



SAFETY II: IMPLICATIONS FOR STAFF WELLBEING

I remember the first few years as an intensive care specialist being filled with the heavy weight of responsibility; lying awake on-call wondering if I had made the right decision, replaying choices where no particular option seemed ideal. I wondered how, after all my training and experience, I could be so anxious and uncertain when everyone else seemed so sure. Around this time, I found this quote:

“the only rational response to complexity is uncertainty”

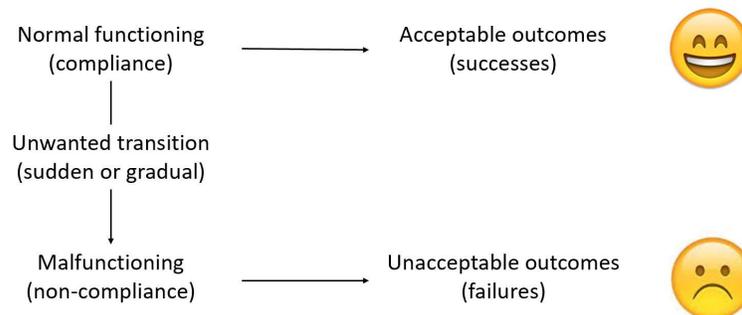
After so many years of learning the right answers, this new role was defined by having to make high stakes, time critical decisions in the setting of incomplete information. The uncertainty I felt didn't come from any personal failing but rather, it reflected the reality of the situation. The ability to navigate this uncertainty was a fundamental part of being a specialist; there was no “right” answer, only the answer spoken by every intensivists: “it depends...”.

This is the state of modern intensive care, sitting at the junction of urgency and complexity. It is a dynamic and unpredictable world filled with inherent risks and trade-offs as we try to keep our patients safe and return them to their lives.

Why Complexity and Safety Matter to Staff Wellbeing

In healthcare, as in many other industries, there is a presumption that if the system works as designed, this leads to good outcomes and conversely, that poor outcomes arise from some malfunctioning or non-compliance. Safety is therefore where unacceptable outcomes are “as low as reasonably possible”. This approach has been coined **Safety-I** by Professor Erik Hollnagel, a Danish safety scientist.

The Current View of Safety – Safety I



Hollnagel E. *Safety-I and Safety-II; the past and future of safety management* 2014

However, there are several implications of this model that may impact on the wellbeing of staff.

Safety efforts are reactive; we only pay attention when there has been an adverse outcome. A huge amount of effort, time and attention will go into the search for the “root cause” of these failures. By contrast, the work we do to create good outcomes is seen as uninteresting. It is just “as it should be”. Successful work and the things we do to achieve it, remain unseen and unvalued.

In this view, people are the weak part of the system as they are non-compliant and variable; where possible they should be constrained with more rules, retrained or replaced by automation.

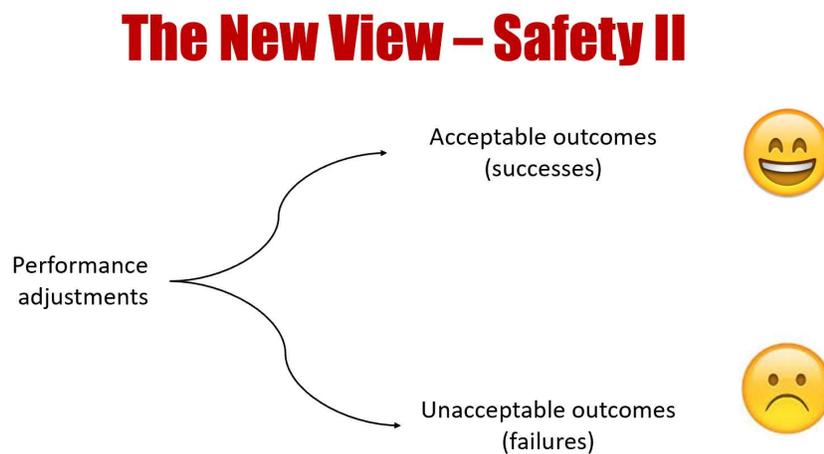
Examples of interventions based on “safety through constraint” will be familiar to you: the ever-expanding number of rules, additional checklists and forms, retraining, computer systems with multiple alerts, ongoing audits to ensure compliance. These new measures often add to the daily frustrations of work and redefine the role of people within the system to being passive followers.

The New View

The idea of safety being the natural state of our system is at odds with the dynamic world of ICU as we try to navigate our patients through their illness. Risks and hazards abound, and staff are constantly responding to the needs of the patient and the wider system, balancing competing goals and priorities. Safety is not the natural state, it is something we create everyday.

Rather than understanding this successful work, we remain fixated on learning only from what goes wrong. In the words of Marit deVos, “it’s like trying to understand the key to a successful marriage by only studying divorce”.

A new model, coined “Safety II” by Hollnagel, redefines safety as the ability to successfully navigate the complexity of work: a proactive state where “*as much as possible goes right*”. Most importantly, people are now seen as the key resource in creating safety as they can adjust to meet the changing conditions.



Hollnagel E. *Safety-I and Safety-II; the past and future of safety management* 2014

These adjustments are both the source of usual success, as well as rare failure. The challenge now is to create the conditions that make success more likely and enable people to navigate complexity.

What It Means in Practice

“There is nothing so useful as a good theory” – Kurt Lewin, 1943

This reframing of safety has major implications for the way we design our systems and the role of people within them. These affect everything, from our approaches to incidents, to quality improvement, to the way we train and lead teams. Here are some ideas to help illustrate what these changes might look like:

1) For any intervention, ask **“are you making failure less likely or usual success more likely?”**

To answer this, we need to be curious about the realities of daily work. The frustrations, conflicting demands, workarounds and tensions that exist all the time. It is about designing to “optimise human well-being and overall system performance, finding solutions that make it easier to “do the right thing”.

2) Learn from all events

Part of making “as much as possible go right” means making visible the hidden work people do to successfully navigate problems. For our unit, this meant debriefing procedures or incidents, even when they went well. These were short but asked questions such as:

Did everyone know what was going on?
Were we clear in our roles?
What hazards did we pick and what did we miss?
What were the surprises or workarounds?

Safety II also examines failures but asks different questions to understand the actions people take. “Why did their choices make sense to them and could someone else make the same choice in the same situation? What was different that meant that what usually works, didn’t this time?”. Being curious aids learning in a way that judgement and blame never can.

3) Build resilient teams and systems

In this setting resilience is not a personal characteristic but rather, it is “the ability of the team/system to monitor and adjust performance to achieve its goals, even when the unexpected happens”.

It is about creating adaptable teams that can respond flexibly to the demands of work. As part of this, we need to bring together the different viewpoints and skillsets within our teams to match the divergent demands of the patients. As leaders, our role is to establish the goals and create the psychological safety that allows everyone on the team to contribute to solving the problem.

In our experience, it is this focus on adaptable teams that has had the most profound effect on the wellbeing of our staff. Being part of a collective which supports each other, that values their contribution and that tries to constantly improve is a powerful antidote to the daily challenges of working in ICU.

For me personally, this change in view has been profoundly rewarding. The answer to my own wellbeing was creating the space to let others in and together, to embrace the uncertainty and complexity of the work we do.

Further reading:

- 1) From Safety-I to Safety-II: a White Paper
<https://www.england.nhs.uk/signuptosafety/wp-content/uploads/sites/16/2015/10/safety-1-safety-2-white-papr.pdf>
- 2) Project Aristotle (Google) and the work of Amy Edmondson on psychological safety
<https://www.nytimes.com/2016/02/28/magazine/what-google-learned-from-its-quest-to-build-the-perfect-team.html>
- 3) Team Resilience: Implementing resilient healthcare at Middlemore ICU –
<https://www.taylorfrancis.com/books/e/9780429469695/chapters/10.4324/9780429469695-9>
Horsley, Hocking, Culverwell, Julian and Zijdel in Delivering Resilient Healthcare (2018)
for a further discussion of how we implemented these ideas in our ICU.

The CICM Welfare SIG would like to thank Dr Carl Horsley for contributing this article to the CICM eNewsletter.