



BACKGROUND

International evidence suggests there are a number of high-impact patient safety risks which, if tackled effectively, can significantly improve safety & quality of healthcare. The HSE Patient Safety Strategy 2019-2024 identifies two priority areas as 1) mitigating the risk of harm from falls and 2) reducing the rate of acquired pressure ulcers.

The Quality & Patient Safety (QPS) Improvement Team in the HSE National Quality and Patient Safety Directorate (NQPSD) has been exploring new ways to deliver widespread capacity building around Quality Improvement (QI) in a way that meaningfully addresses priority patient safety areas whilst maximising efficiencies of digital technology. Mobile apps are at the forefront of social digital innovation. Apps provide immediate access to information, which in turn can support clinical decision-making and improved patient outcomes. It was hypothesised that an app can help improve knowledge and awareness of QI, as well as practical clinical skills in key patient safety areas.

With the aid of funding from the Q Exchange Programme, the QPS Improvement Team has commenced developing a mobile app for people undertaking, or interested in undertaking, QI projects in healthcare.

Mobile App to Support Improvements in Reducing Harm from Falls & Pressure Ulcers

FINAL REPORT FOR Q EXCHANGE
JUNE 2023

AIM

To design and deliver a low-complexity, accessible, engaging and easily navigable mobile app to support healthcare professionals undertaking **QI projects** to reduce patient harm in healthcare settings across Ireland. Timeframe: 18 months to scope, design, test and enhance in 8 pilot sites as a proof of concept.

The App was named **QUICK Patient Safety**, standing for "**Q**uality **I**mprovement **C**apability & **K**nowledge for **P**atient **S**afety". As represented by its name, the app contains curated content to quickly and efficiently facilitate healthcare professionals to improve clinical approaches to reduce patient harm and enhance patient safety. Reducing harm from falls is the first patient safety area addressed by the app. The next safety area will be reducing harm from pressure ulcers.

This app brings users on an interactive pathway of learning and activities using clinical care bundles, QI methods and case studies. The app can be accessed on a mobile phone, tablet, or desktop; any progress made on one device is automatically picked up across all devices. Users can also participate in live virtual project clinics to check in with QI coaches & other app users, and discover new approaches to making improvements.



THE JOURNEY SO FAR and achievements to date



App content developed by



National Quality and Patient Safety Directorate
Office of the Chief Clinical Officer
An Stiúirthóireacht um Ardchaidheidín agus Sábháilteacht Othar
Oifig an Phríomhóiligh Cliniciúil

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This Project is supported by



Q is led by the Health Foundation and supported by partners across the UK and Ireland



PATHWAY CONTENT - FALLS

Pathway 1 Using a QI approach to reduce falls.	Pathway 2 The role of medication in falls prevention.	Pathway 3 The role of orthostatic hypotension in falls prevention.
Pathway 4 The role of mobility and exercise in falls prevention.	Pathway 5 The role of diet in falls prevention.	Pathway 6 The role of a safe environment in falls prevention.



PILOT: TESTS OF CHANGE

In Aug & Sept 2023, we will test the app with healthcare professionals working in 4 hospitals, 2 community services (older persons & disabilities) and 1 hospice. The test group includes:

- ✓ Professionals working with patients who may be at risk of harm from falls
- ✓ Either multidisciplinary teams of 3-4 people OR individuals using the app
- ✓ Individuals with extensive training focused on falls prevention OR those with limited training
- ✓ People currently undertaking a QI project or interested in starting one

Participants are requested to commit to:

- Download the QUICKPatientSafety App
- Complete an online survey before & after using the app, to assess functionality & impact of app
- Progress through at least 2 of the 6 Falls Pathways on the app
- Participate in an online feedback session with other users, to inform final edits to the app

THANK YOU to our partner services



CHALLENGES & LESSONS TO DATE

a) Appreciate your “Knowledge PDSAs”.

Our Core Team members from QPS Improvement, QPS Connect and QPS Education have knowledge & experience in QI, designing & delivering training, clinical expertise, project management, communication and audit skills; but no one had developed a mobile app before. We underestimated how long it would take to understand and navigate this new area in the context of our complex health service. As one of our team members noted, however, this work has contributed many “knowledge PDSAs” as we have progressed rapid cycles of planning, engaging, learning and action over the last year which has improved our understanding of this area.

b) Apps offer fantastic opportunities to build QI capacity “on the go”.

We have discovered that apps enhance flexibility of learning and communication for an increasingly mobile user base. Interactive back-end administrative systems offer dynamic design options for content curation, quick turnaround, and analytics. There are multiple learning pathways as well as options for public and private pathways, so content can be designed for different audiences. Finally, there is minimal training required on using the app and backend support, so it is relatively easy to get up and running and self-manage content.

c) Project Scope is critical.

Outlining what was “in scope” for the project was important, but it was equally (if not more so) important to be clear on what the app was not, and what was therefore out of scope. We were challenged to expand the scope several times, but our team was clear that the app was not intended to:

- Replace face to face training and education for multidisciplinary teams to reduce harm from falls and pressure ulcers.
- Act as a repository for personal data (apart from minimal data gathered to register users on the app & understand where they work)
- Serve as an indicator of performance or assurance in relation to reducing harm from Falls and/or Pressure Ulcers.

d) Regular meetings maintain momentum.

Whilst the project encountered many delays at the outset during scoping and set-up, and throughout the project due to limited staff capacity, the project has made significant progress and will continue to do so. This is, in part, due to scheduling regular, short (30-45 min), fortnightly meetings of the Project Advisory Group and weekly 30-45 min meetings of the Core Project Team. The frequency and regularity of meetings has maintained project momentum, engagement with stakeholders, and provided a catalyst to keep the project moving forward.

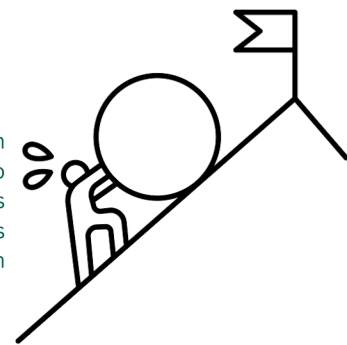


e) Co-design with Partner Services.

The Advisory Group membership is multidisciplinary, and includes representatives from teams across NQPSD; clinical staff from each of the partner services including the QPS Lead and eHealth Nursing Lead from the hospital group; representatives from each of the four hospitals; representatives from the two community services (disability and older persons services); and representatives from the participating hospice. This ensured every partner service had a shared voice in the co-design of this mobile app.

f) Don't underestimate legal considerations.

As we progressed with the project, it became clear that there were a number of legal and regulatory considerations that had to be taken into account with the app. These included GDPR and use of personal data; compliance with the EU Accessibility Directive; and the use of third party content. A legal advisor was brought onto the Core Project Team to assist with navigating these matters.





Participation in Activities

The Project Lead participated in Q Exchange activities designed to offer support to Q Exchange projects, including both the Action Learning Sets and the Evaluation Support Workshops. These virtual sessions provided ideas, insights and inspiration, and were helpful in navigating a number of project challenges. They also provided a fantastic opportunity to network and build relationships with like-minded professionals working to improve health services across the UK and Ireland.

The Project Lead and Team members continue to value the advice and information provided by other Q members through discussion forums, Special Interest Groups, community events, workshops and webinars.

Next Steps

With its base now established and an ever-increasing interest and momentum, this mobile app project is expected to develop significantly over the next 6 - 18 months.

July - Dec 2023

- Complete app build as relates to 6 Falls Pathways
- Complete test of Falls Pathways in partner services, including impact of app on attitudes, knowledge and skills as relate to QI and reducing harm from falls
- QA team support user enrolment and ensure app operates as planned
- Establish Advisory Committee on Pressure Ulcers (PU)
- Commence scoping and mapping PU content to App pathways
- Official Mobile App launch
- Involvement of Patient Partners in strategic development of app
- Build sustainable model for operationalisation & resourcing



Jan - Dec 2024

- Launch of "Live Chat" feature on app
- Phased expansion of 6 Falls Pathways to all health services
- Complete test of 6 PU Pathways with pilot group
- Training for HSE administrators in using and configuring the app Classroom Management System and Authoring Tool
- Business case for further developments and enhancements, including expansion to other high risk patient safety areas e.g. Sepsis and Medication safety
- Publications in journals and presentations at conferences
- Support app spread to other groups, services, and countries

Sharing the Learning

Regular updates for Q Community in Ireland at bimonthly teatime catchup sessions

Project presentations to Management Team and Chief Clinical Officer

Information and updates on social media e.g. Twitter and LinkedIn

Proposed topic for upcoming Quality & Patient Safety "QPSTalktime" webinar

TO DO: Articles for HSE Health Matters Magazine and Quality & Patient Safety Matters Newsletter

TO DO: Papers for peer-reviewed journals on project journey and findings

TO DO: Poster presentations and workshops to be delivered at conferences

TO DO: Promotional video demonstrating mobile app and verified improvements

Click below to download the Mobile App!

