Healthcare Improvement Scotland

Primary Care Phased Investment Programme

Qualitative Evaluation Plan

GMS Contract Implementation in Primary Care

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1 Executive Summary

1.1 Background

Given the rise in demand for primary care services in Scotland and simultaneous shortage of healthcare staff, there has been significant investment made by the Scottish Government to facilitate the implementation of the General Medical Services (GMS) contract which aims to address these challenges.[1-3] Data shows a mixed picture of implementation, with variation in service models and levels of provision.[4, 5] There is limited national data available, and a dearth of evidence exploring the impact of the introduction of contract services, in relation to intended outcomes of reduction in demand for GPs, release of GP time or improved patient outcomes. To address this, Scottish Government have commissioned Healthcare Improvement Scotland (HIS) to deliver the Primary Care Phased Improvement Programme (PCPIP). The programme aims to support fuller implementation of the GMS contract across four demonstrator sites (DSs), with a focus on improving key regulated priority areas - pharmacotherapy and Community Treatment and Care (CTAC) services.

1.2 Aim

The aims of this evaluation are to explore evidence of impact of implementation of the GMS Contract, the impact of a focus on CTAC and pharmacotherapy services on fuller implementation of the contract, and to assess the impact of HIS quality improvement (QI) support in improving implementation of services covered by the regulation in the GMS contract. Throughout this proposal, the term evaluation is used to refer to the *qualitative component* of the wider PCPIP project and evaluation.

1.3 Evaluation approach

Using a realist informed approach findings from this evaluation are expected to produce current contextual evidence about the implementation of the GMS contract. In particular, an understanding of the primary care workforces' and service users' perceptions and experiences of the implementation of services covered by the regulation in the GMS contract delivery will be explored. The evaluation will be conducted across the four DSs, which will be treated as case studies. [6]

1.4 Methods and data collection

Qualitative research methods will be used to collect data across the DSs. Data collection will occur between September 2024 and October 2025 and comprise of the following; i) uni-disciplinary focus groups and semi-structured individual/paired interviews with members of the PC workforce (GPs, GPNs and MDT staff) ii) semi-structured interviews with service users. A multi-strategy and pragmatic approach will be adopted to identify, access and recruit a representative sample of the PC workforce and service users across the case study sites.

1.5 Data analysis

Qualitative data will be analysed using an approach informed by framework analysis. The national measure and QI related data will be collected, analysed and processed by the HIS Data, Measurement, and Business Intelligence (DMBI) team and will be used as a secondary data source in the analysis for this qualitative evaluation.

1.6 Outputs

This evidence will allow the Scottish Government to further understand complex system change, and continue to improve and monitor GMS Contract implementation. Specifically, the outputs for the GMS implementation evaluation are as follows:

- Review of existing evidence on the impact of expanding multidisciplinary primary care teams (with a focus on pharmacotherapy and CTAC) on service users and the wider primary care workforce
- GMS logic model and evaluation plan covering qualitative, quantitative and economic data collection and analysis
- Data collection and analysis including qualitative, quantitative and health economic data
- Six monthly interim reports (December 2024 and June 2025)
- Final report publication (December 2025)

2 Background

Primary care in Scotland is facing unprecedented demand due to an ageing population and increasing numbers of individuals living with multiple long-term conditions, with widening inequality to accessing and receiving primary care reported across Scotland.[1, 3, 7] Meeting this demand is further complicated by a workforce shortage, with reported difficulties in recruiting and retaining staff in this sector, particularly GPs.[8] In response to these challenges, a new General Medical Services (GMS) contract was developed and agreed by the Scottish Government, the British Medical Association, Integration Authorities and NHS Boards in 2018.[9] A key aim of this contract was to reduce GP workload and refocus the role of GPs towards acting as 'expert medical generalists', allowing more time to be spent with service users who have complex care needs. To facilitate this shift, non-expert medical generalist workload has been redistributed to the wider primary care multidisciplinary team (MDT). Some services that were originally provided under GMS contracts have been reconfigured with the expectation they would continue to be delivered in or near general practices. Two services prioritised for reconfiguration at scale across Scotland were Community Treatment and Care (CTAC) and Pharmacotherapy services given their potential to take on a large portion of the proposed redistributed GP workload.

Data collected by Scottish Government shows a mixed picture of implementation across both HSCPs and individual services, with variation in service models and levels of provision, including of CTAC and Pharmacotherapy Services. To address the variation in the implementation of the GMS (2018) contract, Scottish Government have commissioned Healthcare Improvement Scotland (HIS) to deliver the Primary Care Phased Improvement Programme (PCPIP). This programme aims to support fuller implementation of the GMS contract with a focus on improving implementation of key regulated priority areas - pharmacotherapy and CTAC services- and to help develop a culture of continuous quality improvement (QI) across primary care settings.

Across Scotland, primary care services submitted bids to be part of this programme, with successful bids to receive additional funding from SG and support from the HIS PCPIP team to develop service delivery changes to improve local CTAC and pharmacotherapy care delivery. Four demonstrator sites (DSs) were selected: Ayrshire and Arran (health board), Borders (health board), Shetland (health board), and Edinburgh (a sub-cluster area within the Edinburgh city HSCP). These DSs represent significant variation in terms of geography, rurality, and deprivation, allowing a unique opportunity to explore perspectives of the contact and receipt of primary care services in disparate contexts across Scotland. Each site will receive dedicated QI support from the HIS PCPIP team to identify, progress, and monitor changes to local service delivery. The PCPIP programme key deliverables:

1. To determine what/if QI interventions are having an impact and inform the future set of standard measures.
2. Evaluation of the impact of GMS contract implementation.
3. Evaluation of the role and impact of HIS improvement support in improving implementation of services covered by the regulation in the GMS contract.

Key deliverable one will be addressed as a separate part of the programme not subject to this proposal. This evaluation proposal rather will address key deliverables two and three, addressing the SG commission and the research gaps explored further below.

Whilst it is apparent from local annual reports to SG that there is variation as to how the GMS (2018) contract is implemented across Scotland, there is limited robust national data available. Accessing, collecting and reporting on primary care data is complicated by the variable digital systems used

across Scotland and the local ownership of GP data.[10] Whilst Public Health Scotland reports on: GP list size and demographic data, workforce, in-hours activity, out-of-hours activity, disease prevalence, and prescribing; not all practices have agreed to submit this data and/or the data cannot be disaggregated to practice level. With this available data, it remains difficult to ascertain to what extent the GMS (2018) contract has been implemented across Scotland and the extent to which these changes have addressed the key aims of the contract to reduce GP workload, enhance patient experience, and enable better integrated, more coordinated services across primary care.

Furthermore, there is limited data exploring how these changes to Primary Care service delivery have been experienced by staff across the primary care team. A large proportion of the previous work to explore staff perspectives has focused on GPs and their workload, [1, 11] with evidence indicating little to no perceived reduction in GP workload or change in job satisfaction post-GMS (2018) contract. The perspectives of the wider MDT working in primary care have been previously explored using a small sample which did not fully represent all the disciplines of the MDT such as mental health nurses, healthcare assistants, and practice administrative staff. Findings indicating that MDT staff may not always feel well-integrated into the practice team and that there is troublesome variation across administrative and referral processes that inhibit efficient teamworking.[12, 13] However, there is little detailed exploration of how experiences differ across disciplines providing primary care, with the exception of Strachan et al (2022)'s work with Advanced Nurse Practitioners across Scotland.[14] Given that the GMS (2018) contract aims to address increased demand and decreased workforce supply through redistribution of GP work to members of the wider primary care team, it is critical that the perspective of the MDT is explored to best understand how the contract is being implemented locally.

Another desired outcome from the development and implementation of the GMS (2018) contract is improved service user outcomes, with Barbara Starfield's 'four c's' of primary care (contact, comprehensiveness, continuity, and co-ordination) used as guiding principles in the GMS (2018) contract development.[15, 16] Yet, there is limited data exploring how Primary Care reform have been experienced by service users in Scotland. Most existing research has taken the form of either small scale evaluation of pilot services or service improvements (such as Buist et al 2018, Ross et al 2019, Slater et al 2021[17-19]) or have been based on the clinicians' perceptions of the impact of service transformations on patient journeys, experience or outcomes.[11, 13] However, the Scottish Government noted in their survey of public views on primary care conducted in 2022, that awareness of and trust in members of the primary care team outwith GPs vary and many reported difficulties in getting an appointment at their practice.[20] Similarly, longitudinal analysis of the bi-annual Health and Care Experience (HACE) survey in Scotland from 2011/12 to 2021/2 found that patient satisfaction with general practice has been falling since 2015 and the introduction of the new GP contract has not changed this trend.[21] Whilst this survey data provides a high-level overview of service user perspectives, there is a dearth of in-depth, experiential data exploring service users' perceptions of and attitudes towards primary care during this period of change in service delivery. There has been even less consideration as to how different models of delivery and contract implementation has been experienced by those using these services.

Using the four DSs of the PCPIP programme, this evaluation seeks to address the aforementioned gaps and address the SG commission using a qualitative methodological approach to explore service user and staff perspectives across the MDT of local primary care services. This evaluation can be broadly divided into two parallel evaluations corresponding to the two PCPIP programme deliverables (number 2 and 3 respectively). These are: an evaluation of GMS contract

implementation, exploring how the GMS (2018) contract has been implemented and experienced across the four DSs; and an evaluation of HIS improvement support, to assess the impact additional funding and support from the HIS QI teams has had on contract implementation. The aims and objectives of each section of the evaluation are outlined below. The four DSs will be used as case studies in which to understand these perspectives and how the changes made to primary care service delivery over the course of the PCPIP programme impact the delivery and receipt of care.

Please note that the term evaluation is used in this document to refer to the *qualitative evaluation component* of the wider PCPIP project and evaluation.

2.1 What will this evaluation contribute?

The evaluation will explore if phased implementation, and a focus on CTAC and PT facilitated through the PCPIP programme, has resulted in fuller implementation of the GMS contract, and the impact on primary care staff and service users. Specifically, the evaluation will make a unique contribution to existing evidence by treating each DS as a case study within which the implementation of the GMS contract will be explored using in depth qualitative data collection with primary care staff and service users. Data collection will be framed within the context of, and barriers and facilitators to, MDT working in primary care. This will be explored in depth with staff groups in the primary care workforce. There are few published evaluations on the expansion of MDT working in Scotland. This evaluation will uniquely explore where within primary care barriers to MDT working and contract implementation have been addressed or overcome, and how. Further, in depth data collection with MDT staff will help to identify the meaning and impact of reduced and redistributed workload on members of the primary care staff team.

The evaluation will also provide in-depth, service user data, structured around the 'Four C's' of primary care (Contact, Comprehensiveness, Continuity, Coordination). The Four C's are central to the inequalities focus of the underlying theory of change of the 2018 GMS contract. This evaluation will explore if changes being made under the phased implementation of the GMS contract (and focus on CTAC and PT) are reducing inequalities, by gathering in depth data with service users related to the Four C's of primary care. Importantly, this evaluation will give us the opportunity to understand how practices are working within an inequalities lens. In 2023, an international systematic scoping review of primary care transformation (PCT) showed that fewer than 20% of studies measured service user views or satisfaction.[22] This evaluation will be the first PCT evaluation to explore service user views and experience in depth.

In addition, the evaluation will make the following unique contributions:

- Provide systems level qualitative data across the DSs to explore **with** GPs and MDT staff the impact that implementation of the GMS contract has had on their time and workload.

- Provide insights into what contributes to an effective and well-functioning general practice multidisciplinary team, including staff wellbeing/job satisfaction.

- Explore experiences and indicative impact of the models of delivery for CTAC and PT in each of the DSs.

- Collect in depth data with administrative staff. Previous research and evaluation has not included administrative staff, who are fundamental to the primary care staff team and a potentially pivotal mechanism in the implementation of the GMS contract.

- Evaluate the contribution of HIS QI support in facilitating the implementation of DS plans relating to CTAC and PT services.

In developing this evaluation, the research team have consulted with key stakeholders involved in primary care delivery and evaluation, including Public Health Scotland, Demonstrator Sites' executive teams, primary care clinical leads, and academic partners (e.g. Stewart Mercer and colleagues). This has assisted in defining evaluation objectives, questions and outcomes that are relevant to stakeholders, as well as providing insight into how services are being delivered. These consultations have also identified potential limitations and feasibility issues such as recruiting PC workforce and service users to this evaluation. Subsequently the focus of this evaluation has been refined to address the key gaps in evidence relating to GMS contract implementation.

3 Aims and Objectives

3.1 GMS Contract Implementation

Aim:

The aim of the GMS contract evaluation is to, to inform the development of the next iteration of the contract.

Objectives:

The GMS contract evaluation objectives are:

- To understand the impact of implementation of the GMS contract on service user outcomes.
- To understand the impact of implementation of the GMS contract on primary care workforce outcomes.
- To understand the impact of implementation of the GMS contract has had on the wider system
- To understand what elements and mechanisms contribute to successful implementation of the GMS contract.

In order to achieve these objectives, we will gather data on outcomes aligned with each of the objectives. The objectives and outcomes are presented in Table 1.

Table 1 GMS Evaluation Objectives and Outcomes

Objective	**Outcomes**
1 To understand implementation of the GMS contract on service user outcomes*	1.1 Contact 1.2 Comprehensiveness 1.3 Coordination 1.4 Continuity of Care 1.5 Safety of Care

	1.6 Efficiencies of care (Aligned Economic Evaluation)
2 To understand the impact of implementation of the GMS contract on primary care workforce outcomes	2.1 Release of GP time to act as expert medical generalist 2.2 Staff retention 2.3 Integrated MDT team 2.4 Staff wellbeing
3 To understand the impact of implementation of the GMS contract has had on the wider system	3.1 Inequalities 3.2 Efficiency of system 3.3 Integrated services 3.4 Primary and secondary interface 3.5 Unintended consequences
4 To understand what elements contribute to successful implementation of the GMS contract	4.1 MDT working (inc workforce planning, development and supervision) 4.2 Addressing inequalities 4.3 Strategic leadership and partnership management 4.4 Culture for improvement 4.5 QI support and additional SG funding (see section 3.2 below) 4.6 Previously identified and emerging barriers and facilitators 4.7 Service user engagement

*The 2018 GMS contract is underpinned by the 'Four Cs': contact; comprehensiveness; coordination and continuity of care. Evidence suggests that the Four Cs are essential for good quality healthcare in primary care and, importantly, for reducing health inequalities. We will explore service user experience related to the Four Cs, to assess if the implementation of the GMS contract to improve these functions has been successful. The following will be explored:

- Contact – experience of access and use of health services when necessary.
- Comprehensiveness – experience of promotion, prevention, treatment and rehabilitation in the PC context.
- Coordination – experience of care service integration by service users.
- Continuity – experience of the health service professional-service user relationship and perceived trust.

3.2 HIS Quality Improvement Support

Aim:

The aim of the evaluation of HIS support is to determine if additional QI support provided by HIS for services covered by the GMS regulation facilitates implementation of the GMS contract.

Objectives:

The HIS support evaluation objectives are:

- To understand the role of HIS QI support has had on building a culture of continuous improvement and building QI capacity in the DSs
- To understand the role of HIS QI support in implementing the DSs delivery plans for CTAC and PT

In order to achieve these objectives, we will gather data on outcomes aligned with each of the objectives. The objectives and outcomes are presented in Table 2.

Table 2 HIS Support Evaluation Objectives and Outcomes

Objective	**Outcomes**
1 To understand the role of HIS QI support has had on building a culture of continuous improvement and building QI capacity in the DSs	Culture for improvement QI capacity Knowledge and skills of QI Attitudes towards QI Knowledge exchange
2 To understand the role of HIS QI support and additional SG funding in implementing the DSs delivery plans for CTAC and PT	Perceptions of QI support Readiness for change Service user involvement Utility of additional SG funding

4 Evaluation Design and Methodology

This section of the proposal covers the design and methodological approach that will be used for the wider GMS contract and the HIS Support qualitative evaluations led by the Health Services Researchers. The GMS contract evaluation forms the substantive portion of this proposal. As no additional methods will be required to evaluate HIS support, the HIS support evaluation will be embedded within the GMS evaluation, and this will be highlighted where relevant throughout.

The evaluation will employ a case study design, informed by a realist perspective. Realist evaluation aims to explain how complex programmes work and how they are influenced by context.[23-25] Through consideration of the realist question of "What works, for whom, in what respects, to what extent, in what contexts, and how?", the evaluation will seek to identify what works, what doesn't and why in the phased, **fuller implementation** of the GMS contract. Case study design is commonly used in realist evaluation as it permits in depth exploration or 'testing' of a programme or intervention and its underpinning theory.

4.1 Evaluation Setting

The evaluation will take place across each of the four DSs. Each DS will be treated as a case study. Sites were selected to test ability to deliver full implementation in a diverse range of areas such as rural, remote, deprived and urban, at different stages of implementation and have different models of delivery. Ayrshire and Arran serves a rural and urban population including the islands of Arran and

Cumbria, providing primary care across 53 GP practices to approximately 386,000 service users. Borders with a population of 115,510 has 50% of people living in rural areas and 32% of data zones are among most deprived for service users. The Edinburgh HSCP sub-cluster area covers an urban area of approximately 65,000 people, where 5-6 of the nine practices are closed to new registrations and five practices are classified as either high or mid deprivation. Shetland's proposal aims to cover the entirely of GP services run by the NHS Shetland board, which operate in rural and remote island settings, serving roughly 22,900 service users.

4.2 Evaluation Methods

This portion of the evaluation methodology will subsist of qualitative data collection methods, namely interviews and focus groups. Qualitative data will be used to provide an in-depth understanding of impact outcomes related to experience, behaviour, attitudes and processes related to GMS contract implementation. Qualitative data also plays an important role in attribution and will be triangulated with the national measures and QI data in order to contextualise and understand any change over time identified in the data.

Qualitative data collected will provide a cross-sectional view of implementation of the GMS contract and MDT working, using purposive sampling to reflect particular characteristics of the population. There may also be an opportunity to draw comparisons between the case study sites in terms of models of care, staffing compliments and working practices.

[5, 26]Table 3 outlines the qualitative data collection methods that will be employed as part of the wider GMS contract and HIS Support evaluations, aligned against the relevant objectives. These will be newly emerging data gathered by the HSRs in the EEvIT team, as distinct from potential PC national measures or routine QI data.

As highlighted above, the findings of the qualitative data will be interpreted in part through the use of the quantitative data collected as part of the wider HIS and GMS evaluations (e.g. National Measures, the economic evaluation, and local QI support data) across the DSs during programme delivery. The evaluation will take into consideration the findings of this data, using it as a secondary data source, and seek to explain any identified change over time with the findings of the in-depth qualitative data collection with staff and service users.

Table 3 Qualitative data collected by EEvIT PCPIP HSRs

GMS Contract Implementation Qualitative Evaluation	
Objective 1: To understand implementation of the GMS contract on service user outcomes	
Primary Care staff interviews	
Primary Care staff focus groups	
Objective 2: To understand the impact of implementation of the GMS contract on primary care workforce outcomes	
Service user interviews	
Service user panel focus groups	
Objective 3: To understand the impact of implementation of the GMS contract has had on the wider system	

Primary care staff interviews	
Primary Care staff focus groups	
Service user interviews	
Objective 4: To understand what elements contribute to successful implementation of the GMS contract	
Primary care staff interviews	
Senior management interviews	
Service user interviews	
QI team interviews	
HIS Support Qualitative Evaluation	
Objective 1: To understand the role of HIS QI support has had on building a culture of continuous improvement and building QI capacity in the DSs **Objective 2:** To understand the role of HIS QI support in implementing the DSs delivery plans for CTAC and PT	
Primary care staff interviews	
Senior management interviews	
QI team interviews	

4.3 Qualitative methods and data collection

Qualitative data methods include individual/paired interviews and uni-disciplinary focus groups (where feasible) with primary care staff teams (including groups such as GPs [plus locums], General Practice Nurses, pharmacy staff, Advanced Nurse Practitioner, CTAC staff, Practice managers and administration staff) and service users. These disciplines have been prioritised given the focus on CTAC and Pharmacotherapy services in the PCPIP programme. However, as per the GP contract, additional professional services (such as musculoskeletal physiotherapists, community mental health services, community link workers) will be included in the qualitative data collection depending on capacity and representation in previous and ongoing research.

Interviews will be semi-structured and audio recorded, and conducted by telephone or face-to-face, depending on individual preference and practicalities. The interview and focus group topic guides will align with evaluation outcomes and be developed in consultation with the QI support and DS teams. All interview and focus group guides will be iterative and may be modified as data collection progresses. This is responsive to emergent learning during the evaluation as the programme is delivered.

Focus groups are a valuable means of gaining insight into participants' perceptions and experiences by stimulating interaction and guiding participants through a set of topics, allowing the opportunity to observe how issues are conceptualised, worked out and negotiated. One aim of the GMS (2018) contract is to redistribute GP tasks amongst the wider MDT, therefore focus groups would provide a means to explore how this shift is experienced across the team. The group size recommended for a successful focus group varies and ranges from four to 12 individuals to eight to 12 individuals. We aim to have focus groups comprising of a smaller number of participants between six to eight individuals to allow ample speaking time.[27, 28] Given the practicalities of organising and releasing staff to attend focus groups, individual and paired interviews will also be offered. Paired interviews

provide more space for thinking and allowing the participants to complement each other's responses and stories. Individual interviews can be beneficial in providing participants a more comfortable setting to discuss issues that they consider sensitive. The choice of data collection method may be also based on individual preference with the aim to optimise participation.

5 Sampling

5.1 Site sampling

HIS researchers will work with DS leads to select GP practices for data collection, using a pragmatic sampling approach. Factors that may be considered in this site selection process include, for example, existing GP practice involvement in data collection and/or service maturity. Where feasible, attempts will be made to select GP practices that reflect a range of DS level population demographics, such as levels of deprivation and rurality (previously described as urban areas of high deprivation, urban mixed including affluent and deprived and remote and rural populations).[29] The number of practices selected will be relative to the number of practices in the DS. This may be adapted to achieve target sampling numbers and to accommodate practicalities for the DS or individual practices. It is noted that the DSs were originally selected to test ability to deliver full implementation of the GMS contract in a diverse range of areas (see section 4.1).

5.2 Participant sampling

A combination of opportunistic and convenience sampling methods will be applied to service user data collection. This is a flexible approach that is often applied where little is known about the issue or experiences being evaluated, and where participants are selected based on practical and feasibility considerations, such as willingness and availability. The HSRs will strive for as much variation in participant samples as possible, for example with regards to age, gender and ethnic background. This will be achieved by regular analysis of the sample's demographic characteristics and targeted recruitment where necessary.

Representative sampling, where a sample represents the characteristics of the larger population, is not feasible within or relevant to this evaluation. This is primarily due to the methodological characteristics of qualitative inquiry, which does not aim for representative samples due to the depth of data collection. Qualitative inquiry is not concerned with generalising findings beyond the study sample to a wider population; this is predominantly a feature of quantitative inquiry. Rather, qualitative inquiry carries out data collection in depth and can offer contextualising of quantitative findings.

A conceptually driven, purposeful approach to sampling that selects service users based on demographic or protected characteristics, to explore specific outcomes relevant to those characteristics, is not within the parameters of service evaluation. This would require research ethics approval, which is likely to cause significant delay. Therefore, in relation to sampling, we are unable to select service users using inequalities and missingness criteria to explore these variables as outcomes.

Discussions are underway between HIS representatives and clinical academics with experience and knowledge in managing missingness within primary care evaluations. Advice will be sought on the potential to include a missingness perspective within this evaluation.

6 Participant recruitment

6.1 General practitioners, general practice nurses and practice staff

The PCPIP researchers will consult with and be guided by DS leads about the appropriate ways to identify, approach and recruit GPs, practice managers and administration staff to participate in interviews. One potentially feasible approach is for the DS leads to introduce the PCPIP researcher to key representatives at a selection of GP practices.[32] Existing clinical networks and connections such as those with the PCPIP National Clinical Leads and associative panel of GPs, and local GP executive groups and practice manager networks will also be used to encourage and raise awareness of participation in the evaluation.

6.2 Members of the MDT

The PCPIP researchers will consult with the appropriate Clinical Leads/Service Managers at each of the case study sites about the appropriate ways to identify, approach and recruit MDT staff to participate in uni-disciplinary focus group or individual/paired interviews. A pragmatic approach will be required to tailor recruitment strategies to each of the case study sites to maximise recruitment yet minimise burden on service. As previously indicated members of the PC workforce may be identified by targeting a representative selection of practice/hubs within each of the case study sites. These consultations will also inform the level of discipline specific representation at each of the case studies; which is likely to be dependent on the staff whole time equivalent per discipline within each of the case study sites.

6.3 Demonstrator site's executive team

The PCPIP researchers will consult with and be guided by the HIS QI support teams to identify the key strategic leads involved in the delivery of QI within each of the case study sites. Existing contact lists are likely to be the key source of identifying the appropriate personnel.

6.4 Service users

The PCPIP researchers will consult with the DS leads to establish feasible ways to identify, access, and recruit service users. Given the recognised challenges to recruiting service users in primary care, multiple strategies will be employed.[33] The presence of the researcher in waiting rooms and community spaces to provide information to service users at their request will also be considered. Other strategies may include advertising and asking for participation using social media and (digital) posters in waiting areas or community centres across health and social care, and third-party sectors. Opportunistic sampling, including the use of MDT and HIS QI staff during evaluation and QI activities to identify potential service users to the PCPIP researchers, will also be considered. For example, to aid in the recruitment of service users who may experience more social, physical, and mental barriers to accessing primary care services, the HSRs intend to work with Community Link Workers to distribute recruitment information to their service lists. A further strategy could use planned DS service user surveys (as part of local activity) to offer the option for survey responders to participate in this evaluation. At this stage, surveys have not been agreed upon nor devised across all four DSs. Therefore, this method of recruitment is dependent on this being implemented and may also be limited to certain sites.

The HIS researchers have tabulated options for recruiting primary care staff and for service users to the evaluation. The plan is to share and discuss these recruitment options with each of the DSs.

7 Consent

The DS executive teams and local clinical networks will be instrumental in identifying and recruiting local staff to be involved in evaluation data collection. Subsequently local practice staff will help to identify and recruit local service user participants. Service users will receive a Consent to be Contacted form, which will be returned to local staff, indicating their contact preferences and will receive the Participant Information Sheet forthwith.

Participants will receive a Participant Information Sheet detailing the rationale for the evaluation, what their participant involves, and how their data will be managed. The HSRs' contact details are provided in this documentation and participants are encouraged to reach out to ask any questions about the study and their involvement. Additionally, prior to the commencement of interviews and focus groups, the HSR will ask if they have any questions. Participants will be made aware of their right to withdraw from the study at any time during the course of data collection; this is also highlighted in the Participant Information Sheets as well as the Consent form.

Written consent will be recorded through the use of a consent form. For methods using remote mediums such as interviews via telephone or Microsoft Teams, consent forms will be sent to the participants' email prior to data collection, to be reviewed and signed virtually. Additionally, verbal consent will be sought and confirmed at the time of data collection. For those taking part in-person, paper consent forms will be distributed and signed prior to data collection.

Consent forms will be kept in accordance with the data storage and security principle further in the document below.

8 Analysis

Qualitative data (e.g. semi-structure interviews, focus groups) will be analysed using an approach informed by framework analysis, a systematic process of sifting, charting and sorting material according to key issues and themes. This approach is reflective of the a priori themes that have been identified from previous research as well as stakeholder engagement as part of this evaluation proposal development. However, this process is inclusive of the iterative nature of qualitative analysis, as new themes may be identified throughout the data collection and analysis process, these can be added to the framework as needed. Qualitative data analysis will be complete in November 2025, however, data analysis analysis will be ongoing from the point of initial collection.

The National Measure, economic, and QI data will be collected, analysed and processed by DMBI and other members of the Data, Measurement and Evaluation Team; findings from these analyses will be used as a secondary data source for this evaluation.

9 Outputs

The new evidence from this evaluation about the impact of current primary care reform will inform the Scottish Government on future investment decisions for the implementation of the GMS Contract and the next iteration of the contract. There will be a further understanding of complex system change, and recommendations about how to continue to improve and monitor GMS Contract implementation. Whilst this document specifically pertains to the primary qualitative data collection, the outputs for the entirety of the GMS implementation evaluation are as follows-

- Review of existing evidence Review of existing evidence on the impact of expanding multidisciplinary primary care teams (with a focus on pharmacotherapy and CTAC) on service users and the wider primary care workforce.

- GMS logic model and evaluation plan covering qualitative, quantitative and economic data collection and analysis
- Data collection and analysis including qualitative, quantitative and health economic data
- Six monthly interim reports (December 2024, June 2025)
- Final report publication (December 2025)

In addition, the following evidence, products and recommendations are anticipated on completion of this evaluation:

- Provide a comprehensive understanding of the context and extent of GMS contract implementation, especially in relation to CTAC and pharmacotherapy service
- Provide recent data on the barriers and facilitators to implementing the GMS contract which could inform the development of theory-driven implementation interventions for use nationally
- Quality improvement data will allow the assessment of the capacity and capability of the DS sites to develop and implement their own/local services changes
- Identification of unintended consequences such as the migration of staff from secondary to primary care or the increased GP workload that results from the activities of the MDT (e.g. pharmacist led polypharmacy reviews resulting in more people being asked to make a GP appointment).
- Development of national service-user survey using the findings from this evaluation to inform the content of a future questionnaire
- Further identify and develop the proposed national measures to assist the advancement of infrastructure aimed at collecting relevant and feasible routine data in primary care. These standardised measures could be used future evaluations; easing comparisons at a national level and a reliable method to monitor changes over time.
- Recommendations to Scottish government on the next stage of the GMS contract implementation
- Recommendations for future government commissioned evaluations and research

10 Information Governance

10.1 Data management

This portion of evaluation will collect data across the PCPIP demonstrator sites (Shetland, Ayrshire and Arran, Edinburgh City, and Borders) using interview and focus group, and methods to obtain data from both NHS staff and service users. These methods will not collect any personal data for onward sharing. The questionnaire and interview schedules will be designed to collect information on demographics (such as age, ethnicity, etc.) and experiences of primary care.

Interviews and focus groups will be conducted face to face, online (e.g. MS Teams) or over the telephone based on participant preference and convenience. With permission from the participant, sessions will be recorded using the Microsoft Teams software or using on an encrypted Dictaphone/Digital recording device (for telephone or in-person interviews). All participants will be made aware of any recording prior to commencing and the HIS privacy statement will be provided during recruitment and consent signup processes. Transcriptions will either be done using the Microsoft Teams software or manually by the HSRs if deemed necessary for analysis. NVivo software will be used for qualitative analysis.

Interviews or focus groups may take place in a variety of locations, including public venues, government or NHS locations and in participants' homes. If user research takes place in a public venue, an area away from other members of the public/staff will be ensure all discussions are discrete and not overheard. Lone worker policies and safe-guarding in place for HSRs should interviews take place at a participants home. Accessibility and confidentiality assessments are made of public venues in advance.

The participant will be asked to complete a project consent form and be provided with project specific information that will include information about how we will manage their privacy and how to withdraw. Potential participants will have the opportunity to ask the researcher any questions prior to agreeing participation. A participant identification number will be assigned to each person participating in interviews and focus groups and their personal details will be held separately from any data collected during the session. The HSRs will be responsible for the secure storage, transfer, updating, and deletion of information. All written data will be pseudonymised and stored securely on the approved HIS systems.

When engaging with vulnerable participants, an HSR with Protecting Vulnerable Groups (PVG) membership or Disclosure checks completed will conduct these interviews or focus groups. Should no HSR with a valid PVG membership not be available, HSRs will collaborate with individuals who already work with the people involved and/or who have these checks.

10.1.1 Confidentiality

Participants will be pseudonomysed using a numerical identifier along with sample characteristics (such as staff/service user, and demonstrator site). Any quotes included in subsequent reports will be presented without the use of participant names, instead using this numerical identifier along with relevant, high-level sample characteristics (e.g. by referring to Participant 1, Shetland, Nurse; Participant 2, Borders, Service user).

A key linking the participants' (e.g. staff/service user) names and identifier will be held in a locked folder within the Primary Care N:drive, which can only be accessed by the PCPIP HSRs collecting and analysing this data.

10.1.2 Data storage and security

Electronic data will be stored on a secure server at Healthcare Improvement Scotland, in the Primary Care N:drive which can only be accessed by PCPIP HSRs collecting and analysing this data. The list of ID numbers and names and contact details will be stored separately from the collected data in a password-protected file, again only accessible by the members of the health services research team.

Anti-Virus application exists across all laptop and desktop devices. This application is updated automatically. Software patch management to device operating system and standard applications (e.g. Microsoft, etc.) are carried out in line with policy. Physical servers are at a data centre outside of our buildings. It is a secure facility with restricted access and is managed and audited through an NHS Scotland contract. Servers are secured through patch management, anti-virus checking and are secured behind firewalls.

Hard copies of any questionnaires will be stored in locked cabinets within Healthcare Improvement Scotland.

Personal data will be pseudononymised within 1 week of the interview. The key linking personal information with identifier number will be disposed after the evaluation report write up (December

2025). Pseudononymised transcripts will be stored in line with HIS records management and disposal policies; it is minimum 3 years from the date project concludes.

As part of the Data Protection Impact Assessment, a risk assessment (Risks to the Rights and Freedoms of Individuals and mitigating action) was completed.

11 Research Governance

An application for this evaluation was submitted to the Integrated Research Application System (IRAS). IRAS is a single system for applying for the permissions and approvals for health and social care / community care research in the UK. The IRAS ID number for this project is: 343886.

This project was classified as service evaluation (as opposed to research) using the Health Research Authority (HRA) and Medical Research Council (MRC) 'Is my study research' and 'Do I need NHS REC review' tools. This service evaluation status was confirmed by HIS Research Governance staff, thus no ethics application has been submitted in association with this project.

11.1 Roles and Responsibilities

This evaluation of the GMS contract implementation and the impact of the HIS QI support is being conducted by Health Services Researchers (HSRs) within Healthcare Improvement Scotland's Evidence and Evaluation Improvement Team (EEviT). These researchers are embedded within the Primary Care Phased Investment Programme (PCPIP) team. This team is responsible for, the qualitative interviews and ,focus groups data collection and analysis. Additionally, any survey development and analysis will be under their purview. The outputs that they are responsible for are detailed elsewhere in this document below.

The team consists is led by a Amaia Ibanez De Opacua – a Senior Improvement Advisor within EEviT- overseeing the HSRs conducting this evaluation. Contact details can be found below:

Senior Improvement Advisor:

- Amaia Ibanez De Opacua- Amaia.ibanezdeopacua@nhs.scot

Health Services Researchers:

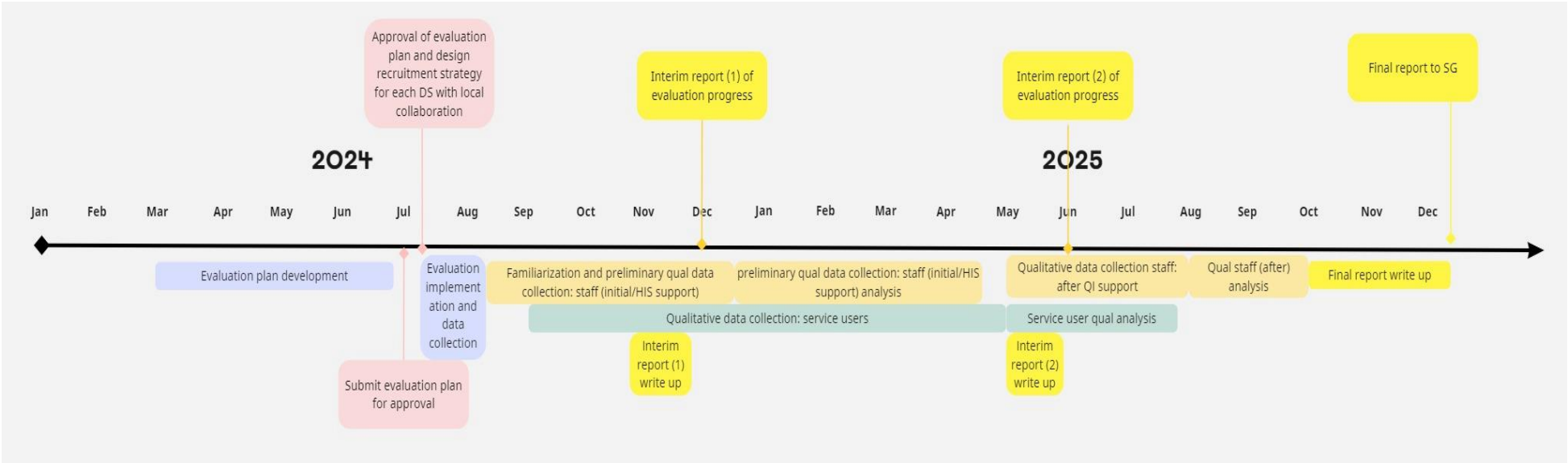
- Louise Craig- louise.craig5@nhs.scot
- Pamela Jenkins- Pamela.jenkins@nhs.scot
- Rachel Wilson-Lowe- Rachel.wilson-lowe@nhs.scot

11.2 Project timeline

The PCPIP was commissioned by the Scottish Government in August 2023 with the project beginning in earnest in January 2024 after the four DSs were selected based off their bids and staff were recruited to post. This programme will conclude in December 2025 with a final report to Scottish Government.

A timeline for the evaluation development, data collection, and reports can be found below:

Figure 1Evaluation timeline



11.3 Potential challenges and potential solutions associated with evaluation implementation

Given the complexities involved in this evaluation a number of potential challenges have been identified at the planning stage, as below; these will be reported more formally via the HIS Risk Register –

- Scope creep; the broad nature of this evaluation creates the potential for objectives to change during the project or for the scope of the evaluation to expand beyond its original objectives.
- Stakeholder expectations; a wide range of stakeholders have interest in the PCPIP evaluation. Each stakeholder has their own area of interest. This evaluation will not meet the expectations of all interested parties while also ensuring the final report is delivered in December 2025.
- Mixed-method approach; whilst this document describes the qualitative evaluation plan, the overall evaluation uses data from a number of different disciplines (evaluation, Quality Improvement, Health Economics) and methodological approaches. This poses challenges in that data collection and analysis may be a lengthy process, and the different philosophical principles and frameworks being used could pose tension in areas such as sampling and the integration of the qualitative and quantitative data .
- Resourcing a fixed term programme; current staffing for the evaluation and core programme delivery team is not at full capacity which may influence the ability to deliver evaluation outputs within the tight timelines.
- Demands on clinical service may limit the level of engagement between the PC leads and workforce with the HIS QI support teams; this may hinder the ability to conduct the improvement work on time and thus the evaluation timelines may have to be adjusted
- Delays to recruitment or low recruitment rates of members of the PC workforce and service users to qualitative research; this will impact on the representativeness of the samples upon which recommendations about implementation will be based on.

Table 4 Potential challenges to and solutions for the evaluation

Potential challenge	**Potential solutions**
Scope creep	– Document evaluation scope to stakeholders – Tools to track evaluation work progress
Stakeholder expectations	– Requests to change the scope of the evaluation is only considered possible with extensions to the final report publication date and additional funding for 2026/27 to retain the data and research roles beyond the programme's planned 2025/26
Mixed-method approach	– Clearly defined roles and responsibilities for the members of the data, measurement and evaluation team – Development of an analysis plan to detail the use of data from different sources
Resourcing a fixed term programme	– Implement a phased approach to evaluation

	– Capacity within other teams or directorates to assist where possible in line with the programme's Risk Management Strategy – Ongoing engagement with Scottish Government about alternative plans if staff cannot be recruited
Low levels of engagement with clinical colleagues	– Ongoing engagement with Primary Care Leads to encourage engagement from the local system as per the programme's Risk Management Strategy[1] – Co-planning QI sessions to ensure timings take account of competing clinical priorities
Delays to recruitment or low recruitment rates of PC team members and service users to qualitative studies	– Use of a pragmatic and multi-strategy approach to recruitment – Adhere to recommendations for increasing participation in qualitative research conduct[34] – Co-planning of focus groups/interviews to ensure timings take account of competing clinical priorities

12 Biases and Limitations

During the development and planning stage, the following potential biases have been identified:

- The rigour and trustworthiness of the qualitative data may be comprised by the researcher's personal values and opinions posing researcher bias during data collection and interpretation
- Convenience sampling to facilitate service user recruitment may pose selection bias. For example, advertising for participation may lead to the recruitment of service-users with strong negative or positive views and, therefore, may not be representative of the population
- The PCPIP researchers although situated in a separate team within HIS (EEvIT) there will be points during the evaluation where the researchers will be working closely with the HIS QI support teams. Therefore, this has potential to comprise the impartiality of this evaluation.

During the development and planning stage, the following potential limitations have been identified:

- This evaluation is resource and time limited; tight timeframes may impact the scope of the evaluation methodology used and length of time available to recruit service users and PC workforce
- This evaluation does not incorporate data from areas that are not PCPIP demonstrator sites**;** the evaluation setting has already been determined using pre-defined criteria. It will not be possible to include emerging evidence from other areas of Scotland within the PCPIP evaluation due to time constraints on data collection and analysis. In addition, there are risks with incorporating evidence from evaluations that may have used different methodologies. This would weaken the robustness of the evaluation methodology and comprise the validity of recommendations in the final report.
- This evaluation does not use a control group, for example non-PCPIP demonstrator sites; this evaluation does not require a comparative design to address the evaluation aims. Instead, the design of this evaluation gives priority to a mixed methods and theory-based evaluation

[1] Primary Care Phased Investment Programme Business Case

that considers the complexity of primary care setting and is focused on understanding the context of implementation. This broader perspective is considered most useful for decision-makers.

- Due to the recognised challenges in recruiting research participants within PC settings the sample sizes could be small
- Limited scope to address inequality related outcomes due to the requirement for ethical approval, especially with regards to sampling (Section 5.1) However, this evaluation has potential to explore inequalities by developing an understanding on how GP practices are addressing inequalities (Section 2.1), using the 4Cs framework (Section 3.1) and sampling sites based on certain criteria such as deprivation and rurality (Section 5.2).
- Demonstrating the impact of the GMS contract implementation could be limited by the lack of relevant and high quality data in primary care
- Information governance issues may pose challenges for data accessibility and sharing

13 Dissemination of findings

To ensure dissemination is impactful a strategy will be co-developed with the target audience, throughout the lifespan of this project, to capture ideas about ways to best share the findings. Dissemination activities may include:

- Oral and written presentations of the evaluation
- Web sites to promote project and findings
- Accessible summaries/leaflets
- Publishing in open-access journals
- Video clips, infographics and podcasts
- Learning events

14 Acronyms and Glossary of Terms

CTAC – Community Treatment and Care

DS – Demonstrator Site

GP – General Practitioner

GNP – General Nurse Practitioner

HACE – Hospital and Care Experience

HIS – Healthcare Improvement Scotland

MDT – Multidisciplinary Team

PHS – Public Health Scotland

PT - Pharmacotherapy

QI – Quality Improvement

Expert medical generalist – a medical professional with expertise in whole person medicine, which requires and approach to the delivery of healthcare that routinely applies a broad and holistic perspective to service user's problems.[35]

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