



Scottish Patient Safety Programme –
Pharmacy in Primary Care
Collaborative
Final Evaluation Executive Summary

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All other patient representatives involved within the collaborative.

INTRODUCTION

The Scottish Patient Safety Programme (SPSP) is a national quality improvement initiative, launched in 2008 within the acute health sector and migrated to primary care in 2010. In 2014 the SPSP extended into the community pharmacy setting as the SPSP-Pharmacy in Primary Care (SPSP-PPC) collaborative. The SPSP-PPC Collaborative has been an ambitious two year programme (November 2014 to October 2016) positioned to *“improve patient safety by strengthening the contribution of community pharmacy and improving communications within the primary care team”*. The programme has sought to achieve this through the formation of a collaborative and use of established improvement tools and approaches focused on three change packages: High Risk Medicines, Safety Culture and Medicines Reconciliation. The programme has involved the use of the Breakthrough Series Collaborative Model which offers structured learning sessions (national and local learning events), allowing collaborative learning, broken up by action periods where changes are tested in practice.

The evaluation, led by the University of Strathclyde in collaboration with NHS National Education Scotland, has been designed to examine the SPSP-PPC collaborative at two levels: (1) the delivery of the collaborative approach at the Health Board level; and (2) how the pharmacy/dispensing practice sites have utilized the change packages. This report consolidates evidence generated and summarises key lessons for consideration in progressing this important patient safety programme.

METHODOLOGY

A mixed methods approach to the evaluation has been used to: describe and understand how the collaborative has been working; identify any successes and challenges with implementing the three change packages; and, provide any early outcomes and impact of the program on patient care. Data collection methods have been varied throughout the time course of the programme and have included: self-completion questionnaires, semi-structured interviews (1-to-1, paired and focus groups); observational case studies; process mapping; documentary evidence; and, patient impact vignettes.

Figure 1 presents the timeline of the SPSP-PPC collaborative activities and the evaluation activities. The approach has enabled both breadth and depth of coverage to be achieved with triangulation of data to verify findings from different sources and methods. The analysis has been guided by two theoretical frameworks: the Kirkpatrick’s Model (1) to conduct a multi-level analysis of the learning delivered through the collaborative approach, and; Proctors’ Taxonomy of Outcomes (2) to examine implementation of the change packages.

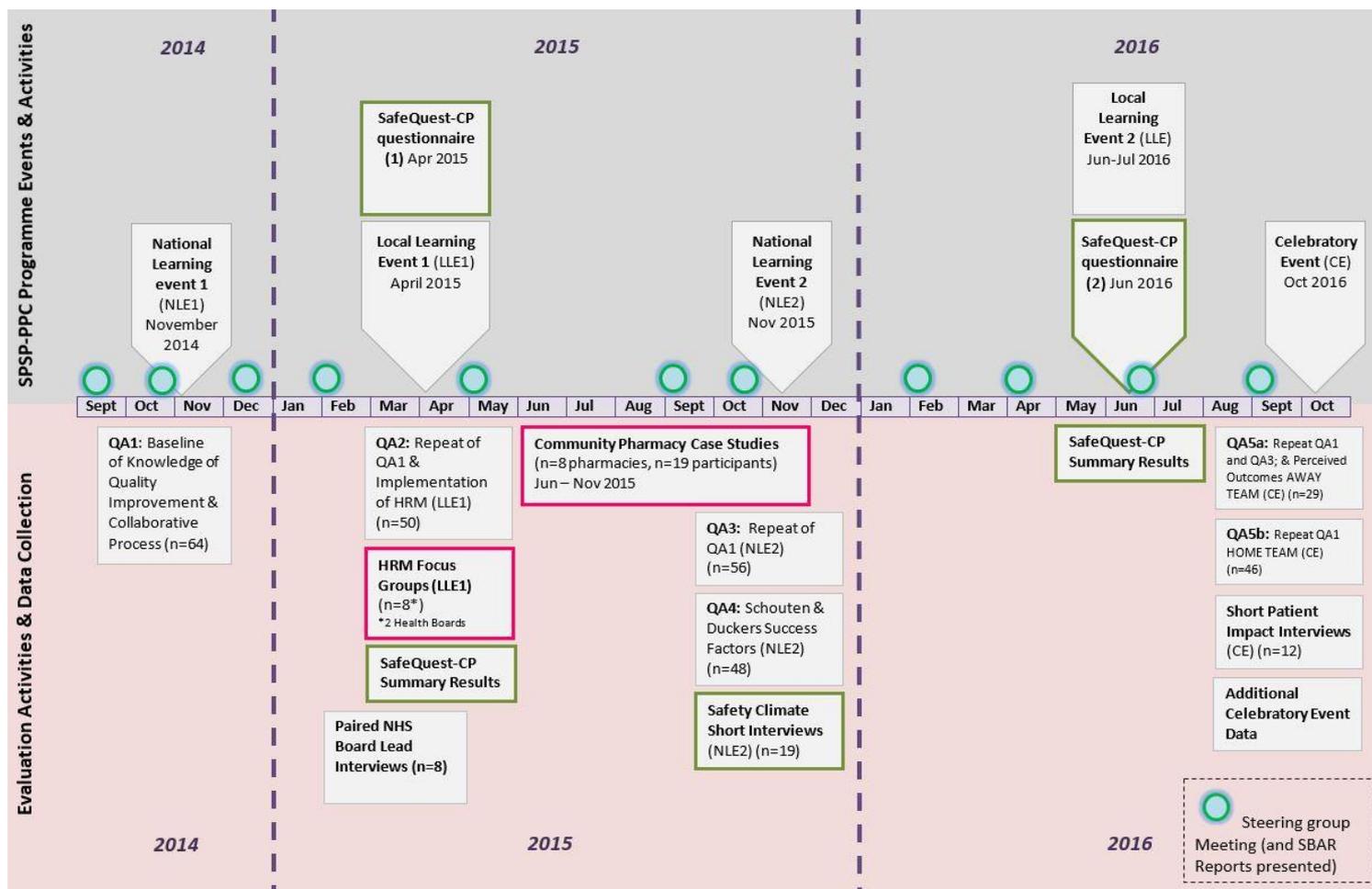


Figure 1: Timeline of SPSP-PPC Collaborative Activities & Evaluation Activities

RESULTS

The programme was sponsored nationally by NHS Health Improvement Scotland, led by two National Leads (Clinical lead and Improvement Advisor lead). A total of 29 study sites (27 community pharmacies and 2 dispensing doctors) were recruited across four Health Boards (NHS GG&C n=10, NHS Highland n=7 (2 of which were dispensing practices), NHS Grampian n=5, NHS Fife n=7). For each NHS Board, two NHS Board Leads were recruited - a Clinical Lead and a Board Facilitator. In addition for each site two representatives formed the “Away Team” attending learning events, with the remaining site staff termed the “Home Team” for the purpose of the evaluation. It is estimated that a total of 187 unique individuals participated in the evaluation evidence generation at some point throughout the programme. See Figure 2 for brief demographic details.

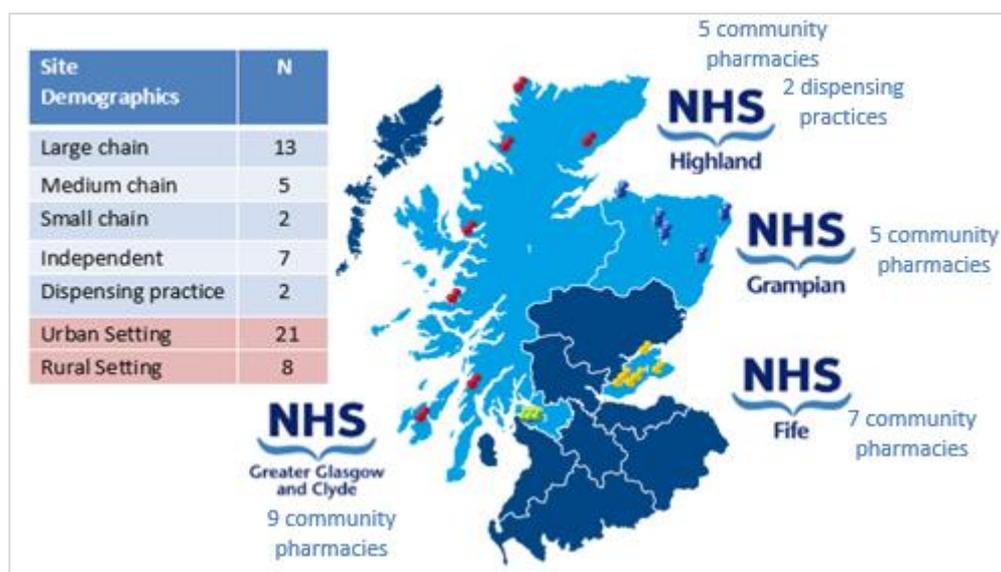


Figure 2: SPSP-PPC study sites with demographics

Table 1 presents the analysis of the evidence generated in respect of the collaborative learning approach. Additionally, quantitative evaluation of known success factors for a QI improvement collaborative were found to be exhibited throughout the programme i.e. teamwork, collaborative processes, expert lead support and organizational support. Table 2 presents the implementation outcome analysis for the three change packages. A traffic light system indicates the extent to which the outcomes of the SPSP-PPC collaborative meet the Proctors' Model components (Green = met; Amber = partially met; Red = requires development; and Grey = lack of supporting data).

Table 1: Evaluation of Collaborative Learning Approach (Kirkpatrick Model)

KIRKPATRICK MODEL	
LEVEL 1: REACTION 	<ul style="list-style-type: none"> • Away Team members had a positive reaction to their engagement with the SPSP-PPC programme, with some of their aspirations for involvement being around an increase in knowledge and an application of that knowledge to improve processes, care, safety, and collaboration. • The training was viewed positively and provided some with a high level of motivation from the start. • Utilising the training materials was not always feasible in the participating sites due to work pressures.
LEVEL 2: LEARNING 	<ul style="list-style-type: none"> • Understanding and knowledge of SPSP-PPC tools and programme elements was low at baseline (2014) for Away Team members, yet a sharp and sustained increase over the following 2 years is observed in knowledge, understanding and confidence in the use and application of these tools and change packages. • The training involved at baseline was sufficient in facilitating Away Team participant learning. • Dissemination of this learning to the Home Team members is lacking.
LEVEL 3: BEHAVIOR 	<ul style="list-style-type: none"> • Home Team understanding of SPSP-PPC collaborative tools was much lower than Away Team members. • Wider team involvement with the SPSP-PPC collaborative elements was varied across sites, with care bundle delivery often conducted by the Pharmacist/Manager.
LEVEL 4: RESULTS 	<ul style="list-style-type: none"> • Due to the project timeline, it has not been possible to quantify whether the patient outcomes were realised as a result of the training. • Any early findings captured are reported under the appropriate change package within the report.

Table 2: Change Package Implementation Outcome Evaluation (Proctors Taxonomy of Outcomes)

	HIGH RISK MEDICINES	MEDICINES RECONCILIATION	SAFETY CULTURE
Acceptability	 Staff understanding and acceptance was developed and maintained over time in part through local contextualised solutions to implementation.	 Understanding of Medicines Reconciliation improved amongst Away Team members over time. Medicines Reconciliation was seen as important and acceptable.	 Acceptability varied, with some anxious about the level of anonymity, particularly in small premises, and how to manage negative output of the questionnaire.
Adoption	 Sites adopted Care Bundles with confidence, and Plan-Do-Study-Action (PDSA) cycles and Run Charts to a lesser degree.	 Based on the limited data, Medicines Reconciliation has been adopted to an extent within the sites.	 The uptake of the SafeQuest-CP questionnaire reduced over time and at present the reasons are unclear.
Appropriateness	 The HRM element was seen as appropriate within the context of the role of sites, and the provision of safe and reliable patient care. Better alignment with other national services was proposed for moving forward.	 The Medicines Reconciliation care bundle was seen as appropriate and important for sites.	 Number of staff /staff roles completing the survey and the baseline culture needs consideration in moving forward to support effective use of the tool
Feasibility	 Although data reporting could be onerous, delivering the HRM care bundles was seen as feasible.	 The major challenge to feasibility was access to the Immediate Discharge Letter (IDL), which when resolved enabled delivery of the care bundle in sites.	 The tool was feasible where there were no access issues and results were integrated into current practices. Where this was not the case challenges remained on use of the tool.
Fidelity	 Delivering the care bundle was seen as the responsibility of the Pharmacist and not involving the wider team in many sites.	 The Medicines Reconciliation care bundle was delivered across all 4 NHS Boards but the patient cohort to whom it was applied varied.	 Feedback of the SafeQuest-CP results was variable, yet experienced positively where results were discussed.
Penetration	 Awareness and understanding of the HRM care bundle was variable, (more salient for Away Team) which affected who in the team was delivering the care bundle. In only a few cases were the wider team fully involved.	 Data not available	 There are some examples of how the tool is generating a change in practice and may be useful learning to be shared to support wider institutionalisation.
Sustainability	 The HRM element was seen as compatible with pre-existing activities within the sites. The HRM change package was ongoing in the sites for almost 2 years. There was willingness from staff to continue.	 Medicines Reconciliation sustainability is dependent upon multiple factors moving forward: patient cohort application; access to IDLs; and staff engagement	 Some evidence of a desire to continue to use the tool. There are early signs of sites integrating changes into current/evolving systems/procedures.

The evaluation approach, integrated within the programme development and review process, has afforded the opportunity to provide continuous feedback of learning gained to the Project Team. Figure 3 presents a selection of the key lessons gained for each aspect of the SPSP-PPC collaborative: the collaborative learning approach; HRM care bundles; Medicines Reconciliation care bundle; and the Safety Climate Survey.

KEY LESSONS: COLLABORATIVE LEARNING

- Bringing together Away Team members across the organisation generated a positive reaction, and provided a networking opportunity and motivation to be engaged with the SPSP-PPC collaborative.
- The collaborative approach delivered was rated positively by Away Team members with regards to the recognised factors of success: expert lead support; collaborative processes; teamwork; organisational support.
- Involvement of the wider site staff will be important in moving to a sustainable model, and further consideration of their learning needs and how best to raise awareness of, and deliver training on, the QI approach and change package programmes requires attention.

KEY LESSONS: HIGH RISK MEDICINES

- Some sites developed their own tools to support integration into established systems and procedures. Home Team awareness and understanding was variable, much stronger for Away Team participants, and this impacted on whom in the practice team was delivering the care bundle to patients, often the onus lying with the Pharmacist.
- The HRM element was seen as compatible with pre-existing work activities (aside from data collection and reporting); delivery remains ongoing in the practice sites (approaching two years) with a strong willingness from staff to continue.
- Feedback on patient satisfaction flagged that application of the HRM care bundle on a regular basis may be laborious for some patients; but patients appreciated the communication channel the HRM element offered to extend engagement with the site team.

KEY LESSONS: SAFETY CULTURE

- Assurance of anonymity of individuals completing the tool is important, and was especially a concern for small sites.
- The time and resources necessary to apply the tool and discuss the outputs need to be acknowledged; there should be recognition that feedback can take multiple forms depending on the setting.
- The opportunity to share/benefit from the learning generated by the SPSP-PPC collaborative pilot sites (potentially acting as Champions) to new sites should be maximised.

KEY LESSONS: MEDICINES RECONCILIATION

- The major challenge to feasibility was access to the IDL, which when resolved enabled delivery of the care bundle in sites.
- Medicines Reconciliation sustainability is dependent upon a number of factors: definition of the patient cohort; timely and reliable access to IDLs; and appropriate staff involvement.

Figure 3: SPSP-PPC Collaborative: Key Lessons

CONCLUSION

The SPSP-PPC Collaborative, delivered across multiple sites with differing geography (urban/rural) and health systems (four distinct localised health care systems) and practice environments (small/medium/large chain and independent community pharmacies, plus dispensing practices) has provided the opportunity to test both the approach and the delivery of the change packages. The consequence of this diversity has been threefold: firstly, the opportunity to collect, collate and analyse an extensive data repository generated through the applied mixed methods evaluation approach; secondly, identification of variation in the level of uptake and use of the three change packages with observed adaptation in the local practice setting to some extent; thirdly, to generate insight into the potential key adoption mechanisms and support systems that are known to be crucial in moving to a successful full scale rollout. Success and impact of the programme is already evident through the early adoption and spread of the Patient Safety Climate Survey into practice across Scotland in 2016/2017 (PCA(P)(2016)15: *Pharmaceutical Services Supporting Continuous Improvement and Closer Partnership Working*) (3). Further work is also now supported nationally to progress development of consolidated HRM care bundles ready for moving to scale in support of driving improvements in patient safety across NHS Scotland.

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