Delivering Resilient Health Care: From Principles to Practices

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What does it mean to be safe?

Patient safety is the absence of preventable harm to a patient during the process of health care. The discipline of patient safety is the coordinated efforts to prevent harm, caused by the process of health care itself, from occurring to patients.

When we think about safety, we usually think about accidents - about (low probability) events with adverse outcomes.
The problem is safety!

Safety = \sum_{i=1}^{n} \text{Accident}_i

3. DEFINITIONS

3.20 Safety. Freedom from unacceptable risk.

Safety is defined as ‘freedom from accidental injury,’ which can be achieved by ‘Avoiding injuries or harm to patients from care that is intended to help them.’
Looking for silver bullets

Since the 1970s health care has imported solutions such as quality assurance, root cause analysis, ‘lean’, standardised guidelines, teamwork, check-lists, accreditation, and above all IT in various forms.

Solutions typically presume predictability, inherent linearity, and proportionality of causes and effects – which is nowhere to be found in the real world of care delivery.

“... prevailing strategies rely largely on outmoded theories of control and standardization of work.” (Berwick, 2003).

It is generally assumed that problems will be solved with a few more resources, a little more effort, another set of recommendations, better data about the amount and rate of harm, more precise measurements, tightened practices, or a new IT system.

“It is widely believed that, when designed and used appropriately, health IT can help create an ecosystem of safer care ...” (IOM, 2012).
Increasing safety by reducing failures

Function (work as imagined) → Success (no adverse events) → Acceptable outcomes

Hypothesis of different causes: Things that go well and things that go wrong happen in different ways and have different causes

Find, fix - and forget

Malfunction, non-compliance, error → Failure (accidents, incidents) → Unacceptable outcomes
Safety-I – when nothing goes wrong

Safety is a condition where the number of adverse outcomes (accidents / incidents / near misses) is as low as possible.

Safety-I is defined by its opposite - by the lack of safety (accidents, incidents, risks).

The premise for Safety-I is the need to understand why accidents happen.

Accidents and incidents represent a lack of safety.

How can we learn about safety by studying situations where it isn’t there?

If we want something to increase, why do we use a measure that decreases?
Managing safety by snapshots

Harmful events attract attention. But they are rare and isolated.

Events are analysed step-by-step. Responses are developed for each problem found. Harm is therefore preventable.
But do we really know what happens?

The numerator is how many there are of a type of event – accidents, incidents, etc. This number is known (with some uncertainty).

The denominator is how many cases something went well. This number is usually unknown.

We always count the number of times something goes wrong. We analyse the rare events.

We rarely count the number of times something goes well. We need to understand the common events.
The proper management of safety

To manage safety properly, we must understand how and why everyday clinical work goes right. This understanding provides the basis for defining practical and meaningful measurements.

Counting what goes wrong does not measure lack of safety.
The problem is NOT safety!

Safety is defined and measured more by its absence than by its presence.

Reliability is a dynamic non-event ... it is an ongoing condition in which problems are momentarily under control due to compensating changes ... Weick, K. E. 1987. Organizational culture as a source of high reliability. California Management Review 29 (2), 112-128.

Safety is invisible: people often don’t know how many mistakes they could have made but didn’t ...
Explaining what happens and how

A need to understand why the unexpected happened.

Easy to see when something happens

Difficult to see when “nothing” happens

No need to understand why the expected happened.
From the negative to the positive

Negative outcomes are caused by failures and malfunctions.

All outcomes (positive and negative) are due to performance variability.

Safety-I = As little as possible goes wrong.

Eliminate failures and malfunctions as far as possible.

Safety-II = As much as possible goes well.

Facilitate everyday work. Improve resilience.

HRO = Ability to respond when something fails.

Improve ability to respond to adverse events.
Life is full of “dynamic non-events”

Every day, from morning to night, practically everything we do works just as it should, which we take it for granted.

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Increase safety by doing things right

Safety must be begin by understanding the variability of everyday performance.

- Function (work as imagined)
- Everyday work (performance variability)
- Malfunction, non-compliance, error
- Success (no adverse events)
- Failure (accidents, incidents)
- Unacceptable outcomes
- Acceptable outcomes

Constraining performance variability to remove failures will also remove successful everyday work.
Safety II – when everything goes right

Safety-II: Safety is a condition where the number of successful outcomes (meaning everyday work) is as high as possible. It is the ability to succeed under varying conditions.

Safety-II is achieved by trying to make sure that things go right, rather than by preventing them from going wrong.

Safety is defined by its presence.

The focus is on everyday situations where things go right – as they should.

Health is ‘a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity’.

“Safety” is the ability of an organisation to sustain required operations under both expected and unexpected conditions.
How do “dynamic non-events” happen?

- By responding in a flexible way
- By monitoring what goes on
- By learning what works and what doesn’t
- By anticipating - looking ahead
Resilience is an expression of how people and organisations cope with everyday situations - large and small - by adjusting their performance to the conditions.

An organisation’s performance is resilient if it can function as required under expected and unexpected conditions alike (changes / disturbances / opportunities).

A potential to respond to threats as well as opportunities.

A potential to learn - both from what goes well and what goes wrong.

A potential to anticipate the effects of actions as well as long-term changes to demands and resources.

A potential to monitor what happens - externally and internally.
Managing the resilience potentials

1. Develop four sets of questions (specific, diagnostic, formative). This constitutes the Resilience Assessment Grid (RAG).

2. Describe the role of the potentials for the organisation and how they relate to each other. Use this to interpret the data and develop effective remedial actions.

3. Apply the RAG using pre-defined respondents. Collate the results and provide feedback. Agree on needed remedial actions.

4. Use the RAG regularly to make repeated assessments. Safety management must be done continuously over an extended period of time.