

Building a national, systemic network to advance quality and patient safety research

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SUMMARY

Capacity for quality and patient safety research can be limited by challenges such as: lack of time, funding, knowledge, and motivation. Research networks can help overcome these barriers by pooling knowledge, skills, and resources, and bolstering collaboration. This paper describes the journey so far to build a national QPS research network aiming to bring together members from across academia and the health system – from patients – to workers – to leaders – to encourage development and adoption of evidence-based approaches to system improvement.

KEYWORDS

Systems approaches, networks, healthcare

Introduction

As of 2021, the seminal paper, ‘To Err is Human’ (Institute of Medicine, 2000), which called for a systems approach to patient safety had been cited approximately 20000 times (Pierre et al., 2021). Using this as a marker for systems approaches to patient safety, it may appear that most research has been carried out in the USA with other countries lagging significantly behind. This may be true of the Irish healthcare system, with a scoping review of Irish patient safety research suggesting recently there is a ‘modest’ amount of patient safety research (O’Connor et al., 2023) and barriers identified to adopting human factors approaches such as lack of shared language, expertise, and a competency framework (Sharafkhani et al., 2024). Moreover, anecdotal evidence suggests this research has often been carried out in institutional or geographical ‘siloes’, which can lead to duplication, research waste, and lack of implementation of evidence-based practice, to improve patient safety.

Improving patient safety in the Irish healthcare context is imperative, based on evidence from two studies suggesting the rate of adverse events in hospitals showed no decline between 2009 and 2015 (Rafter et al., 2016; Connolly et al., 2021). To address this, a national system-wide network has been established aimed at bringing together stakeholders across the healthcare system, from patients, to frontline staff, to healthcare leaders, and academics, to identify priorities for quality and patient safety (QPS) research and improvement work, and contribute to better, safer care. Such research networks may promote collaboration between different institutions and stakeholders and increase knowledge transmission (Adams, 2012) and trustworthiness in research (Nyirenda et al., 2020). This paper outlines the journey and priority QPS research areas identified so far, which include sociotechnical systems design, and implementation science.

Structure and Scope of the network

The Evidence-Based Quality Improvement and Patient Safety Research Network (EQUIPS) was established in 2024 and is co-funded by the Health Research Board (HRB) and Health Service Executive (HSE) National Quality and Patient Safety Directorate (NQPSD). The network itself

adopts a systems and co-design approach: 40 grant co-applicants and collaborators, representing multiple academic institutions, healthcare departments, public bodies, and patient advocacy groups came together to apply for the funding and develop a programme of work.

The network's work programme is divided into three activity 'strands'. Each strand and the tasks within them have a leader representing each of the stakeholder groups (i.e., patient partners, healthcare professionals and academics). The Enabling strand puts in place activities and resources to strengthen capacity for and capability to do QPS research, build a vibrant, sustainable community, and support knowledge translation into everyday practice. Through systematic review methods and stakeholder consultations, the 'Understanding and Informing' strand aims to ascertain priorities and strategies for QPS research in Ireland, develop shared definitions of quality and safety, and identify barriers and facilitators to participation in QPS research. This strand also hosts a social network analysis to analyse the growth of the network and the factors supporting growth and knowledge dissemination. The 'Focusing' strand is the research engine of the network, which is divided into research 'clusters' aiming to address research gaps in identified priority areas. The first priorities identified are Sociotechnical Systems Design and Implementation Science.

Progress and challenges

By January 2025, the EQUIPS Research Network grew from the initial 40 co-applicants and collaborators to a community of over 200 members in Ireland and further afield. To date, the EQUIPS Research Network has held several successful events, including an in-person event in Dublin which facilitated networking, hosted a keynote speaker who delivered an introduction to systems thinking, and stimulated conversations regarding the barriers and facilitators to patient safety. Progress has been made on its work programme, including two literature reviews (the findings from which should be available by the time of the conference), a webinar series on 'the practicalities of QPS research', and development of a database of QPS research and improvement projects. A social network analysis is planned to begin early in 2025 to provide a snapshot of the system, including thought leaders, knowledge brokers, and peripheral members, as well as provide an indication of knowledge exchange.

Building such a network is not without its challenges. Facilitating collaboration and equal participation between such varied stakeholder groups can be difficult. To overcome this, the network is drawing on best practice guidance from other Irish research networks and setting up a 'ways of working' task force to develop a strategy for co-production and collaboration in genuine partnership in the network. To facilitate the attendance of frontline clinicians, which was an initial challenge, meetings have been shortened.

Conclusion

The EQUIPS Research Network aims to coordinate and accelerate quality and patient safety research in Ireland by bringing QPS researchers, knowledge users, those working in healthcare and patient partners together to improve care outcomes including safety and quality. By taking a systems approach to its development, engaging stakeholders at various levels of the system, it is hoped this aim will be met. This paper outlines initial successes and challenges, to support others to develop similar networks to bolster capacity for research and improvement work in healthcare.

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