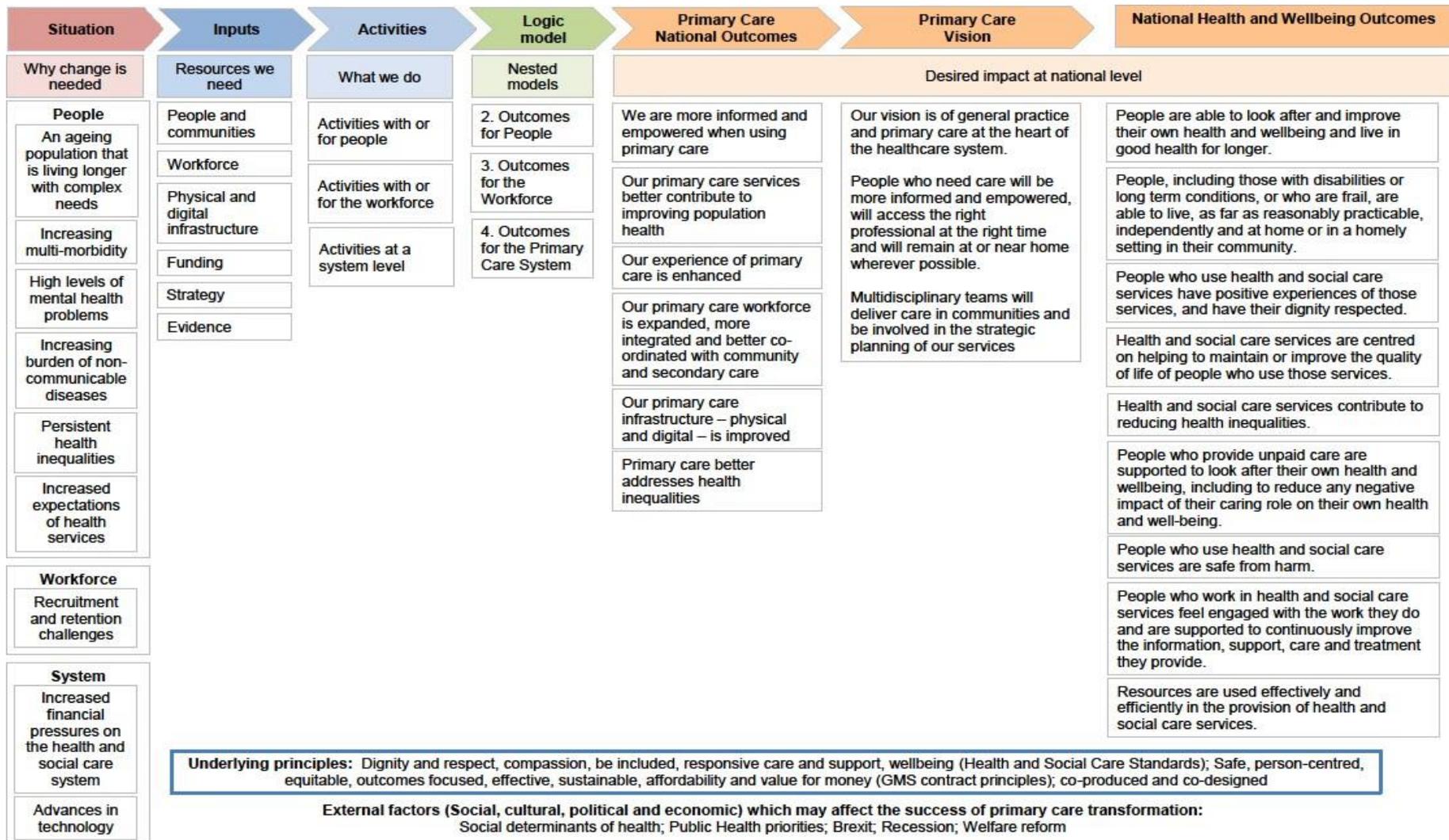
The Outcomes Framework consists of four inter-related diagrams linking inputs to outcomes. The first (Diagram 1) is the **Strategic** Level outcomes framework or logic model. It sets out the steps linking factors affecting people (i.e., those who use the health system), the workforce and the primary care system through inputs, activities and primary care vision and outcomes to the high level National health and Wellbeing Outcomes.

The outcomes for people (Diagram 2) include the important contributions of involvement of patients in their care and supported self-management where appropriate. That for workforce (Diagram 3) takes into account the need to address current recruitment and retention challenges and move to a more multidisciplinary and integrated workforce. This should help to deliver the national primary care outcomes of better informed patients, better population health and a focus in health inequalities. Diagram 4 illustrates what is need to achieve the primary care outcomes at a system level. Underlying principles such as dignity, compassion, and addressing inequality are set out, and significant external factors, political, social, cultural and economic, are seen as important to be aware of.

The Outcomes Framework provides a foundation for identifying where indicators are needed and other kinds of evidence to measure progress in delivering the Vision. It should help inform the identification and prioritisation of evidence gaps which require new data, research or analysis to be taken forward within the Monitoring and Evaluation Strategy [37]. The Strategy aims to gather and share evidence on whether intended changes are being delivered and the reasons for this. This will help ensure evolving policy, practice and strategy is informed by consistent and robust evidence.

The strategic level diagram is reproduced below, and the other diagrams can be accessed here ([Outcomes Framework for Primary Care](#)).

## Primary Care Outcomes Framework - Strategic Level



## Appendix D. Phase 1 Interview Topic guide

### Evaluation of New Models of Care

Thank you for agreeing to meet with one of our researchers to discuss your views and experiences of primary care transformation implementation in NHS [health board].

This study is being conducted in two phases.

In Phase 1, we are interested in exploring what activities are taking place in [health board] and how these fit with the on-going health system in [health board].

In Phase 2, we will focus more on actual projects, examining their aims and objectives, milestones and achievements.

#### Phase 1: Intervention Theory and Expectations of Impact

- 1. Can you describe your role in Lanarkshire:**
  - a) generally – (Health Board/ HSCP/ IJB)
  - b) in relation to primary care transformation in [health board]?
- 2. How has this change in delivery been funded?**
- 3. Do you know about the Primary Care Transformation Fund? Was this considered as a source of funding for this project/these project(s)?**
  - a) who were the main drivers in developing the bid and projects?
  - b) how wide was the general support for the bid/projects?
- 4. Are you aware of the aims of Primary Care Transformation nationally?**
- 5. Do you work closely with any national stakeholders? (e.g. SG etc.)**
- 6. Are you aware of the aims of Primary Care Transformation services locally?**
- 7. What projects have been developed and why did you choose to fund these?**
  - a) why were these models/tests chosen?
  - b) do these projects build on previous work or are they entirely new ways of working?
  - c) what involvement did primary care practitioners (e.g. GPs) have in the choice and development of the models/tests?
- 8. What is your relationship with the local projects?**
  - a) do you have an overarching role across projects?

b) do you have a specific role in individual projects?

**9. Who have you had to engage with in order to develop and deliver these projects?**

- a) who were the drivers?
- b) who else is involved, what are their roles and how were these determined, have their roles evolved/changed over time?
- c) who is not really involved who you think should be?
- d) was there any patient/public involvement in the choice or design of the new models of care?

**10. What governance arrangements/structures are in place? Is this the same for all projects?**

**11. What progress has been made so far?**

- a) has the rate of progress been similar across the different projects?

**12. Have you tried/considered testing other models that have either not 'got off the ground' or which didn't work so well?**

**13. What are the expected overall outcomes/impacts of the projects as a whole in Lanarkshire? In what timescales:**

- a) short term (within the next year)?
- b) medium term (within the next two to three years)?
- c) long term (beyond three years)?

**14. How will these outcomes/impacts be measured? Do they require existing or new data? How will the data be collected and by whom?**

- a) Will support be required to collect data to inform the measurement of impact?
- b) Have quality standards/measures of success for this been agreed? What are these, how were they identified and by whom?
  
- c) Are there plans for local evaluation and, if yes, by whom?
- d) can you describe the plans for the local evaluation?
  
- e) Are there plans for identifying 'success' of projects?

**15. Are there plans for identifying the 'sustainability' of projects?**

- a) have there been any facilitators or barriers in the development and/or implementation of the projects?
- b) do you foresee any barriers or facilitators in sustaining the projects?
  
- c) What are the resource implications of these projects? Now and in terms of sustainability?
  
- d) Who are the key stakeholders in terms of future sustainability and spread?

**16. Are [health board] planning on trying out other 'new ways of working' in future?**

**17. Is there anything else about this evaluation you would like to add?**

## Appendix E. Example of Phase 2 Interview Topic Guide (example)

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

1. Can you introduce your role (no names) and describe your involvement in the project?
2. Can I start by asking about the impact of implementing the project/model?
3. What has it been like for you?
4. What has it been like for other staff / stakeholders?
5. Can you tell me about what you feel the impact has been for patients?
6. Could you describe your understanding of the patient pathway in the new model? Other impacts? Reduced/ increased workload? Data collected?
7. Has there been any changes made during the implementation of the project?
8. Did you make any changes along the way?
9. Have there been changes to the impacts on patients as the project progressed? Data collected?
10. Has there been any unintended negative consequences of the project?
11. If you were to give advice about how to implement this project/model again in another area what would that be?
  - a. What would be good for others to know?
12. What have you learned yourself from this project?
13. What benefits do you see in rolling out / scaling up the project?
  - a. Is there anything specific about the rural context that would impact on roll out?
  - b. How easy do you think it would be to implement the project again / scale it up?
  - c. What would be needed/ required to keep the project going?
  - d. Are there any indications that these will be provided in the future?

## Appendix F. Participant Information Sheet (example)

[University Logo]

### Study title

**Evaluation of New Models of Care: [health board]**

### Invitation paragraph

You are being invited to take part in the NHS [health board] case study, which is part of the Scottish School of Primary Care's national evaluation of Primary Care Transformation projects. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

### What is the purpose of the study?

This study aims to identify the challenges and facilitators to implementing new models of care in NHS [health board]. The study will involve two phases. The first phase aims to identify the range of transformation projects in [health board], to understand where they are happening and who is involved, and also their intended impacts. The second phase of the study will identify a number of these projects or locations for an in-depth case study. We will focus on identifying any impacts; barriers and facilitators in implementation; lessons learned; and impacts for patients, practitioners and the wider health system of [health board]. The study will last from June 2017 to September 2018.

### Why have I been chosen?

You have been identified as a key stakeholder involved in new ways of working in primary care in [health board]. Your views will help us to better understand the development and implementation of new models of care and what lessons have been learned about establishing and sustaining them.

### Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part, you are still free to withdraw at any time and without giving a reason.

### What will happen to me if I take part?

If you do agree to take part, you will be asked to meet with a researcher for an interview at a time and location suitable to you. The interview is expected to last for around 60 minutes. You will be asked at the beginning of the interview if you have any questions about the study, and you will then be given a consent form to complete and sign (you will be given a copy of this information sheet and your consent form to keep). If a face-to-face interview isn't suitable, but you would like to take part, we can arrange a telephone interview instead. In this case we will send you a consent form and ask you to complete it and return it to us before the interview.

With your permission we will record the interview to ensure that we retain an accurate account of the discussion. If you do not wish the interview to be audio recorded please indicate this to the researcher and omit this part of the consent form. All recordings will be held on secure University of [case study lead base] servers and will be destroyed

at the end of the study. Interviews will be transcribed and anonymised. Transcripts will be retained securely for 10 years. Your anonymised data will be stored for additional future research performed by approved researchers.

It is possible that you might be asked to take part in a second interview later in the project. This might happen if you are involved across a range of different projects being developed in [health board], or to help us understand how the projects develop over time.

When you are asked to participate in the interview you will also be asked, if it is appropriate, whether you are willing to receive ongoing email prompts that aim to keep the research team informed of important changes or events in your local area (these might include larger stakeholder events or changes in key personnel or restructuring of local services). If you choose to take part in this then you will receive a structured email at intervals agreed between you and the research team, but not more than monthly. If we don't receive a response from you then you will receive only one reminder and if you decide that you no longer wish to take part then we will not send you any more prompts.

You will also be asked whether you are willing to complete two questionnaires. The first questionnaire, called NoMAD, will help us identify and understand barriers and facilitators of the new models of care being developed. The questionnaire will be sent to you by email or in paper format at the beginning of the study. We will ask you to complete this questionnaire a second time later on in the study. If we don't receive a response from you then you will receive only one reminder and if you decide that you no longer wish to take part then we will not send you any more questionnaires.

The second questionnaire called an outcomes rating scale will help us to understand the objectives of the work being carried out in [health board] and when these might be achieved. The questionnaire will be sent to you by email or in paper format at the beginning of the study. We will ask you to complete this questionnaire once. If we don't receive a response from you then you will receive only one reminder.

**What are the possible disadvantages and risks of taking part?**

Taking part in the evaluation will require you to give a modest amount of your time.

**What are the possible benefits of taking part?**

You will receive no direct benefit from taking part in this study. The information that is collected during this study will give us a better understanding of what new models of care are being developed and how they are being implemented. Additionally, your views will help us understand better what those charged with planning and implementing new models feel about their data and support needs.

**Will my taking part in this study be kept confidential?**

All information which is collected about you, or responses that you provide, during the course of the research will be kept strictly confidential. When we use the information provided by you, from the interviews, electronic prompts or questionnaires, it will be anonymized and depersonalized. No names or identifiable data will be mentioned if we quote something that you say in future reports or publications. You will be identified by an ID number, and any information about you will be removed so that you cannot be recognised from it.

However, some participants may be easier to identify due to their unique or role or profile. In recognition of this, quotes that may be attributable to a participant due to their unique or key role will not have a role identifier

attached, and if this is not sufficient to ensure anonymity then these quotes will not be used. Your anonymised data will be stored for additional future research performed by approved researchers.

Please note that assurances on confidentiality will be strictly adhered to unless evidence of serious harm, or risk of serious harm, is uncovered. In such cases the University may be obliged to contact relevant statutory bodies/agencies.

**What will happen to the results of the research study?**

The results from the interviews will be used by the research team to provide feedback to stakeholders and to our funders, the Scottish Government, via the Scottish School of Primary Care. We will also aim to publish our findings in academic journals and presentations at conferences.

**Who is organising and funding the research?**

The Scottish Government is funding this research and the funding is being administered by the Scottish School of Primary Care. The study is led by the University of [insert base of case study lead].

**Who has reviewed the study?**

This study has been reviewed by the University of Glasgow, College of Medical, Veterinary and Life Sciences Ethics Committee.

**Contact for Further Information**

If you would like further information about this study, please contact [name, email and telephone number of case study lead].

**Thank you for taking part in this study**

## Appendix G. Consent Form (example)

[University logo]

Participant Identification Number: N/A

GU Project R&D No: [insert]

**Title of Project: Evaluation of New Models of Care: NHS [health board]**

**Name of Researcher(s):**

**Please initial box**

I confirm that I have read and understand the information sheet dated \_\_\_\_\_  
(version \_\_\_\_\_) for the above study and have had the opportunity to ask questions.

I understand that my participation is voluntary and that I am free to withdraw at  
any time, without giving any reason, without my legal rights being affected

I agree to my anonymised data being archived and that electronic versions of these  
will be stored on password protected University of [ ] computers.

I understand my information will be stored for additional future research and I will  
not be able to be identified from any analyses performed by approved researchers.

I understand that if some of my views are quoted in a report or published papers,  
this will be done in a way that ensures that I cannot be identified.

I understand that, subject to my permission, the interview will be audio recorded  
for the purpose of the study and that any recordings will be destroyed at the end  
of the study. Depersonalised transcripts of the recordings will be kept for a period  
of 10 years to ensure accurate reporting in any future publications.

If appropriate, I agree to being sent electronic prompts and/or questionnaires to  
complete, and understand that I will be given the opportunity to withdraw from  
future surveys.

I agree to take part in the above study.

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Name of subject      Date    Signature

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Name of subject                      Date    Signature  
(if telephone interview)

Researcher      Date    Signature

(1 copy for subject; 1 copy for researcher)

## Appendix H. Identified ANP roles

### a) Health Board Involvement in the ANP Academy and Identified ANP Roles in relation to ANP Case Study

NHS Health Board		ANP Academy	ANP Lead	GP Practices	OOH	Other Care Settings
Ayrshire & Arran		Yes	Yes	Yes	Yes	care homes; community hospitals
Borders				Yes		Not known
Dumfries & Galloway		Yes		Yes		community hospitals; community nursing (older people)
Fife			Yes (seconded)	Not known		community hospital; care homes
Forth Valley				Yes	Yes	community hospital; prison service
Grampian			Yes	Yes		community nursing; home visits; care homes
Greater Glasgow & Clyde		Yes	Yes	Yes	Yes	learning disabilities; care homes; home visits; community nursing
Highland & Islands			Yes	Yes		community hospitals; home visits; care homes
Lanarkshire		Yes	Yes	Not Known	Yes	community hospital (planned); home visits (planned); care homes (planned); Integrated care team (planned)
Lothian			Yes	Yes	Yes	Immediate Care Clinic; hospital at home; prisons (planned); care homes (planned)
NHS24		Yes				Telephone triage and self-care advice
Orkney				Yes	Yes	home visits community nursing
Shetland				Yes	Yes	Community and rural general hospital care homes (planned)
Tayside				Yes	Yes	care homes home visits enhanced community care
Na h-Eileanan Siar (Western Isles)						community and rural general hospital home visits minor injuries

**b) Number of Identified ANP Roles in relation to NHS Health Board and Care Setting**

Health Board	Approximate General Population Size	Approximate Number of ANP Role				Future Plans
		as Clinical Lead	in GP Practice	in Community/ OOH	in Training	
Ayrshire & Arran	367,000	1	30	13	4	Additional 10 ANP trainees per annum
Borders	110,200		8		1	1 ANPs in OOH, 3 GP attached ANPs, and 6 Community Hospital ANPs
Dumfries & Galloway	148,190		8		13	Additional 4-6 ANPs per annum
Forth Valley	300,000		20	8	2	Additional 15 for independent general practice, 5 health board general practice, and for OOHs
Fife	280,000	1 (seconded)	Not Known		12	Not known
Greater Glasgow & Clyde	1,200,000	1	30	15	6	Not known
Grampian	500,000	2 (1 OOH 1 primary care)	67 ANPs multiple roles		38	Ongoing OOHs training programme and Advanced Practice Academy
Highland	31,000	OOH	43.77 WTEs multiple roles		16.2 WTE	Not known
Lanarkshire	563,000	1	Not Known	4	9	Not known
Lothian	800,000	2	3	9	29	Additional 90 GP attached ANPs
Orkney	21,500		6		6	Not known
Shetland	23,000		3 WTE	2 WTE	5.1 WTE	Additional 11.8. WTE ANPs to support care home and range of primary/community care services
Tayside	400,000		10	2		Not known
Na h-Eileanan Siar (Western Is.)	26,500				Not Known	23 ANPs to meet national criteria (16 x community hospital/OOHs, 7 x A&E/Minor injuries)
NHS 24	N/A				3	Not known

## Appendix I. Identified Musculoskeletal Physiotherapy Tests of Change

### Musculoskeletal Physiotherapy Tests of Change Inputs and Outputs

	Funding	Other Inputs	Activities/Outputs
Ayrshire and Arran	PCTF funding, other funding stream (not disclosed)	3 Physiotherapists available across 9 GP practices. Staff working as part of a cluster model.	APPs as first point of contact for MSK related ailments. Direct route of access for patients.
Borders	Physiotherapy Services	One APP in a Spinal MSK Role. Two APPs working in community care roles.	APP triaging referrals to secondary care.
Dumfries and Galloway	Board top-slicing, Orthopaedic funding	Chronic pain pathway. AHP Triage.	Physiotherapy questionnaire about chronic pain. Physiotherapy workshops about chronic pain. AHP triaging orthopaedic patients through MSK Physiotherapy.
Fife	Board top-slicing, Individual practice funding	One APP in one GP Practice. Online advice tool for Physiotherapists and GPs.	APP as first point of contact for MSK related ailments. Direct route of access for patients. Potential for APP to prescribe and inject. Advice tool to increase confidence in GPs and Physiotherapists.
Forth Valley	Primary care funding (non-PCTF), Board top-slicing	Extended scope practitioner in two 2C practices. MSK Hub	Extended scope practitioners within two practices. Hub streamlining referrals into secondary care.
Grampian	HSPC funding	One APP in one practice Telephone Appointments	One APP in one practice FPOC triage by receptionist Return phone call from the Physiotherapist.
Greater Glasgow and Clyde	PCTF funding, QOF funding	APP in GP practice SHIP project Physiotherapist in GP practice	One APP in cluster Community project bringing together clinicians from different fields to target specific local issues Physiotherapist within the same building blocking off time for 2 quick access patients per week.
Highland	Individual practice funding	APP in GP Practice Telephone consultation NHS 24 MATS	Hired by individual practice due to perceived need. One APP serving one practice (as reported in Phase 1). Physiotherapist calling patients. Replaced self-referral. FPOC for all MSK related issues.
Lanarkshire	PCTF funding	APP in GP practice	One APP covering 3 practices as part of a cluster.
Lothian	PCTF funding, health board pump-prime funding	APP in GP Practice MSK Pathways APPs	5 GP APPs in 3 HSCPs APP specialising in triaging patients with spinal MSK complaints providing care for defined clinical areas e.g. low back pain. Funded by primary care
Orkney	Health board funding	APP in GP Practice	One APP covering 2 practices

Shetland		No new models of care reported.	
Tayside	unknown	APP in GP practice MSK solutions tool	One APP in a practice in difficulties.. Online resource for GPs and AHPs Encouraging better knowledge sharing and communication between GPs and Physiotherapists
Na h-Eileanan Siar (Western Isles)	unknown	APP in GP Practice	1 APP available for 2 sessions per week in a single practice.

Appendix J. Indication of Reported Progress for all 204 tests of change (as of January 2018)

NHS Health Board	Test of Change Name (details)	Test Status when Scoped			
		Implemented	Partially implemented	Not implemented	Not known
Ayrshire & Arran	ANP (Out-of-Hours)		1		
	ANP (GP practice)		1		
	ANP Lead		1		
	ANP Academy	1			
	Ayrshire Urgent Care	1			
	Community Phlebotomy			1	
	EyeCare Ayrshire	1			
	GP Recruitment	1			
	Healthy and Active Rehabilitation Programme	1			
	House of Care	1			
	Link Workers/Community Connectors	1			
	MSK Advanced Physiotherapy Practitioner (General Practice)	1			
	Pharmacy First (community pharmacy prescribing for urinary tract infections and impetigo)	1			
	Pharmacy Independent Prescribers	1			
	Stewarton Pilot (focussed community redirection)		1		
Borders	Advanced Paramedic Practitioner (South Cluster)		1		
	ANP (General Practice)		1		
	Anticipatory Planning Review - What Matters to Me (West Cluster)		1		
	Community Acute Rehabilitation Team (Central Cluster)	1			
	Chronic Obstructive Pulmonary Disease Pilot (South Cluster)		1		
	Enhanced Anticipatory Care Planning (embed anticipatory care plans across clinical systems for frail and elderly population)				1

	Here we are - Docman Management (South Cluster)		1		
	Medicines Reconciliation in Primary Care (West Cluster)	1			
	MSK Advanced Physiotherapy Practitioner (General Practice)	1			
	MSK Advanced Physiotherapy Practitioner (community)	1			
	New Patient Checks Pilot (West Cluster)		1		
	Supporting Mental Health Needs in Primary Care Scottish Borders: Early Intervention/Prevention		1		
	Supporting Mental Health Needs in Primary Care Scottish Borders: Early Years		1		
	Supporting Mental Health Needs in Primary Care Scottish Borders: Improved Access and Support		1		
<b>Dumfries &amp; Galloway</b>	ANP (Out-of-Hours, General Practice, community hospital - older people)		1		
	ANP Academy	1			
	MSK Advanced Physiotherapy Practitioner Triage		1		
	MSK Chronic Pain Pathway		1		
	NHS24 MSK MATS	1			
	One Team - Locality-based Multidisciplinary Team				1
	One Team - General Practice Multidisciplinary Team			1	
<b>Fife</b>	ANP Lead			1	
	Frailty Register	1			
	Multidisciplinary Team Review of Frail Elderly (including consultant and nursing post for care homes)		1		
	MSK Advanced Physiotherapy Practitioner (General Practice)	1			
	MSK (Online Advice Tool)	1			
	NHS24 MSK MATS	1			
	Third Sector Local Area Coordinators	1			
<b>Forth Valley</b>	ANP (General Practice, community hospital, prison service)		1		
	Improving Quality of Palliative and End of Life Care (particularly non-malignant conditions)			1	
	Mental Health in Primary Care		1		
	MSK Extended Scope Practitioner	1			
	MSK Hub	1			
	NHS24 MSK MATS	1			

	Sustainable Primary Care: Developing Cluster Working	1			
	Sustainable Primary Care: improved Use of Technology (Florence: home BP monitors)		1		
	Sustainable Primary care: Improving Anticipatory Care Planning			1	
	Sustainable Primary Care: Post-diagnostic Support for Dementia	1			
	Sustainable Primary Care: Autism Project		1		
	Sustainable Primary Care: Supporting Multidisciplinary Team Working (including Outcomes Communication and PASC projects)		1		
	ANP (Out-of-Hours)		1		
<b>Grampian</b>	ANP (OHH, General Practice, community nursing)	1			
	ANP Lead	1			
	Community Care Mental Health Hub	1			
	Links Worker (frail elderly)		1		
	Link Workers (mental health)	1			
	Mental Health and Wellbeing Practitioners (children and young people)		1		
	MSK Advanced Physiotherapy Practitioner (General Practice)	1			
	MSK Physiotherapy Roll-out of Telephone Advanced Physiotherapy Practitioner appointments		1		
	MSK Physiotherapy Telephone Advanced Physiotherapy Practitioner appointments	1			
<b>Greater Glasgow &amp; Clyde</b>	ANP ( Out-of-Hours, nursing home liaison, learning disabilities)		1		
	ANP Lead		1		
	ANP Academy	1			
	Cluster Development	1			
	Community Phlebotomy and Treatment Room Reviews				1
	Developing Models Round Frail Elderly				1
	Mental Health in Primary Care (numerous cluster-based projects -Alcohol Brief Interventions, Learning Disabilities, Physical Health in Mental illness, Interface Working, Resilience, Wellbeing)	1			
	MSK ( Physiotherapist in General Practice)	1			
	MSK (3 Advanced Physiotherapy Practitioners in General Practice, second cluster)		1		
	MSK (Advanced Physiotherapy Practitioner in GP Practice, first cluster)	1			
	MSK (Advanced Physiotherapy Practitioner in SHIP project)		1		

<b>Greater Glasgow &amp; Clyde (Inverclyde)</b>	Activities of Daily Living Smartcare			<b>1</b>	
	ANP (General Practice)	<b>1</b>			
	Health Care Support Worker		<b>1</b>		
	Home Visits (telephone triage)	<b>1</b>			
	MSK Physiotherapy in General Practice	<b>1</b>			
	Home Visits(paramedics)		<b>1</b>		
	Pharmacy Independent Prescribers in General Practice	<b>1</b>			
	Health Centre-based Phlebotomy	<b>1</b>			
<b>Highland</b>	ANP (OHH, care homes, community hospitals, home visits)	<b>1</b>			
	Cluster Development (1) Moray Firth	<b>1</b>			
	Cluster Development (2) North & West	<b>1</b>			
	Cluster Development (3) Argyll & Bute	<b>1</b>			
	Computerised Cognitive Behavioural Therapy Mastermind Programme	<b>1</b>			
	Developing Mental Health Multidisciplinary Teams		<b>1</b>		
	Project Manager for Mindfulness Network and Decipher Life Skills Service	<b>1</b>			
	Development of Urgent Care Consultations (Argyll & Bute)	<b>1</b>			
	Enhanced Anticipatory Care Planning (embed anticipatory care plans across clinical systems for frail and elderly population)		<b>1</b>		
	Interface between Primary Care and Secondary (Moray Firth)		<b>1</b>		
	The effectiveness of Specialist Mental Health Pharmacist time in Primary Care	<b>1</b>			
	Mental Health: Everyone's Business	<b>1</b>			
	MSK Advanced Physiotherapy Practitioner in GP Practice (roll out)		<b>1</b>		
	MSK Advanced Physiotherapy Practitioner in General Practice	<b>1</b>			
	MSK Physiotherapy (telephone consultation)	<b>1</b>			
	Multidisciplinary Team Working (North & West)		<b>1</b>		
	NHS24 MSK MATS	<b>1</b>			
	Pilot of Buurtzorg Model (Argyll & Bute)		<b>1</b>		
Quality of Urgent Care Centres (North & West)	<b>1</b>				

	ANP Lead	1			
<b>Lanarkshire</b>	Community Design: ANP (OHH , General Practice, community hospital, Care Homes and Integrated Care teams)		1		
	ANP Lead		1		
	ANP Academy		1		
	Digital Programme: Online Appointments Booking		1		
	Digital Programme: Electronic Patient Call Notice Boards	1			
	Digital Programme: Ordering Repeat Prescriptions Online	1			
	Digital Programme: Outcome Manager Software Pilot		1		
	Digital Programme: Self-service Check-in Kiosks	1			
	Digital Programme: Self-service Surgery Pods		1		
	Digital Programme: Telephone Triage	1			
	Digital Programme: Training and Support for Staff	1			
	Digital Programme: Video Conferencing Equipment	1			
	Digital Programme: Vision Anywhere Service		1		
	GP Community Redesign: Pharmacy Support for GP Practice	1			
	GP Community Redesign: Practitioner Support	1			
	GP Community Redesign: Mental Health Occupational Health		1		
	GP Community Redesign: Signposting Training for Receptionists	1			
	GP Community Redesign: MSK Advanced Physiotherapy Practitioner in General Practice	1			
	GP Community Redesign: MSK Advanced Physiotherapy Practitioner in General Practice (roll out)	1			
	House of Care (amend IT systems)	1			
	House of Care: Clinical Champions and Project Manager (appointment of roles)	1			
	House of Care: Staff Training	1			
	House of Care: Implementation	1			
House of Care: Peer Support for Families and Carers	1				
House of Care: Self-management training courses	1				
House of Care: Local Support Signposting	1				
Leadership Programme: Linking Knowledge Networks	1				

	Leadership Programme: Sessions for Cluster Quality Leads	1			
	Mental Health: Occupational Therapist for Falls Risk People (appointment of role)		1		
	Mental Health: Individual Placement/Support for People with Mental Health Problems	1			
	Mental Health: IT Development for Service Delivery		1		
	Mental Health: OT clinics early intervention/self-management/referral		1		
	Mental Health: signposting for access to social prescribing	1			
	Mental Health: Train Community Pharmacy Assistants as Mental Health Champions		1		
	Mental Health: Out Of Hours Service	1			
	Mental Health: Training for Responding to Distress		1		
	Mental Health: Increased Access to Psychological Therapies		1		
	Mental Health: Weight Monitoring for Clozapine Prescribing		1		
	Recruitment and Retention: Assess Practice Closures, Assess Risk, Supported Placements		1		
	Recruitment and Retention: GP Exit Interviews		1		
	Recruitment and Retention: Improving Practice Sustainability Tool	1			
	Recruitment and Retention: Marketing Strategy for Vacancies	1			
	Recruitment and Retention: Coaching Support	1			
<b>Lothian</b>	Musselburgh Primary Care Access Centre	1			
	ANP (Out-of-Hours, General Practice, Immediate Care Clinic)	1			
	ANP Lead	1			
	ANP (General Practices)	1			
	GP Practice Phlebotomy (developing and sustaining)	1			
	Developing and Sustaining Primary Care: Cluster Leadership/Management	1			
	Developing and Sustaining Primary Care: Supporting Access to Community Support			1	
	Developing and Sustaining Primary Care: Sustainability Support to GP Practices (resilience)	1			
	Edinburgh Headroom	1			
	Midlothian Wellbeing Service	1			
	MSK Advanced Physiotherapy Practitioner in General Practice	1			
	MSK Physiotherapy Pathway (self-referral)	1			

	MSK Exercise specialists employed to progress rehabilitation routines		1		
	NHS24 MSK MATS		1		
	Supporting Frail Elderly	1			
<b>NHS24</b>	NHS24 MSK MATS		1		
	ANP Academy		1		
<b>Orkney</b>	ANP (General Practice)		1		
	ANP (OOH)		1		
	Empowering Localities; Locality Led Design of Multi-Disciplinary Model			1	
	Fit for the Future Services; A Review and Redesign	1			
	MSK (Advanced Physiotherapy Practitioner in General Practice)	1			
	NHS24 MSK MATS			1	
<b>Shetland</b>	ANP (Out-of-Hours, hospital)	1			
	ANP (GP practice)	1			
	Development of capacity to deliver behavioural activation support to people		1		
<b>Tayside</b>	ANP (OHH)			1	
	ANP (General Practice)			1	
	Development of multi-disciplinary Community Hub Model: Dundee	1			
	Development of Multi-disciplinary Community Hub Model Angus		1		
	Development of multi-disciplinary Community Hub Model: Perth		1		
	Community Hubs: Local skin ulcer clinics	1			
	Community transport scheme: for less mobile elderly			1	
	Community Transport scheme: for less mobile elderly (Pilot - finished, no further funding)	1			
	GP engagement programme Perth & Kinross		1		
	GP Recruitment & Retention: Career Start GP	1			
	GP Recruitment & Retention: Flexible Career GP		1		
	GP Recruitment & Retention: Leadership GP	1			
	MDT working: Enhanced community support Frail elderly	1			
	MDT working: Mental Health and Wellbeing nurses in Links Health Centre Montrose Angus	1			

	MDT working: test of development - Neighbourhood Care in South west Locality (Angus)		1		
	MDT working: Sustainable models	1			
	MDT working: Brechin Medical, Angus	1			
	Mental Health and Wellbeing: Listening service: "Do you need to talk"	1			
	Mental Health and Wellbeing: Social prescribing	1			
	Mental Health and Wellbeing: Staff wellbeing	1			
	Mental Health and Wellbeing: Welfare rights	1			
	MSK Advanced Physiotherapy Practitioner in General Practice	1			
	MSK Solutions Tool (web-based for GPs and Allied Health Professionals)	1			
	Pharmacy: Community Pharmacy		1		
	Pharmacy: Locality Pharmacy	1			
	Technology: Florence (telehealth for long-term conditions)		1		
	Technology: Enable Care TEC Solutions	1			
<b>Na h-Eileanan Siar / Western Isles</b>	MSK Advanced Physiotherapy Practitioner in General Practice		1		
	Primary Care-led Dementia Diagnosis and Support	1			
	Self-Management Support (6 week programme)	1			
	Staying Well Programme	1			
<b>Total tests of change: 204</b>		<b>118</b>	<b>70</b>	<b>12</b>	<b>4</b>

## Appendix K. SSPC-Implementation Framework – example screen shots

User friendly framework to guide the project implementer through setting up a test of change in Primary Care. Based on a database of real case studies it builds up to provide a resource for project managers, stakeholders and policy makers.

### Project definition

Easy to use drop down and links to clarify the project.

Test category	Currently listed (click number to see more details)
Care Planning	4
Community Pharmacy	7
GP	51
House of Care	8
IT	15
Link Workers	6
Mental Health	30
Optometry	1
Paramedics	2
Phlebotomy	4
Primary Care-Secondary Care	5
Urgent Care	4
other	4

Next: select a category for your test of change:  
If 'other' state a new suggested category

Select a category from drop-down list  
Open text box

### Categories

Categories drawn from the database help to categorise the proposal and draws on the experience of previous tests of change

The online SSPC Implementation Framework then takes the user through a series of steps to enable them to think through the factors affecting successful implementation of a test of change.

