
HOW TO LEARN FROM WHAT GOES WELL?

or

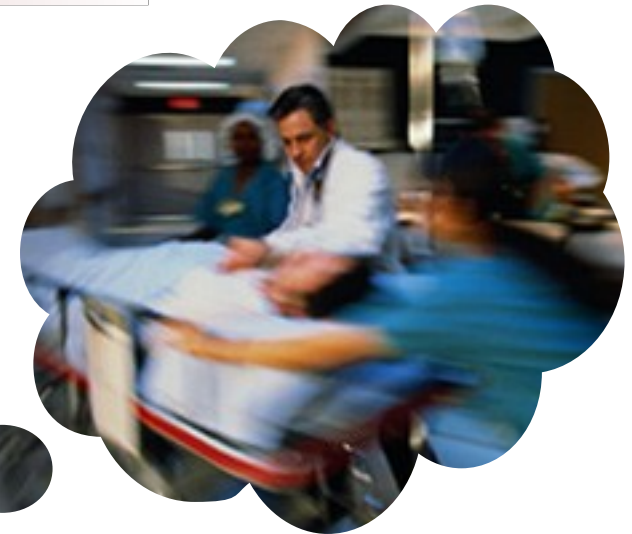
WHAT HAPPENS WHEN “NOTHING” HAPPENS?



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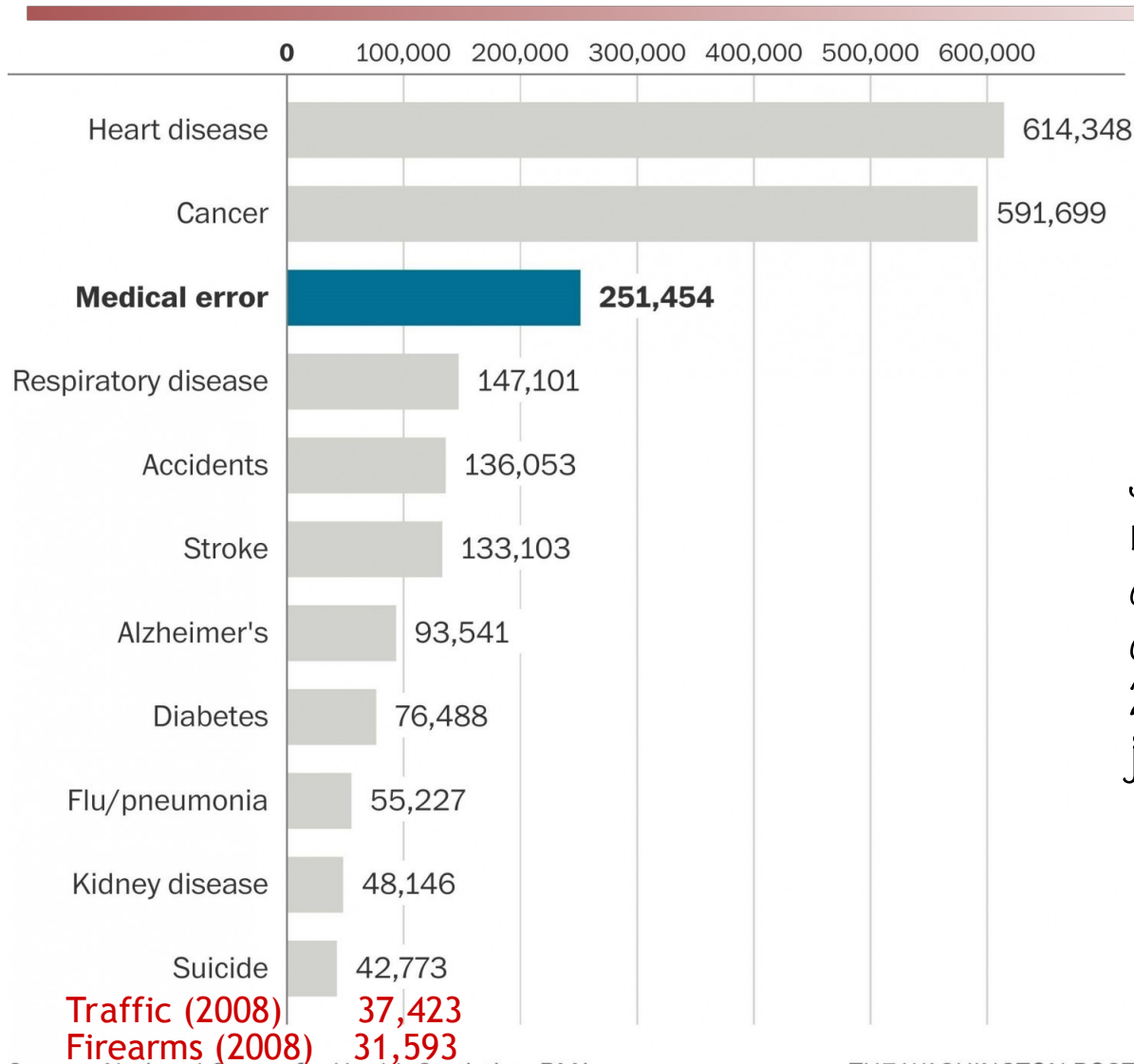
What does it mean to be safe?

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.

Medical error: 3rd leading cause of death



Johns Hopkins University researchers estimate that medical error is now the third leading cause of death in the USA (2000-2008). 251,000 lives per year or one 747 jet per day.

THE WASHINGTON POST

Source: National Center for Health Statistics, BMJ

The problem is safety!



3. DEFINITIONS

3.20 **Safety.** Freedom from unacceptable risk.

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



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.'



Increasing safety by reducing failures



Function (work
as imagined)



Success
(no adverse
events)

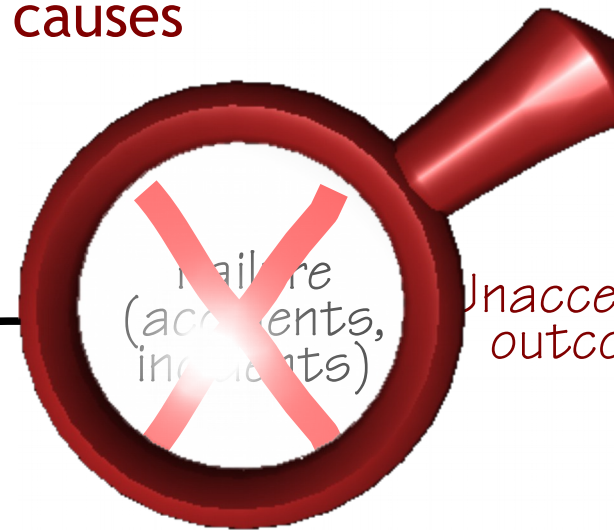
Acceptable
outcomes



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



~~Malfunction,
non-compliance,
error~~



~~Failure
(accidents,
incidents)~~

Unacceptable
outcomes



Find, fix - and forget

The measurement of safety

Reported DHB adverse events (excluding code 10 behaviour events), 2006-07 to 2017-18



Learning from adverse events

Adverse events reported to the
Health Quality & Safety Commission

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.

If we want something to increase, why do we use a measure that decreases?

Accidents and incidents represent a lack of safety.

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

Managing Safety-I

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

The belief in causality (Causality Credo)

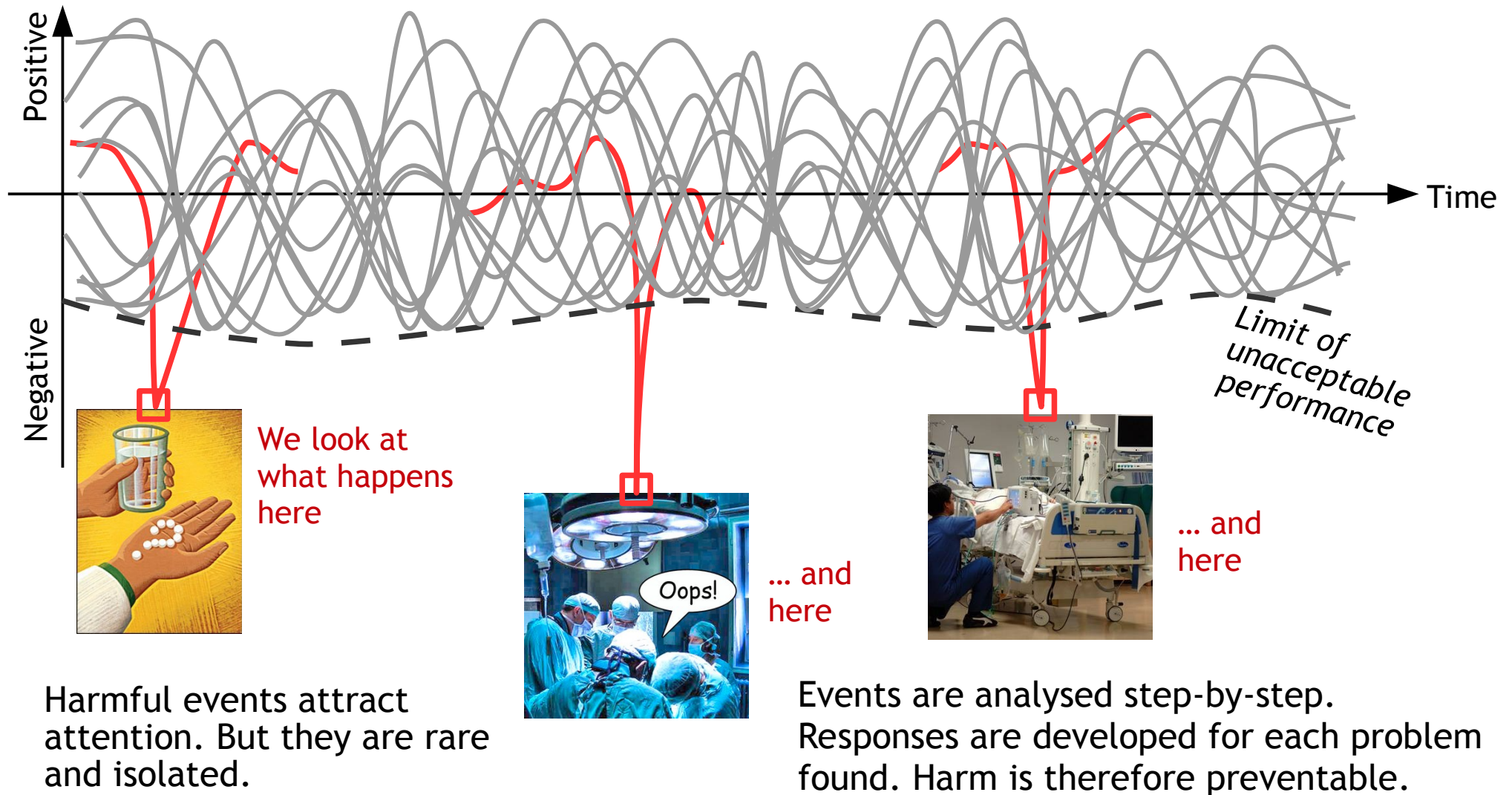


- (1) Adverse outcomes happen because something has gone wrong (cause-effect thinking + value congruence between cause and effect).
- (2) Causes can be found and treated (rational deduction).
- (3) All accidents are therefore preventable (zero harm principle).



Prevent, eliminate, constrain.
Safety, quality, etc. are different and require different measures and methods.

Managing safety by snapshots



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

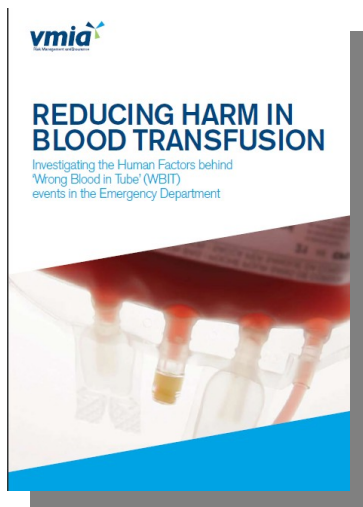
Events are analysed step-by-step. Responses are developed for each problem found. Harm is therefore preventable.

Wrong Blood in Tube (WBIT)

WBITs are estimated to occur at a rate of approximately 1 in 2,000 samples. Main causes are:



- labelling of sample tubes away from the bedside
- failure to check patient identity
- similar names (together with incorrect identity checks)
- use of pre-printed labels
- confusion of patient notes and/or request forms
- inaccurate verbal instructions/no request form



- Environment (3 recommendations)
- Staff (9 recommendations)
- Equipment (12 recommendations)
- Patient (2 recommendations)
- Procedure (6 recommendations)
- Culture (8 recommendations)

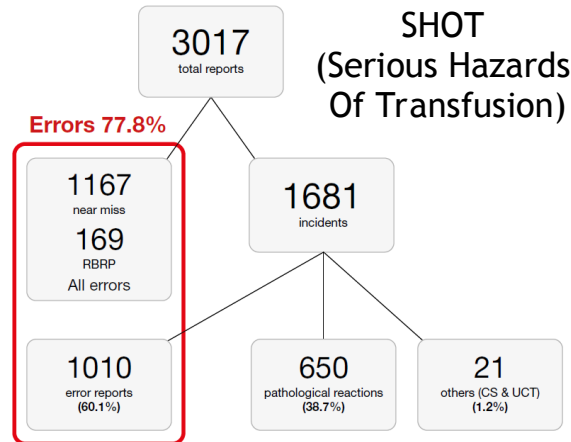
www.vmia.vic.gov.au

(These recommendations) will provide input for those responsible for reducing errors related to mislabelling and miscollection of blood samples.

The implementation ... should be considered in the broader context of the organisational culture of Australian healthcare.

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)



Numerator

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

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

Denominator



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

The problem is NOT safety!

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

Reason, J. (2000). Safety paradoxes and safety culture. *Injury Control & Safety Promotion*, 7(1), 3-14.



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 ...

Safety is *invisible*: reliable outcomes are constant, which means there is nothing to pay attention to.

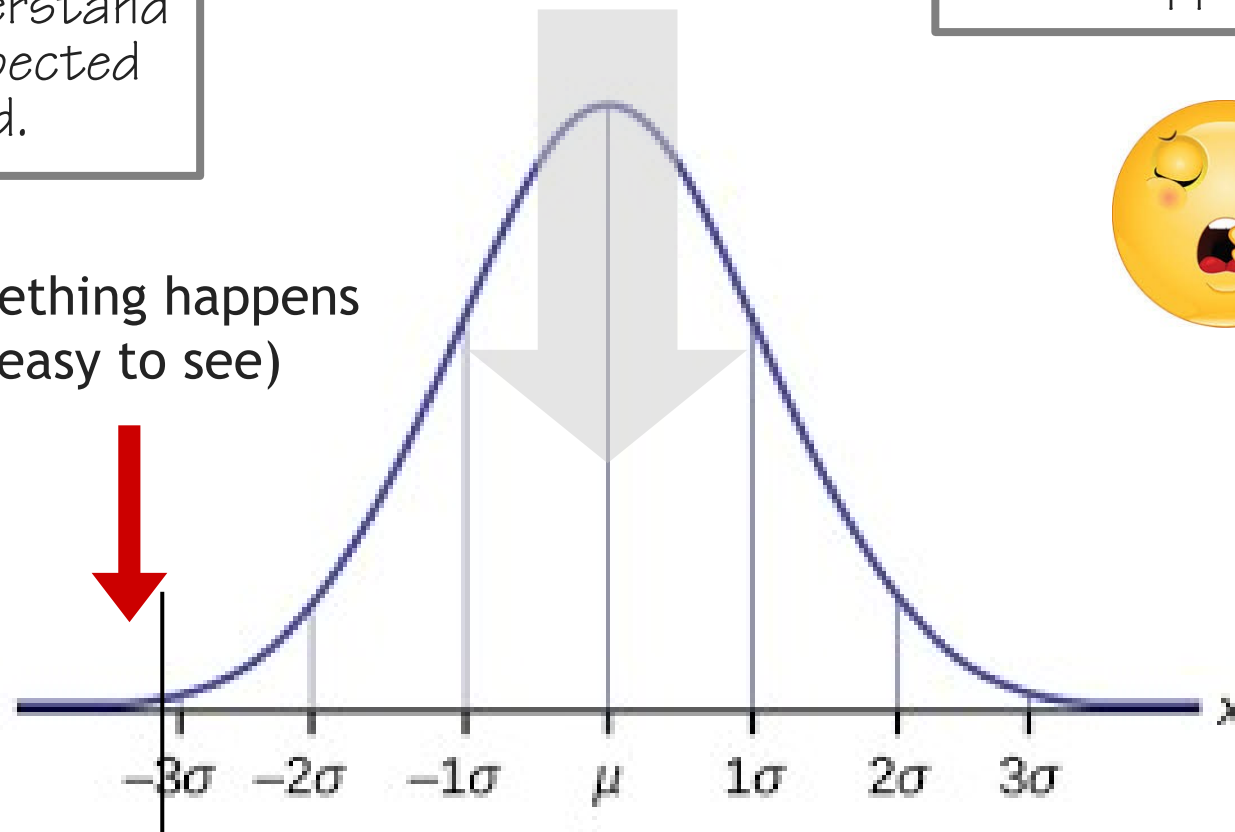
Events and “non-events”

No need to understand why the expected happened.

A need to understand why the unexpected happened.

“Nothing” happens (difficult to see)

Something happens (easy to see)



Life is full of “dynamic non-events”

Every day, from morning to night,



practically everything we do



works just as it should



and we take it for granted

What happens when “nothing” happens?



Resources (time, manpower, materials, information, etc.) may be limited and uncertain.



↓
People adjust what they do to match the situation.

These adjustments are inevitable, ubiquitous, and necessary.

↓
Because of resource limitations, performance adjustments will always be *approximate*.

↙
Performance adjustments are the reason why “nothing” happens – why work is safe and effective.



↘
Performance adjustments are also the reason why things sometimes go wrong.

How are adjustments made?



CREATE/MAINTAIN

conditions that are necessary to carry out the work.

AVOID

anything that may have negative consequences for yourself, your group, or organisation

COMPENSATE FOR

conditions that makes work difficult or impossible.

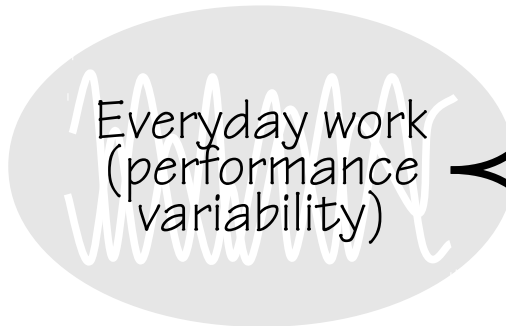


Increase safety by doing things well

Safety must be based on an understanding of Work-as-Done.



Function (work as imagined)



Malfunction, non-compliance, error



Success (no adverse events)

Acceptable outcomes



Failure (accidents, incidents)

Unacceptable outcomes



Constraining performance variability to remove failures also removes the basis for 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.

Managing Safety-II

Safety-II is a condition where as much as possible goes well.



Support, augment, facilitate.
Safety, quality, etc. are inseparable and need matching measures and methods.

1. Care about what happens all the time rather than what happens rarely. **We always count the number of times something fails, but rarely the number of times it just works.**
2. Look for ‘work-as-done’ - the habitual adjustments and why they are made. **When something is done, as a part of work, it has usually been done before and gone well before.**
3. Learning should be based on the frequency of events rather than their severity. **Small improvements of everyday performance may be more important than large improvements of rare performance.**

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



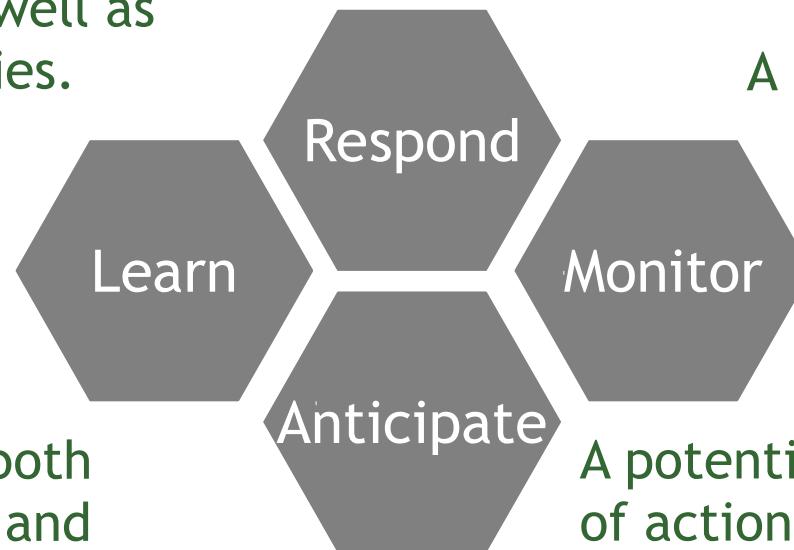
Potentials for resilient performance

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 **monitor** what happens - externally and internally.



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.

The Resilience Assessment Grid (RAG)



		Target*	Status
Event list	Is there a prepared list of possible and potential events or conditions for which the system should be ready to respond?		
Relevance of event list	Has the list been verified and/or is it revised on a regular basis?		
Response set	Have responses been planned and prepared for every event in the list? Do people know what to do when one of these events occur?		
Relevance of response set	Does the system check that the responses are adequate? How, and how often, is this done?		
Response start and stop	Are the triggering criteria or threshold well defined? Are there clear criteria for when to return to a "normal" state?		
Activation & duration	Can an effective response be activated fast enough? Can it be sustained as long as needed?		
Response capability	Are there sufficient support and resources to ensure response readiness (people, equipment, materials)?		
Verification	Is the readiness to respond (response capability) adequately maintained? Is the readiness to respond verified regularly?		
		Target	Status
Indicator list	Does the organisation have a list of regularly used performance indicators?		
Relevance	Is the list verified and/or revised on a regular basis?		
Validity	Has the validity of indicators been established?		
Delay	Is the delay in sampling indicators acceptable?		
Sensitivity	Are the indicators sufficiently sensitive? Can they detect changes and developments early enough?		
Frequency	Are the indicators measured or sampled with sufficient frequency? (Continuously, regularly, every now and then)		
Interpretability	Are the indicators / measurements directly meaningful or do they require some kind of analysis?		
Organisational support	Is there a regular inspection scheme or schedule? Is it properly resourced? Are the results communicated and put to use?		
		Target	Status
Selection criteria	Does the organisation have a clear plan for which events to learn from (frequency, severity, value, etc.)?		
Learning basis	Does the organisation try to learn from things that go well or does it only learn from failures?		
Learning style	Is learning event driven (reactive) or continuous (scheduled)?		
Categorisation	Are there any formal procedures for data collection, classification, and analysis?		
Responsibility	Is it clear who is responsible for learning? (Is it a common responsibility or assigned to specialists?)		
Delay	Does learning function smoothly or are there significant delays in the learning process?		
Resources	Does the organisation provide adequate support for effective learning?		
Implementation	How are 'lessons learned' implemented? (Regulations, procedures, training, instructions, redesign, reorganisation, etc.)		
		Target	Status
Corporate culture	Does the corporate culture encourage thinking about the future?		
Acceptability of uncertainty	Is there a policy for when risks / opportunities are considered acceptable or unacceptable?		
Time horizon	Is the time horizon of the organisation appropriate for the kind of activity it does?		
Frequency	How often are future threat and opportunities assessed?		
Model	Does the organisation have a recognisable and articulated model of the future?		
Strategy	Does the organisation have a clear strategic vision? Is it shared?		
Expertise	What kind of expertise is used to look into the future? (In-house, outsourced?)		
Communication	Are the expectations about the future known throughout the organisation?		

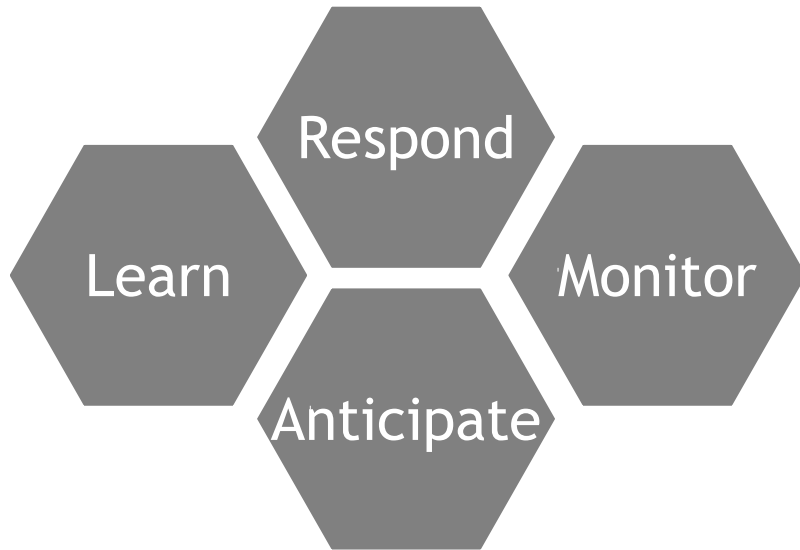
Comprises four sets of questions, one for each potential. The questions are:

SPECIFIC – address issues that are important for a concrete organisation.

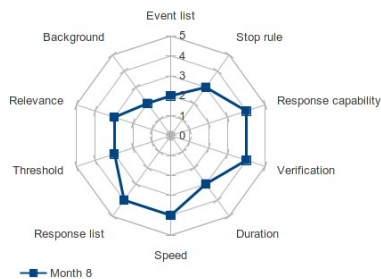
DIAGNOSTIC – point to details of a potential that are meaningful to assess.

FORMATIVE – answers can be used to make decisions about how to improve potentials.

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.





RESILIENT HEALTH CARE

“Health is more than the absence of disease”
“Safety is more than the absence of risk”

The 8th RHCN Meeting will be held from August 26th (Mon) to 28th (Wed) 2019 at in Awaji Island, Hyogo, Japan.

The meeting will be preceded on August 25 by a small group workshop or a larger symposium like the one in Sydney in 2015.

