Case Study

A Partnership for Safer Care: The Advancing Quality Alliance (Aqua) and Liverpool Women's NHS Foundation Trust

The Challenge

Patient safety investigations are designed to understand what went wrong and prevent recurrence. However, too often they focus on what should have happened, rather than what actually happens in practice.

At Liverpool Women's, in partnership with Aqua, this raised an important challenge: how can investigations better reflect the realities of frontline care and produce more meaningful learning under the Patient Safety Incident Response Framework (PSIRF)? Healthcare delivery is complex and rarely linear. Care depends on interactions between people, systems, environments, and competing priorities. Many of the factors that shape outcomes, such as workarounds, interruptions, and implicit assumptions, remain largely invisible within formal procedures.

Hierarchical Task Analysis (HTA) offers a way to bring this complexity into view. By breaking tasks down into their component steps, decisions, and dependencies, it helps teams understand how work is truly carried out across roles and settings, and where variability and risk are introduced. Importantly, HTA shifts the nature of investigation conversations, from asking "who failed?" to exploring "what made this difficult to do reliably?" Creating this shift requires new ways of thinking, practical application, and confidence to engage with system complexity.

Our Approach

In March 2026, Aqua delivered a bespoke, one-day patient safety investigation methodology programme at Liverpool Women's, placing HTA at its core.

The session was highly practical, bringing together clinical, safety, and operational colleagues to build capability through hands-on learning. Participants were first introduced to HTA through simple, familiar tasks to illustrate a key insight: even seemingly straightforward activities contain hidden complexity. This established a shared understanding of how factors such as environment, equipment, interruptions, and assumptions shape outcomes.

The programme then moved into applied learning, using the discharge medication process as a real-world example. Teams worked collaboratively to map the process in detail, exploring the interactions between roles, systems, and decision points. HTA was used alongside systems thinking approaches, including SEIPS (System Engineering Initiative for Patient Safety), to support structured exploration without blame.

A strong emphasis was placed on:

- Involving the people who do the work
- Testing and validating the analysis collaboratively
- Focusing on how systems influence performance

This ensured the learning was grounded in reality and immediately applicable to ongoing safety work.

The Impact

This partnership has strengthened both the capability and confidence of Liverpool Women's teams to take a more systems-focused, learning-oriented approach to patient safety investigations.

Applying HTA to the discharge medication process revealed a significant gap between how the pathway is designed and how it is experienced in practice. What initially appeared to be a straightforward process was shown to involve multiple interdependencies, competing priorities, and hidden sources of risk. Crucially, the work did not uncover entirely new problems, it made existing system conditions visible, discussable, and actionable.

Teams identified factors shaping performance, including:

- Complex handovers across professional groups
- Fragmented and poorly integrated digital systems
- Reliance on informal workarounds
- Delays linked to unclear prioritisation
- Practical risks across prescribing, dispensing, and medication availability.

The greatest impact, however, was in how this changed the conversation about safety.

Participants moved away from retrospective judgement towards forward-looking enquiry, asking:

- Where is this process vulnerable under pressure?
- What makes this task harder to complete reliably?
- What conditions need to be in place for success?

This shift supports more constructive investigation discussions, reduces the focus on individual blame, and builds a stronger foundation for sustainable improvement.

As a result, Liverpool Women's colleagues are now better equipped to:

- Identify system-level risks earlier
- Design improvements grounded in real-world practice
- Apply consistent human factors thinking across investigations

The HTA exercise has acted as a catalyst for a broader shift towards a system improvement mindset in line with PSIRF.

What's Next

Liverpool Women's colleagues have taken the outputs from the HTA session forward to accelerate improvement work in the discharge medication process and apply the methodology to other priority areas.

The partnership with Aqua is continuing into 2026/27, including the development of an innovative patient safety "flashmob" approach to further embed learning and engagement.

"Having Aqua's support in helping the Trust transition into PSIRF, and in exploring different approaches such as HTA, has been invaluable. Upskilling staff in this simple yet effective tool has the potential to create significant, impactful, and lasting system changes, particularly in addressing our most complex patient safety challenges. This session has acted as a springboard to elevate the Trust towards a system improvement mindset."

Rachel Beddows (Continuous Improvement Lead, Liverpool Women's Hospital), Paula Best and Hayley Roberts (Patient Safety Learning Response Leads, Liverpool Women's Hospital).

There is also growing external interest in the work. In collaboration with Patient Safety Learning, insights from this programme will be shared through national safety forums, including a joint session for the Patient Safety Managers Network in September 2026. If you are interested in joining this, please contact Patient Safety Learning.

This work demonstrates how understanding care as it is actually delivered can support the design of safer, more reliable systems for both staff and patients. If you would like to find out more, please contact Dr Jemma Barton.

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