Successful Digitalisation Pathways

How Can Healthcare Organisations Improve Patient Safety?

Carsten Engel I Chief Executive Officer of the International Society for Quality in Health Care (ISQua) I Dublin, Ireland

In an interview with HealthManagement.org, Dr Carsten Engel, the Chief Executive Officer of the International Society for Quality in Health Care (ISQua), discusses issues affecting patient safety and strategies that healthcare organisations can enact to improve these issues.

✓ Key Points

- Medical errors/adverse events often result from system weaknesses or misalignment between demand and capacity.

- Reducing complexity and streamlining workflows make a system more robust and thus improve patient safety.

- Patient safety should be incorporated into an organisation's culture and workflows, not siloed. Leadership can

- signal its importance through engagement by education and integration into all aspects of management thinking.

- Strategies to understand the factors involved in why a system works and why it goes wrong can better inform system improvements.

- As partners in their care, patients can be engaged to inform the system when a process functions incorrectly.

Would you briefly tell us about yourself and ISQua's mission?

By background, I'm an anaesthesiologist and have worked for 20 years as a clinician. For the past 15 years, I've been working full-time in quality, first as part of the healthcare accreditation organisation, IKAS, in Denmark and for the last year as ISQua's CEO.

ISQua is an organisation whose mission is to inspire and drive improvement in the quality and safety of healthcare through education, knowledge-sharing, and external evaluation. We support the healthcare system and connect people through global networks. ISQua's tagline is 'KNOWLEDGE | NETWORK | VOICE'. We gather knowledge to make it accessible through our networks and give a voice to those who need it.

How big a problem is patient safety?

It is a significant problem. Over 20 years ago, epidemiological investigations found that around 10% of hospital patients were affected by adverse events. Much hasn't changed in the meantime; the rate of adverse events is still around 10%. About

one in 14 of these is fatal, with around 50% being considered preventable.

What are the challenges in preventing medical errors/adverse events?

One of the challenges is that healthcare is a complex system, where the result of an action can't always be predicted. Any complex system can be made less complicated by having standardised procedures for doing some things, but this does not provide a complete solution. In addition to having a solid foundation of standardised procedures, you also need the ability to anticipate what might happen, monitor what is going on, react properly, and learn from your experience.

Culturally, safety must be made a priority. It should be accepted that safety issues are due to people working within a system with flaws rather than bad people. Creating and maintaining a blame-free culture is still a problem in many parts of the world. Most often, harm is not caused by recklessness but by people trying to do their best within systems that are not sufficiently strong and resilient.

What actions can an organisation take to improve patient safety?

One of the most important things is to mainstream patient safety. Patient safety is not a project separate from everyday operations. Although an organisation will benefit from having a safety committee and a safety department, safety responsibilities should not be partitioned off into these organisational structures.

regulations, they used a narrative approach to ask the organisation to describe how they handled safety issues.

There are also examples from several countries where organisations have used the Functional Resonance Analysis Method (FRAM). It's a way to analyse work processes and understand all that influence them. You create process maps that, as an example, make it easier to understand why incorporating a seemingly straightforward procedure like medication recon-

We can't avoid complexity, but we can reduce it: Standardise everything that can be standardised

Safety must be included every time a process is considered; we must ask not only how to deliver but also how to deliver safely. The organisation must signal that safety is important. Top management must consistently show commitment in multiple ways by deeds rather than words alone. Finally, the proper infrastructure must be provided to work safely.

Moving from Safety-I to Safety-II approaches requires a paradigm shift in managing patient safety. What are the challenges in implementing a Safety-II approach?

To briefly reiterate, Safety-I is a philosophy that focuses on learning from what goes wrong to discern how can it can be prevented from happening again. Nothing is wrong with the approach in itself, but it needs to be supplemented with another approach when working in a complex system.

What makes things go right so often, despite conditions sometimes varying in predictable or in unpredictable ways? One core idea is that there's something called 'work-as-imagined', and then there's 'work-as-done'. Work-as-imagined is the official procedure, and work-as-done is what happens in everyday practice. When working in the Safety-I paradigm, it is tempting to think of deviations from work-as-imagined as errors causing harm, which must be prevented. In the Safety-II paradigm, we recognise that conditions vary, necessitating adaptations. Often, these adaptions are deviations from work-as-imagined and are what saves the day. Sometimes, they make things go wrong. Thus, understanding why things go right most of the time is also needed to understand better why they sometimes go wrong.

This idea is a very appealing way of thinking. Translating it into action is more difficult: it's easier to fix a procedure than to improve the process of adapting to varying circumstances. But examples can be found. For instance, I've heard about a regulatory agency in the Netherlands that changed its approach to inspections. Instead of examining compliance with rules and

ciliation is not always successful. To understand how medication reconciliation is incorporated into the workflow, one must know who is doing it, what information they need, how they can access it, and how they pass the information on. When this is depicted graphically, it is easy to understand why the process is perhaps not as simple. When performing root cause analysis, by looking at things through a Safety-II lens, one can understand how a system adapts for the better or worse so that more robust solutions can be reached and the ability to adapt in useful ways improves.

How have staffing shortages affected patient safety issues?

There are some alarming figures from the U.S. During the pandemic years, a great increase occurred in totally preventable issues like falls, pressure ulcers, catheter-associated urinary tract infections, ventilator-associated events, and MRSA bacteraemia. Relative staffing shortages may explain this. The staff didn't decrease, but the workload heavily increased.

There are two ways to address this shortage. One is to increase staff which is not always feasible. The other way is to make work easier for the staff available to do the work that needs to be done. Prudent standardisation can reduce complexity. Standardise everything that can be standardised. In both clinical pathways and communication protocols, many procedures should be standardised. One should be aware that how to do things is often more standardisable than when to do things.

Technology should be leveraged as much as possible to reduce the burden of work. Workflow is important. When I was in healthcare, we spent much time making things flow: obtaining the right information, making the patients flow (for instance, transferring them from the emergency department to the ICU or the ward), and making equipment flow. Attention to and understanding of the flow and its variations can

reduce friction, vulnerability, and bottlenecks. Understanding variations in flow also allows for better allocation of resources. These are ways to proceed to make health care safer.

How can patient engagement improve patient safety?
Partnering with patients is an important part of patient safety. Patients are the only ones that see the whole patient journey; they will increasingly not just become passive recipients of care, as more care is moving out of hospitals into the patient's home, they also become providers of care. We should leverage their resources.

Some hierarchies need to be broken down. It needs to be acceptable that anyone in the operating theatre can speak up if they have a concern or believe the surgeon is making a mistake. Whatever happens, say 'thank you for voicing your concern' even if the concern turns out to be wrong.

What innovations in the next five years might improve patient safety?
Some of the most important innovations will concern the flow of information (like information technology), the flow of patients, and facilitating a real-time picture of the organisa-

Patients are the only ones that see the whole patient journey

Some have talked about using patients as scaffolds for the system, about allowing them to reach in. An example of this is when patients call the hospital for test results they expected to receive but haven't; the call reveals that the response has gone missing for some reason. This does not mean that providers should renounce their responsibility for safety, but we should utilise the patients as partners to add some strength to the system's safety.

How can we better engage the workforce to improve patient safety?
As leaders, we must tell and show them that safety matters and appreciate what they do to improve safety. We must create a culture where they speak up about their concerns. One way to create such a culture is to have safety walk rounds where leaders ask staff what concerns they have. This is not just token activity. It's important that the people who have contributed are given feedback to acknowledge that they were heard. This demonstrates that it is taken seriously and can lead to improvements.

People must be trained to understand what safety is, how it works in a healthcare system, how important it is to anticipate what might happen and monitor if a patient responds in the right way, and to learn from previous challenges. This will contribute to improving the system continuously.

One of the things that the adverse event reporting systems have contributed to is improving culture. Sometimes, an adverse event story leads to learning something that can be changed. Every time an adverse event is discussed, a signal is sent that patient safety is essential and must be taken seriously. This is something that can change the culture.

tion's status. Because if it's important to anticipate events and monitor patients, one must understand how patients flow through the systems. Everyone, including the patients, must have the opportunity to quickly see if there's a sickness or if something else is going wrong.

Regarding what physical form that might take, we have seen examples now. For instance, dashboards at one glance can visualise the bed occupancy in the whole hospital or across the entire hospital system. This visualisation can spot where a particular patient will get the optimal care.

We have also seen examples where intensive care services can be provided at a distance from where intensive care units are physically located via virtual communication. This can bring expertise to the patients from a much broader range than found in traditional systems where patients need to come to where the expertise is.

What sort of regulatory innovations do you foresee coming soon?
It will be difficult for regulators to adapt to a way of thinking where one, not only monitors for compliance with rules, but also monitors for the ability to adapt and respond. There are people around the world who have taken up this challenge. They're trying to find ways to reconcile traditional regulation with the concept of Safety-II and the resilience thinking that we talked about.

Conflict of Interest
None. ■

Watch the full interview here.