Resilient Healthcare

Resilience

It’s not you, it’s the System

Dr Carl Horsley

HQSC Deteriorating Patient Workshop

You are in the wrong room

Resilience

is the ability of the team/system to

monitor and **adjust**

performance to achieve its goals,

even when the unexpected happens.

Understand "Safety II"

Understand system resilience

Understand adaptive teams

Outline

Introduction to Safety II

The Building Blocks of a resilient system

Respond	adaptive teams
Monitor	the expectation gap
Anticipate	seeing the future
Learn	fixing the right problems

Conclusion (Hand holding and singing)

Rules of Engagement

- This is a workshop
- You have the answers
- Share the airtime
- We will be timing you

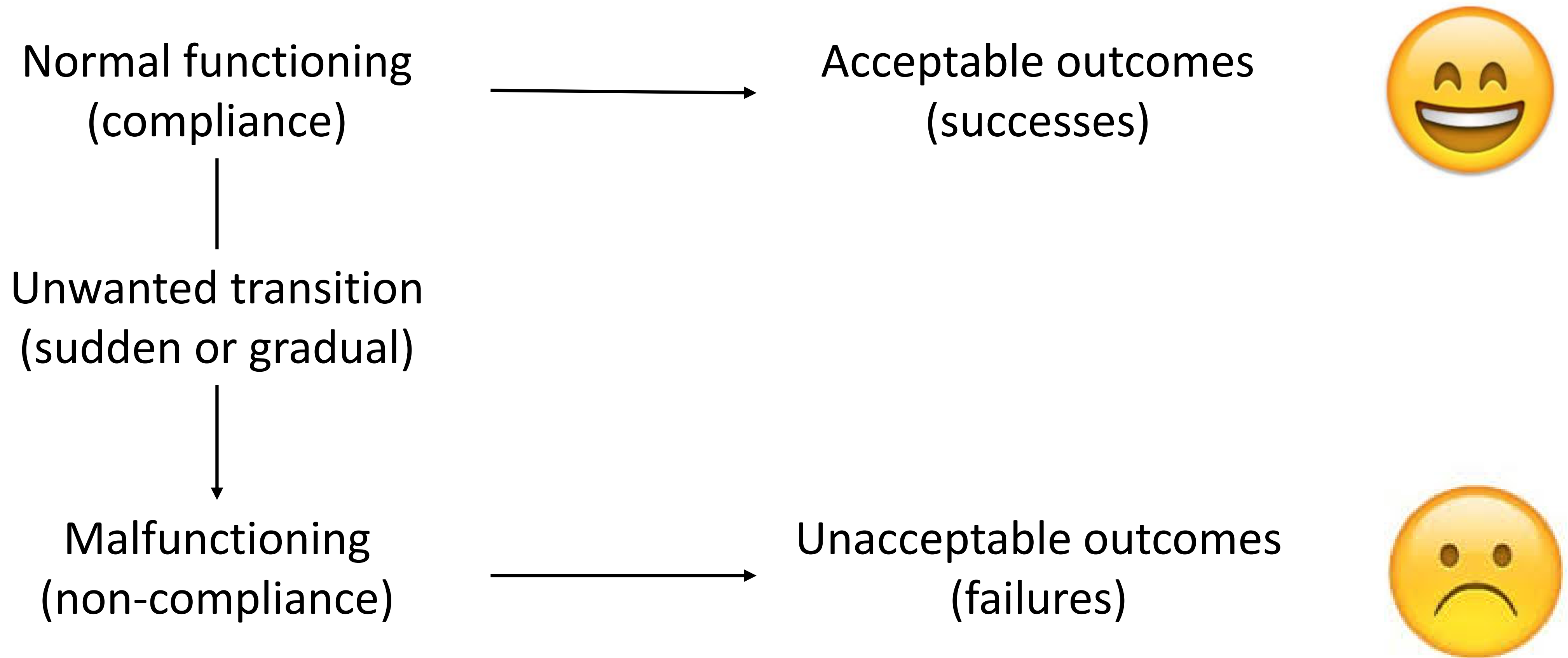
Your Workplace

“Work-As-Imagined”

The Aim of Safety

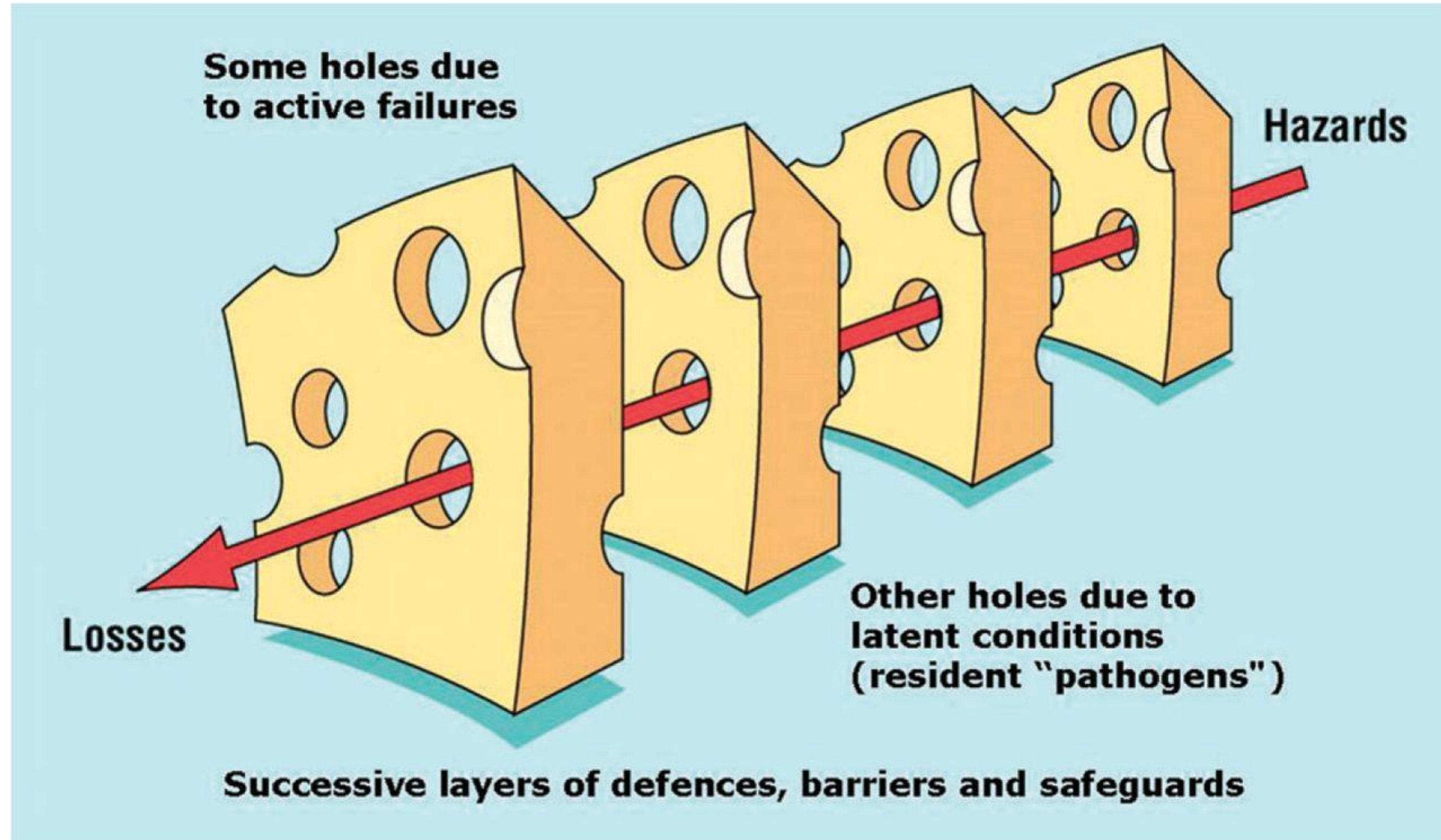
*That as few things as possible go **wrong***

The Current View of Safety – Safety I



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

The Swiss Cheese Model



Incident

Find and Fix

Compliance
1
2
3

More
Defenses

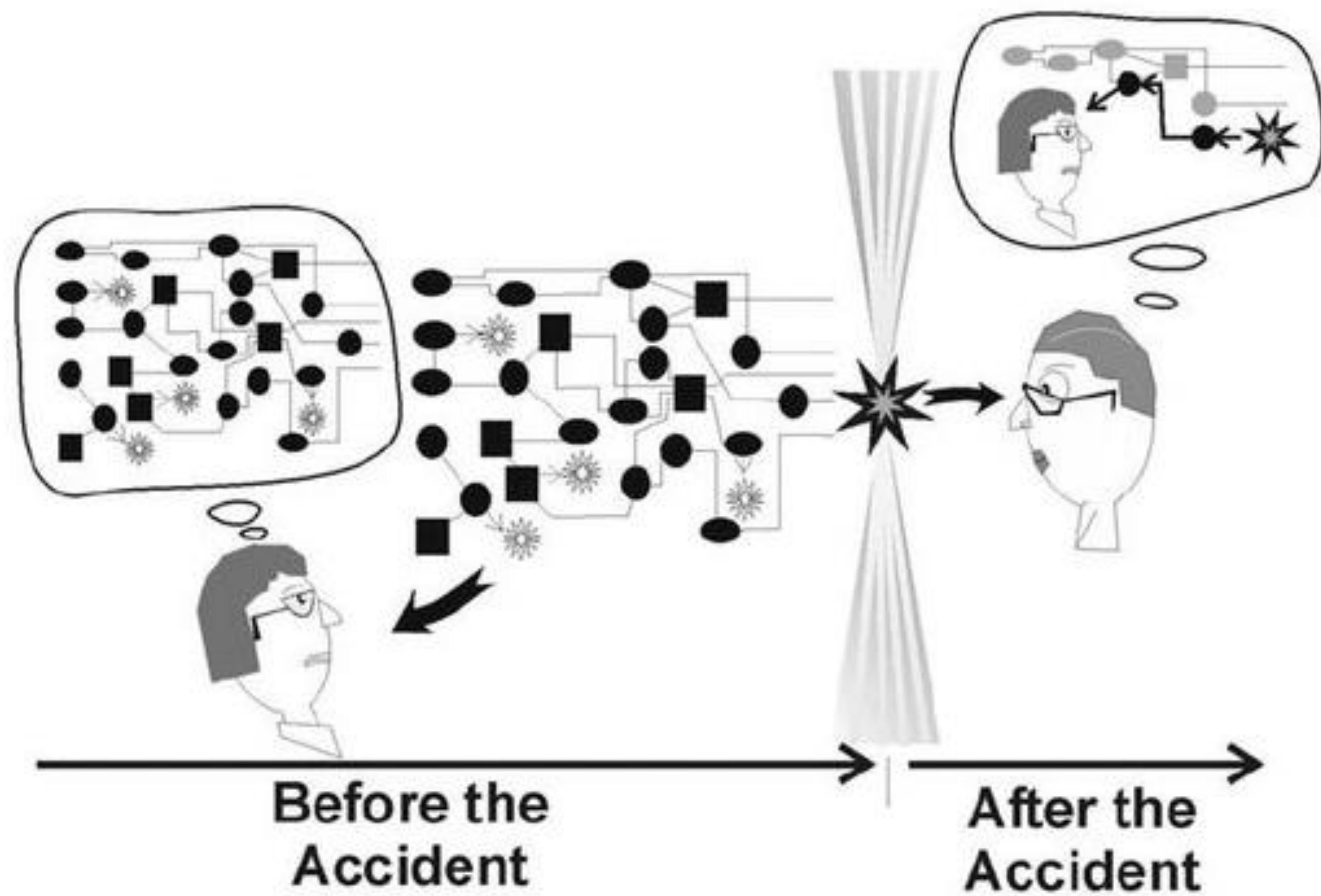
People are a liability

Safety - I

Definition of safety	That as few things as possible go wrong
Safety management principle	Reactive; responds when something happens or something is deemed an unacceptable risk
View of the human factor in safety	Humans are predominantly seen as a liability or hazard
Accident investigations	Accidents are caused by failures and malfunctions. The purpose of investigations is to identify the causes.
Risk Assessment	Accidents are caused by failures and malfunctions. The purpose of investigations is to identify the causes and contributory factors

Why isn't it working as hoped?

Reactive
Retrospective
Biased



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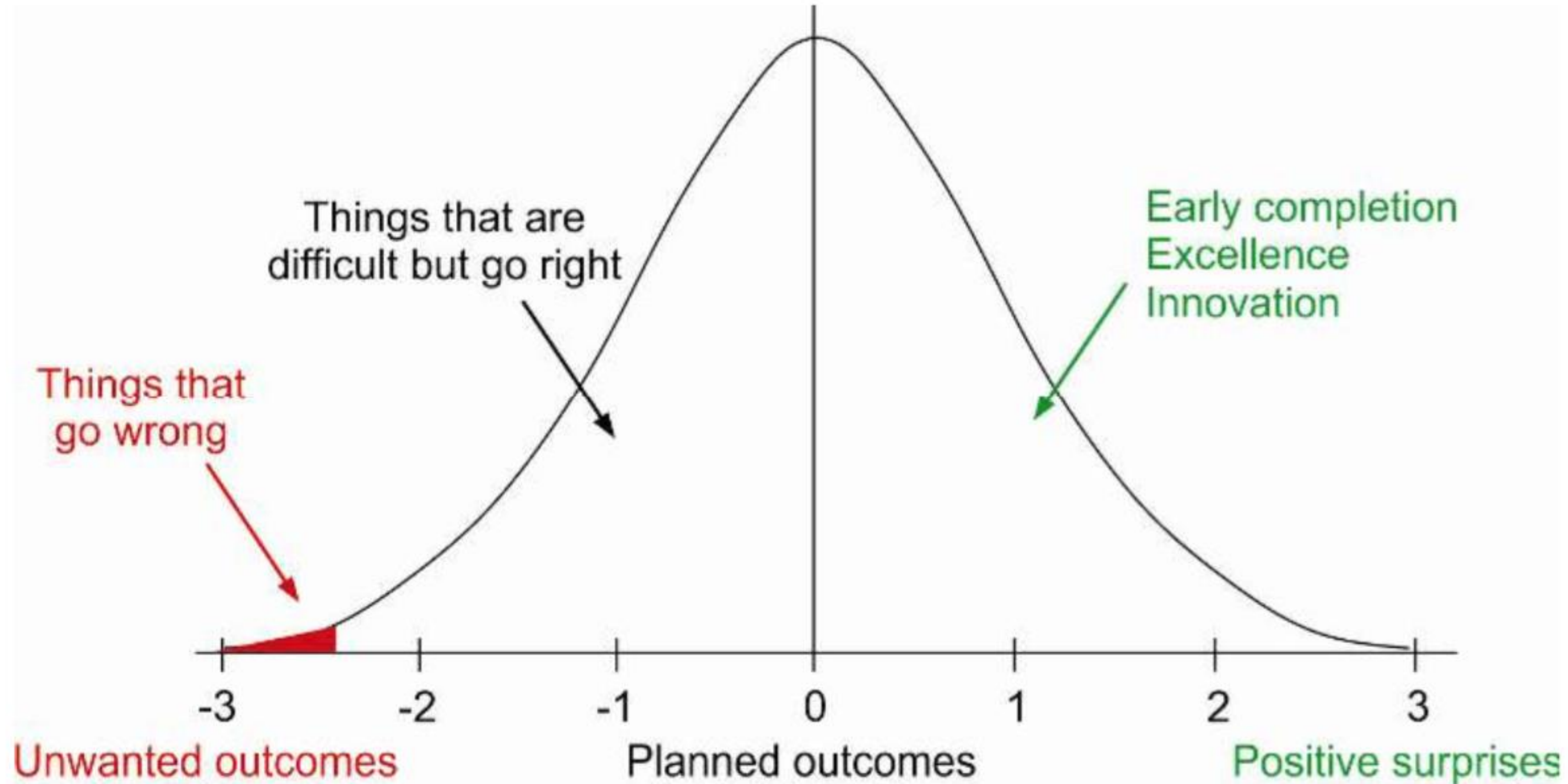
Limits Learning About Our Systems



Trying to understand **safety** by only looking at **incidents**…

…is like trying to understand successful **marriage** by only looking at **divorces**.

Marit de Vos 2018

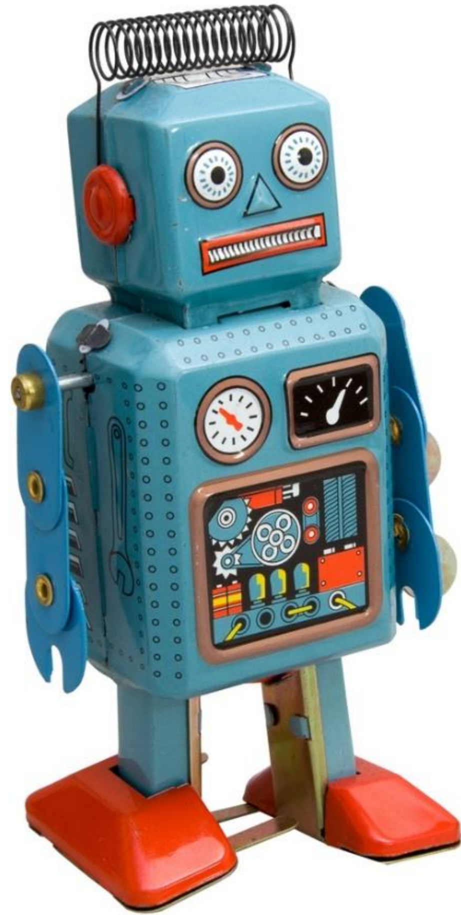
Creates Brittleness

Hides the sources of
Adaptability
and
Innovation

Can Make Normal Work Harder

and More Complex

Changes the way we see ourselves



Healthcare Worker

Patient and family

Zero or -1 ?

Normal functioning
(compliance)

"Nothing to see here"

Unwanted transition
(sudden or gradual)

Malfunctioning
(non-compliance)

"I can't believe you did that"

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

Upgrade the Components

- Re-education
- Team drills

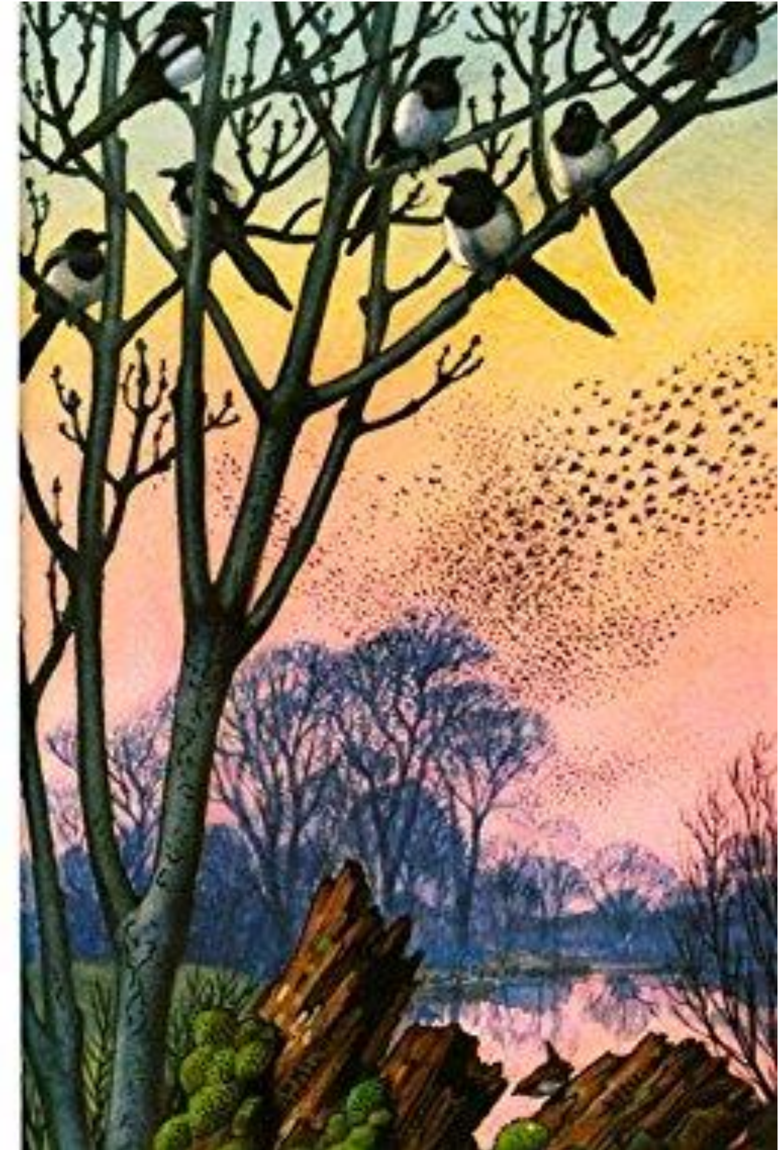
- Mindfulness
- Empathy training

Leanne has been staring at this beautiful tree for five hours.

She was meant to be in the office. Tomorrow she will be fired.

In this way, mindfulness has solved her work–related stress.

22



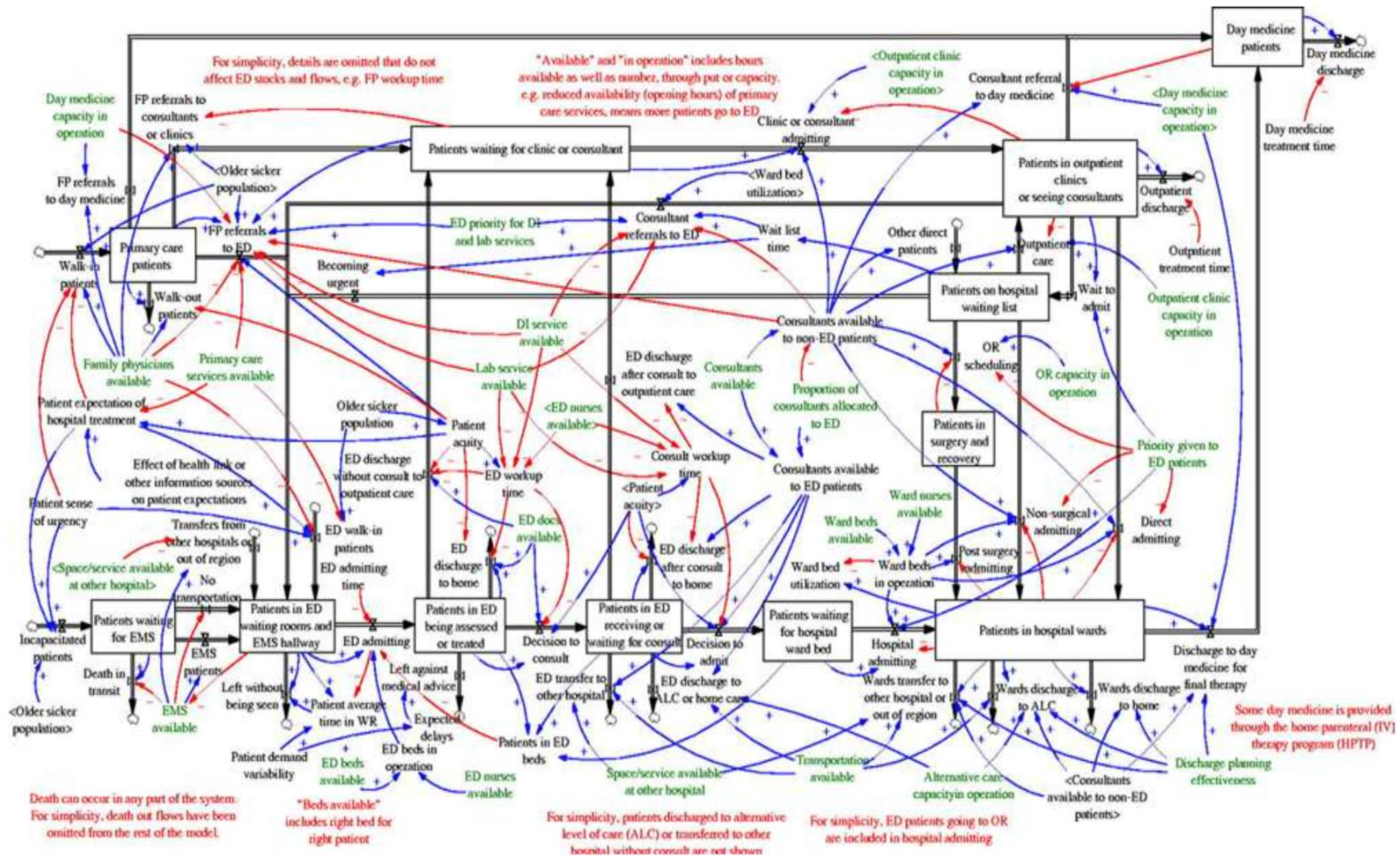
Staff Burnout and Disengagement

The Fundamental Problem

The Cheese Is ALIVE!

Starlings by Elbow 2008

Work-As-Done (WAD)



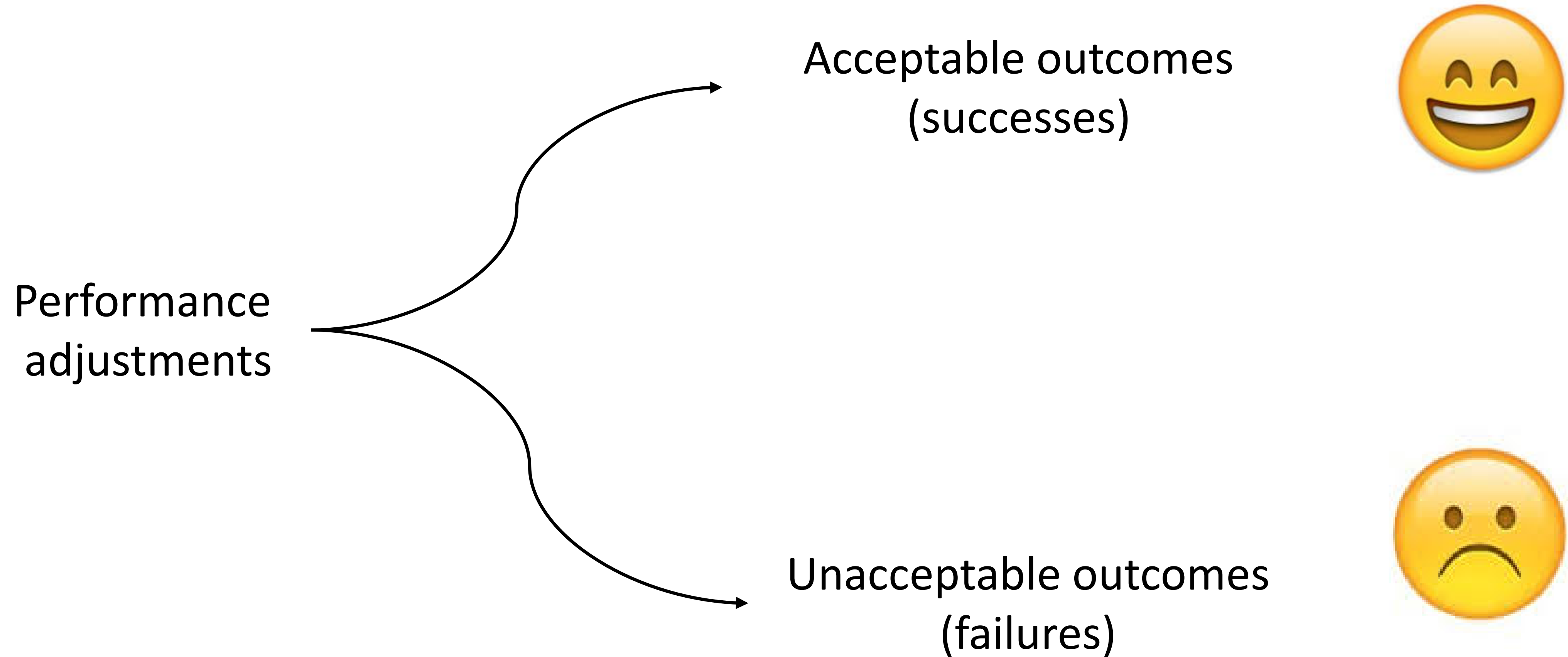
Hollnagel *The ETTO Priciple: Efficiency Thoroughness Tradeoff* 2009

WAD

MIND THE GAP

WAI

The New View – Safety II



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

The system only succeeds
because *people/teams*
are able to adjust to meet the
conditions of work

Complexity is the problem…

People are the solution

The New Aim of Safety

*That as many things as possible go **right***

Safety - II

Definition of safety	That as many things as possible go right
Safety management principle	Proactive, continuously trying to anticipate developments and events
View of the human factor in safety	Humans are seen as a resource necessary for system flexibility and resilience
Accident investigations	The purpose of an investigation is to understand how things usually go right as a basis for explaining how things occasionally go wrong
Risk Assessment	To understand the conditions where performance variability can become difficult or impossible to monitor and control

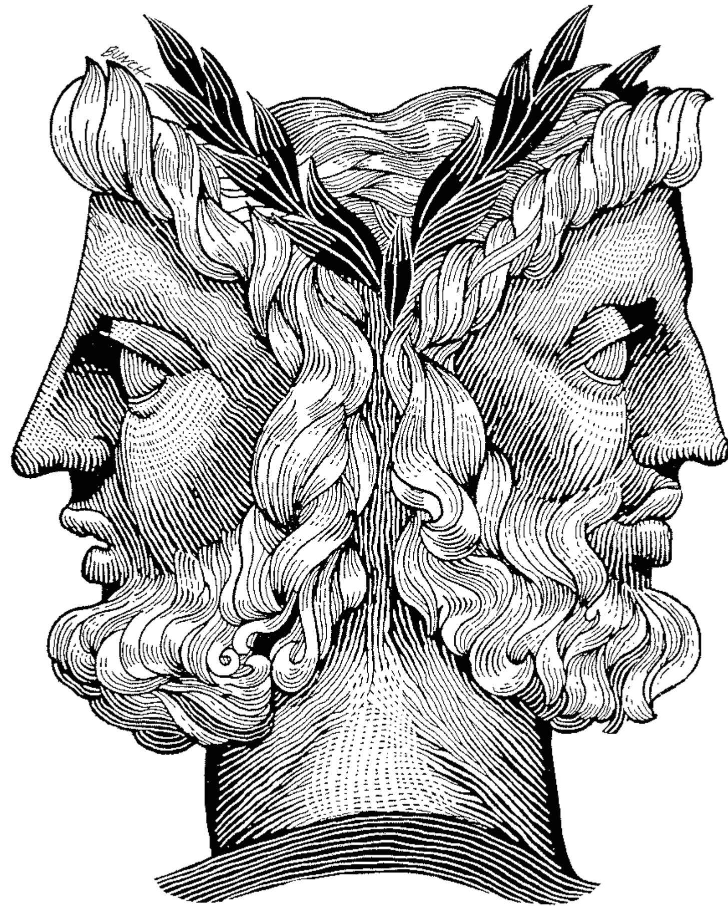
There is nothing so practical as a good theory.

— Kurt Lewin —

Lewin, K. (1943). Psychology and the process of group living. Journal of Social Psychology, **17**, 113–131.

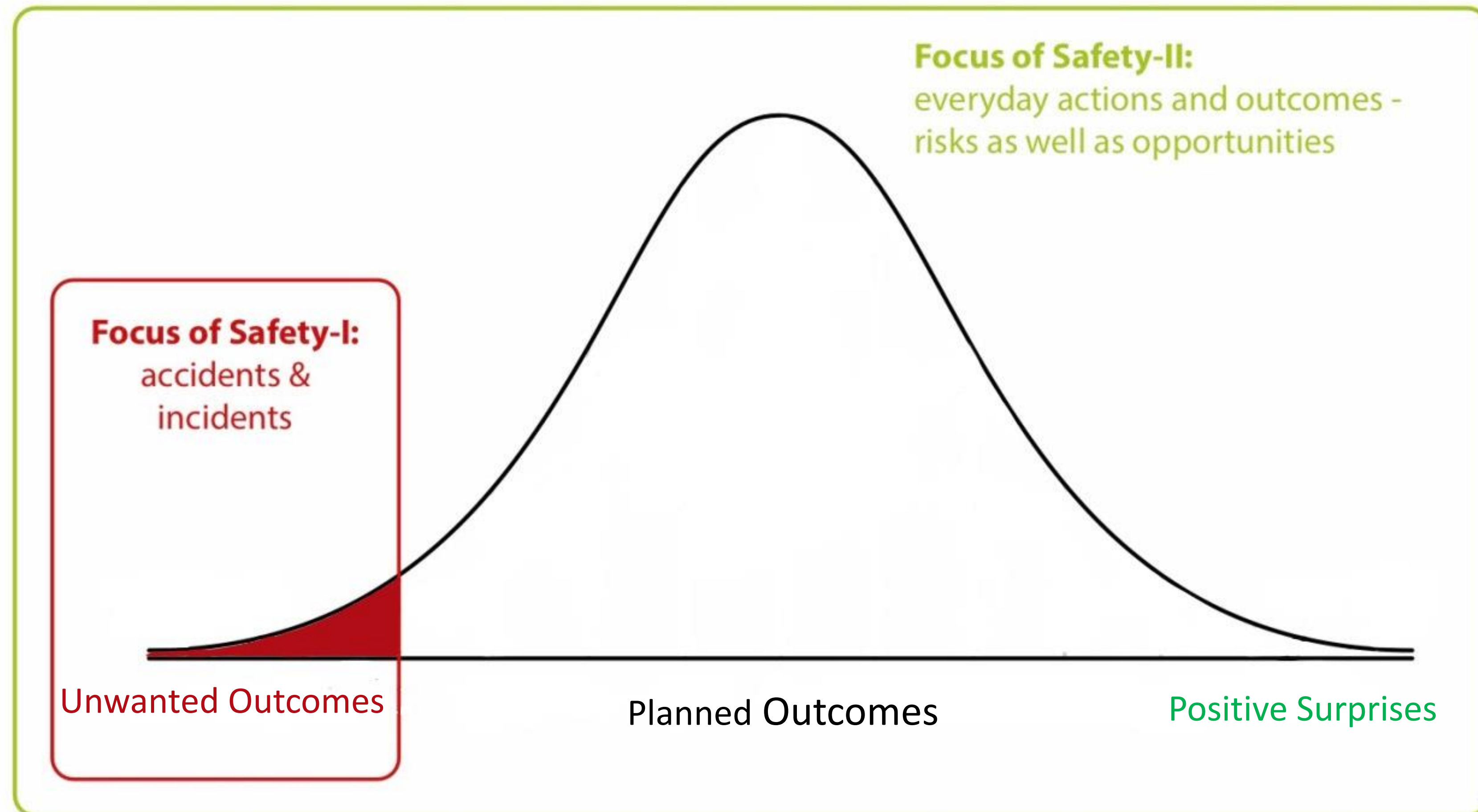
1. Make Usual Success More Likely

Are you making **failure** less likely?



Or usual **success** more likely?

2. Learn from all events



3. Build Resilient Systems

Resilience

is the ability of the team/system to

monitor and **adjust**

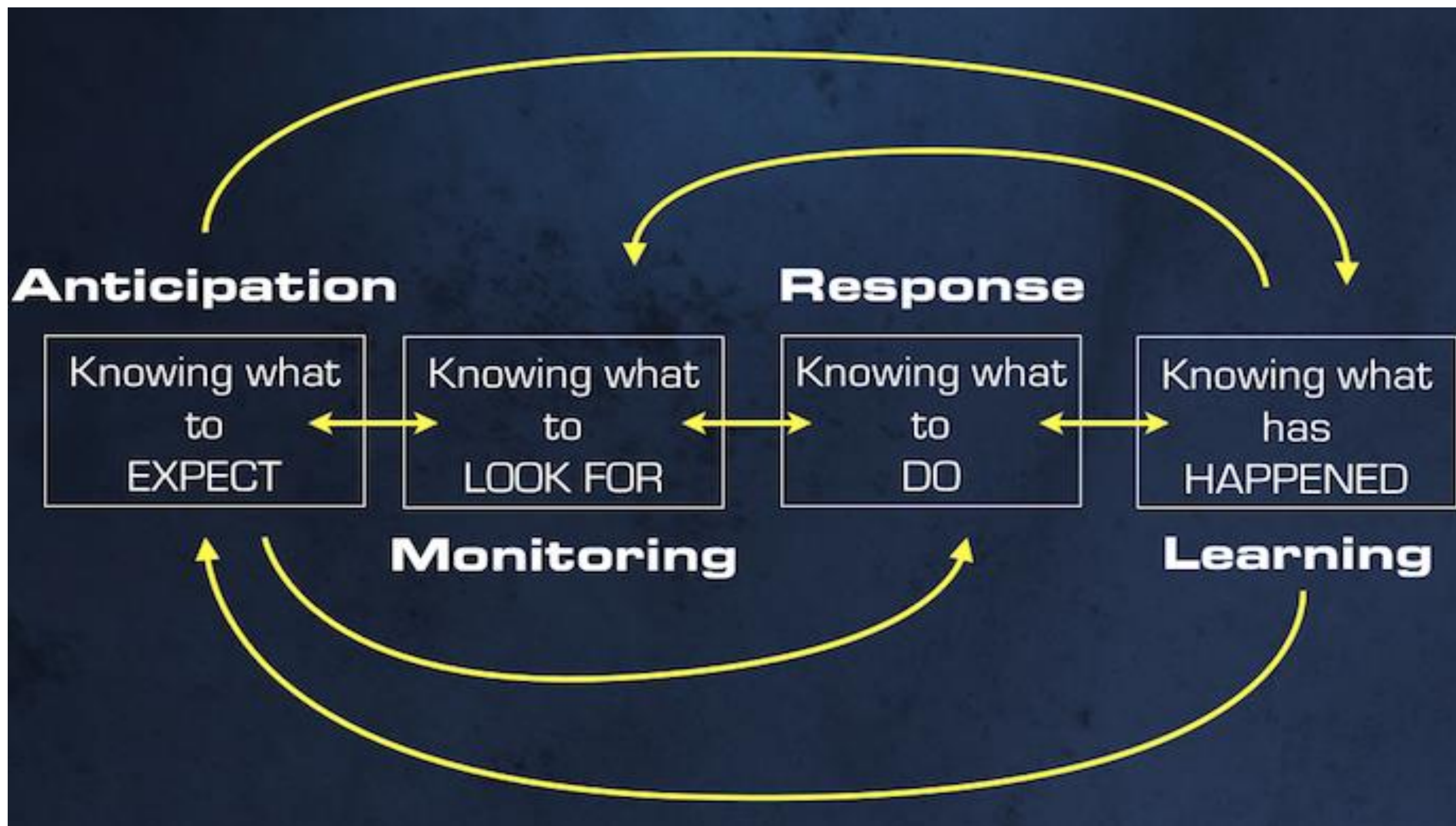
performance to achieve its goals,

even when the unexpected happens.

Balancing Creativity and Constraint

"In complex environments, resilience often spells success, while even the most brilliantly engineered fixed solutions are often insufficient or counterproductive."

Gen Stanley McChrystal *Team of Teams* 2015



Anticipation
Response
Knowing what to EXPECT
Knowing what to LOOK FOR
Knowing what to DO
Knowing what has HAPPENED
Monitoring
Learning

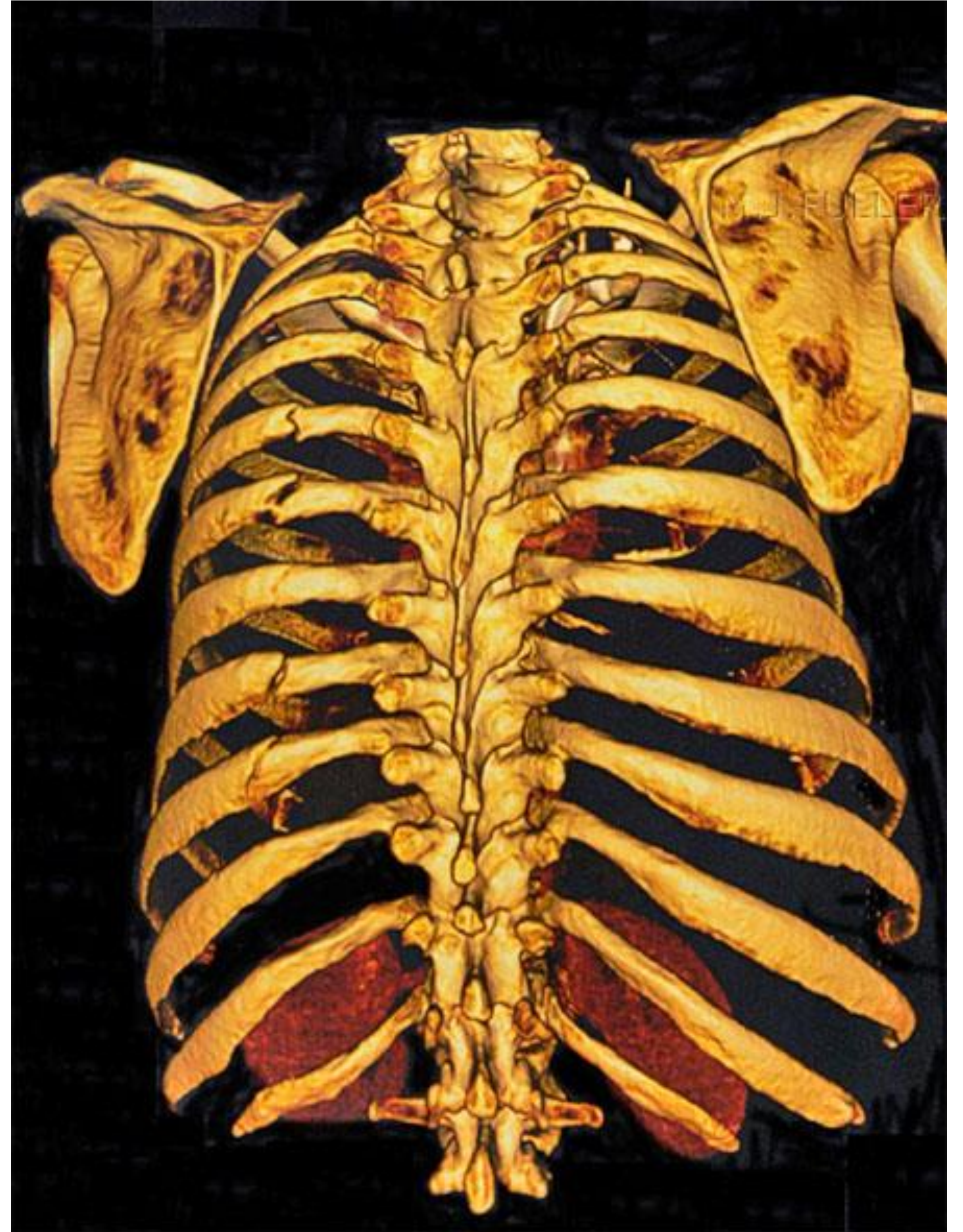
1. Respond

Case: Mr T

- 72 year old man
- History of heavy alcohol use
- Smoker - COPD
- AF on dabigatran
- Recurrent falls
- Malnourished
- Lives alone, family visit

- Fall 3 days ago
- Admitted with multiple fractured ribs
- CT Head – atrophy; no bleed

- PCA for analgesia
- Admitted for observation
- Alcohol withdrawal scale



RRT Call to the Ward – 3 days after admission

- Found on floor
- Confused
- Low blood pressure
- Falling oxygen levels
- Fever

Resus chart:

"wants everything done"

Efficiency

Cardiac arrest

Adaptability

Mr T

Workshop Question 1 – 10 minutes

Who is "the team" for this patient?

How do you train for adaptability in the setting of urgency and uncertainty?

The quanta of healthcare = team

The Law of Requisite Variety

"The greater the variety of responses,

the greater the variety of conditions the system can cope with"

First Law of Cybernetics: Ashby, 1956

Requisite variety

A Change in Communication

Team performance in

Uncertainty
and
Interdependence

Psychological safety

A shared belief held by the team

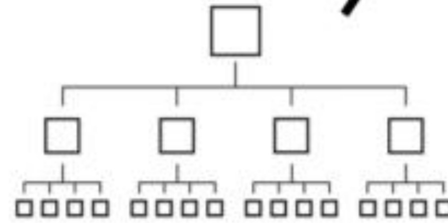
that the team is safe for

interpersonal risk taking

Google “Project Aristotle” (see rework.withgoogle.com)

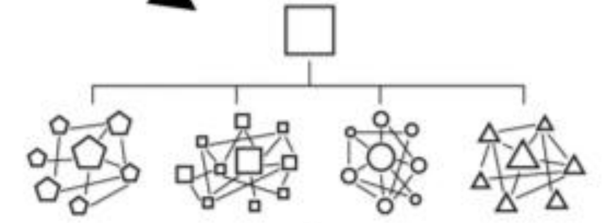
INTENT BASED LEADERSHIP
CREATE AN ENVIRONMENT FOR PEOPLE TO CONTRIBUTE SO
THAT THEY FEEL VALUED AND REACH THEIR POTENTIAL

Cross Boundary Teaming



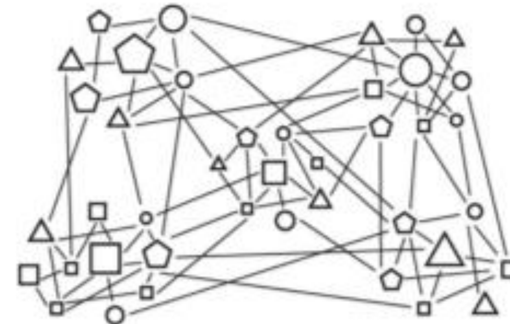
Command

A traditional top-down structure. The connections that matter are between workers and their managers.



Command of Teams

Small teams operate independently but still within a more rigid superstructure



Team of Teams

The relationship among teams resembles the closeness among individuals on those teams.

Gen Stanley McChrystal *Team of Teams* 2015

CRITICAL CARE
COMPLEX

Team Resilience

1 Does everyone know what's going on?

SBAR → PREBRIEF → RECAP

2 Does everyone know who is doing what?

- ROLE CLARITY
- LEADERSHIP + ACTIVE FOLLOWERSHIP

3 Are we clear in our communication?

- NAMED PERSON
- READ BACK
- CLOSED LOOP

4 How do we ensure we reach our goals?

Even when things change?

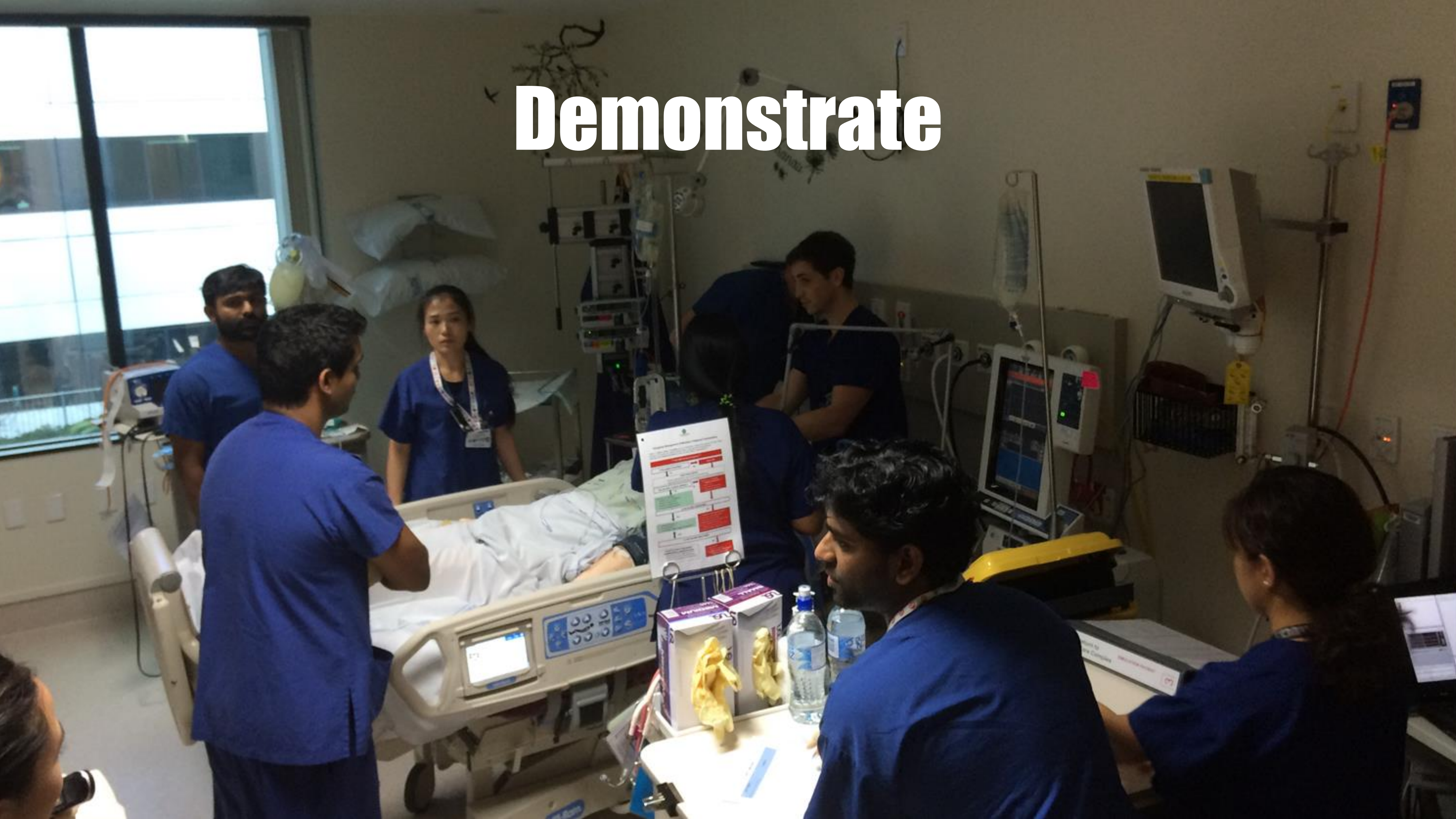
- ANTICIPATE
- MONITOR
- RESPOND
- LEARN

5 How do we speak up if we have concerns?

- ENQUIRE
- ADVOCATE
- ASSERT

6 How do we make it safe to speak up?

- REDUCING HIERARCHIES
- VALUING SPEAKING UP
- FOCUS ON LEARNING


Demonstrate

Reinforce and Model

"Interwoven into the daily"

(Credit: Rob Suisted www.naturespic.com)

“Structured variability”

Improved team organising

Proactive safety behaviours

Psychological Safety

Some Surprises

EXPECTATIONS

Followers help leaders lead

2. Monitor

Mr T: the previous day

↑Alcohol Withdrawal Scale
SHO review → diazepam

Increasing productive cough

NZEWS (electronic) had been adjusted on day 1 - ↑RR

Workshop Question 2 – 10 minutes

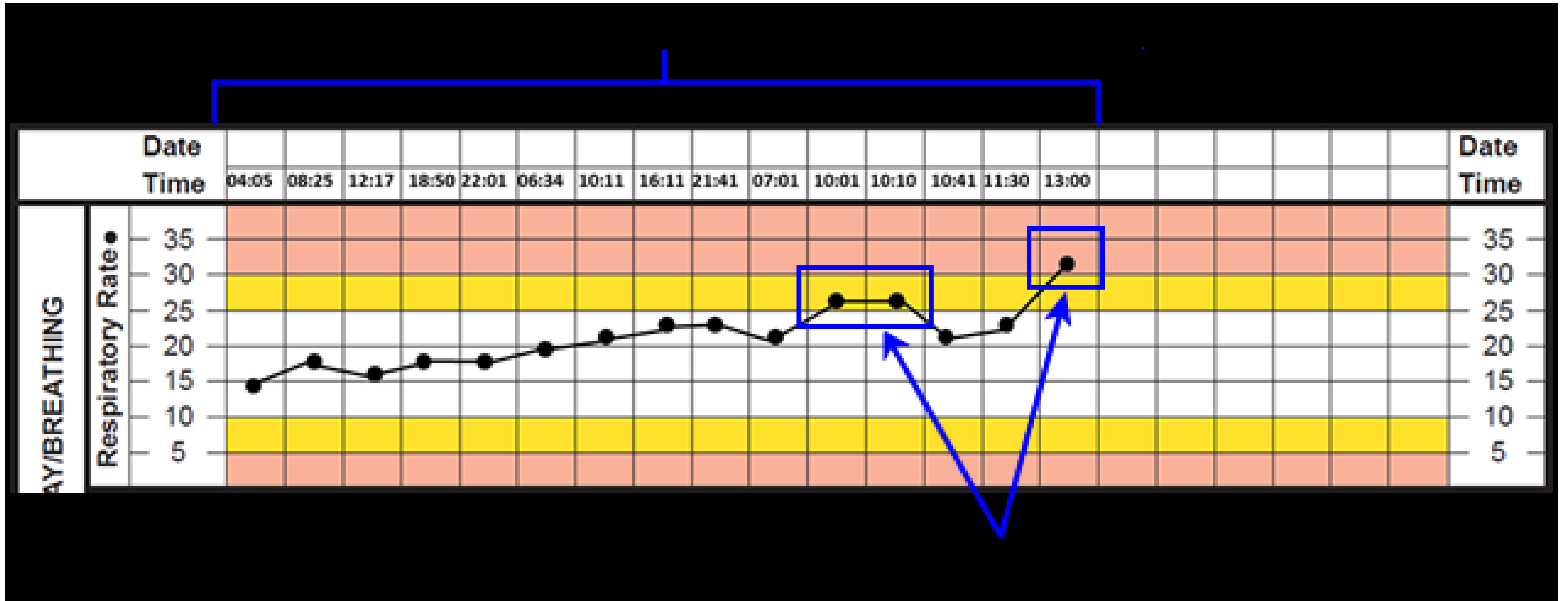
How would you design the system to make sure that patient deterioration was never identified?

Knowing what to look for

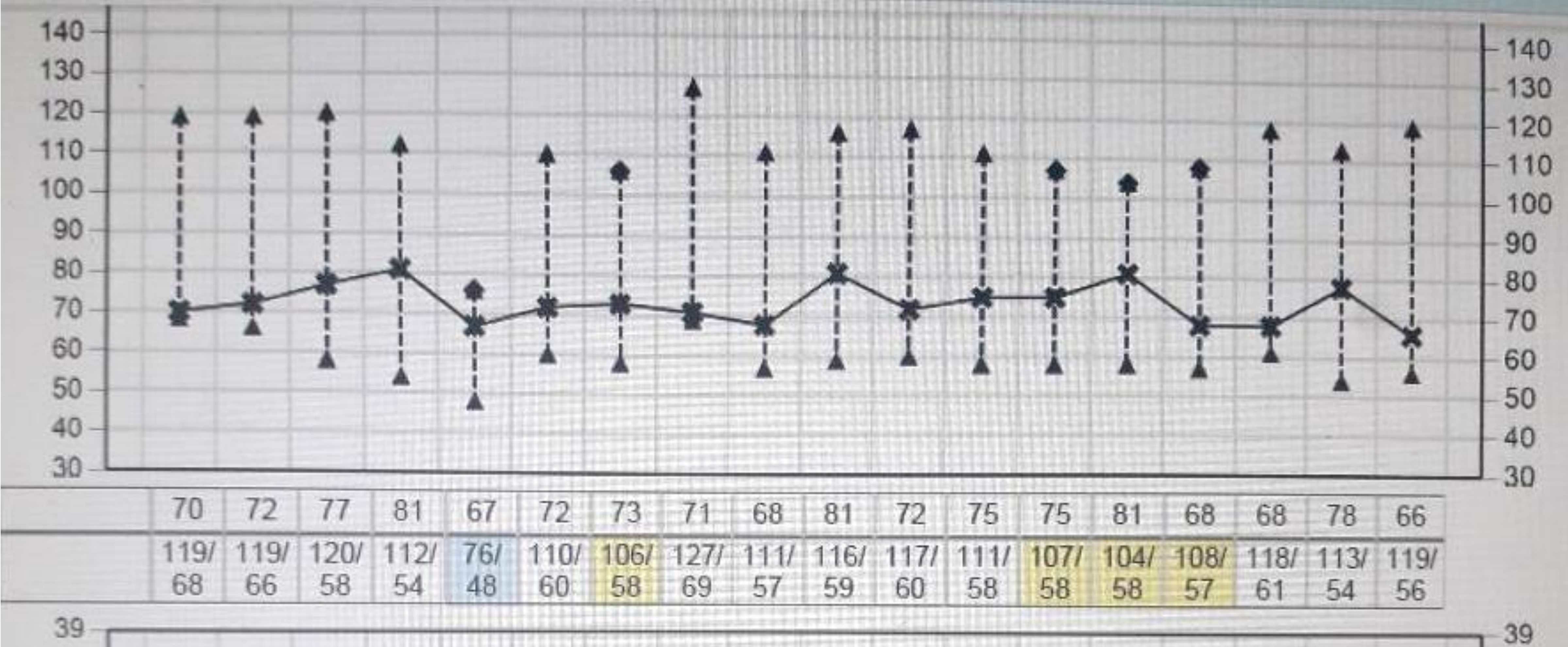
Identifying the gap between our expectations and the reality of the situation

Tools to make the situation visible

Out with the old...



And in with the new...



It's Not Just About NZEWS

- Staff non NZEWS referrals to Patient At Risk Team
- Amber Care
- Korero Mai/ Call for Concern

Are all additional potential sources of monitoring **BUT…**

3. Anticipate

Mr T: an update

- Mr T’s daughter arrives
- Upset and surprised that Mr T had deteriorated
- Very concerned about him earlier

- States he has been deteriorating for months and he would not wish for heroic treatments

Workshop Question 3 – 10 minutes

How could we enable staff to anticipate issues?

How could we enable patients/families to anticipate issues?

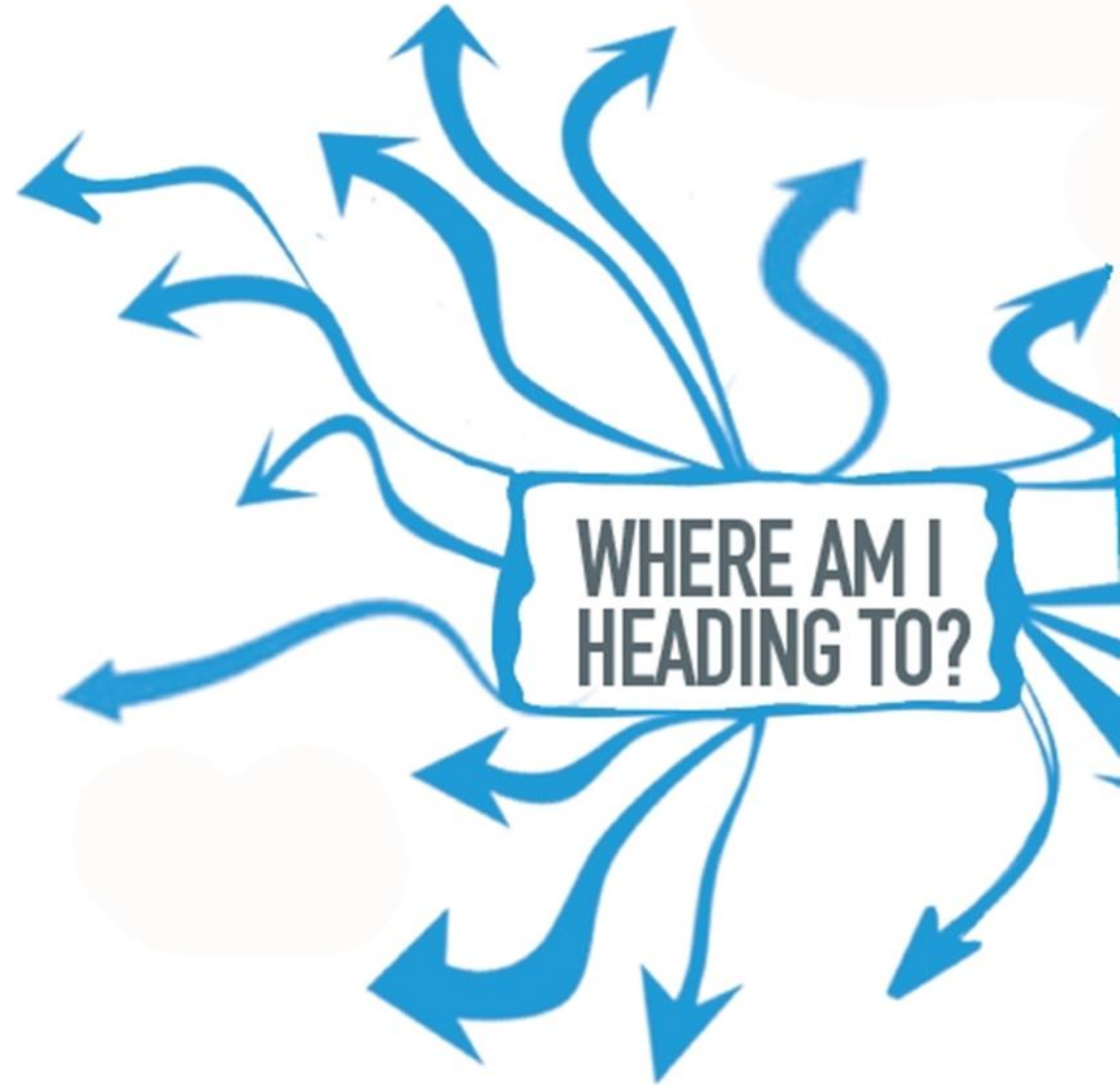
How do we anticipate the patients wishes if things change?

Knowing What to Expect

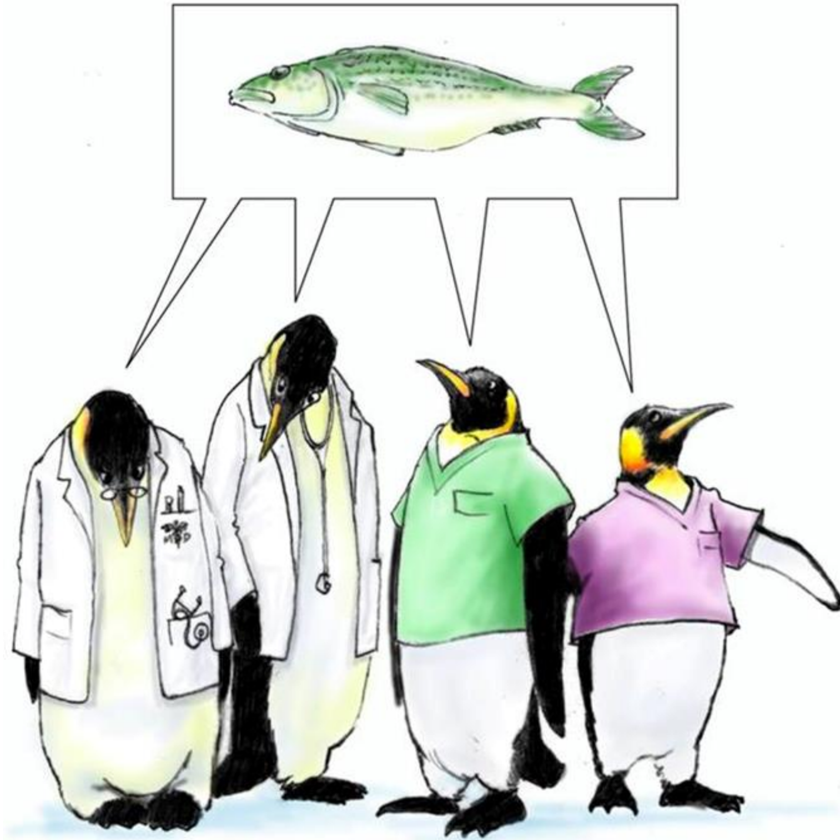
Knowing where we are

Knowing what SHOULD happen

Knowing what MIGHT happen



Anticipation



Hinges on building a shared understanding of:

- The current situation
- What should happen
- What might happen
- The values/wishes of the patient
- What we will do if things change

4. Learn

Mr T: an update

- Changed to focus on comfort and continues to deteriorate
- Mr T's son-in-law makes an HDC complaint about the failure to recognise deterioration earlier
- The HDC wants you to write a new policy and resus form

“When we fix the wrong thing for the wrong reason, the problems continue to happen.

It’s costly and demoralizing”

Brene Brown, **Dare to Lead**, 2018

Knowing What Has Happened

Safety II looks at usual success
to understand rare failures

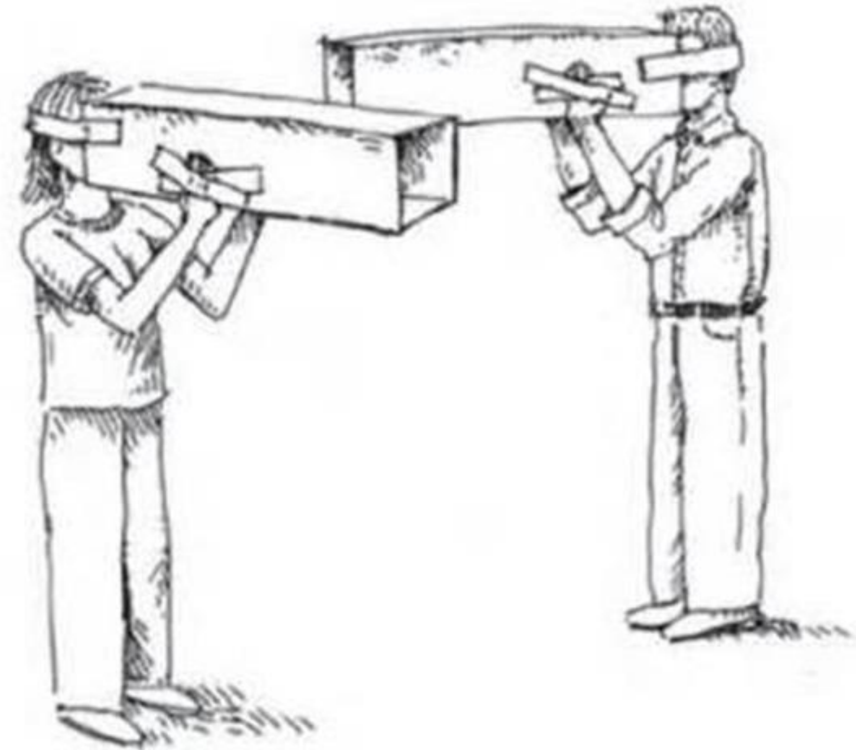
Requires understanding
Work- as-Done,
not just Work-as-Imagined

Local Rationality

People do things that make sense to <u>them,</u> given

their goals,
understanding of the situation
and
focus of attention

<u>at that time.</u>



WAD

MIND THE GAP

WAI

Clinicians are the only ones who have fundamental knowledge about the workflows that define their care. But they don't control the systems that set the context within which they work. The key question for a leader is, how do we make it easy for them to do it right?"

"If culture eats strategy for breakfast,

infrastructure eats culture for lunch"

Brent James, Chief Quality Officer
Intermountain Healthcare
NEJM Catalyst July 2017

Workshop Question 4 – 10 minutes

- How would you find out about Work-as-Done on a ward?
- How would you ensure any new rules are followable?

A Fundamental Change of Perspective

A Resilient System for Deteriorating Patients

ANTICIPATE	Advanced Care Planning and Goals of Care Building a shared understanding AMBER care bundle
MONITOR	NZEWS Korero Mai
RESPOND	Rapid response teams PAR/outreach
LEARN	Understanding Work-as-Done Making usual success easier

Summary

- We work in a complex adaptive system, not a factory
- People and teams are your key resource in creating safety
- Design your systems to make it easier for them

Singing and hand holding

“The mind, once stretched by a new idea, never regains its original dimensions”

Oliver Wendell Holmes

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