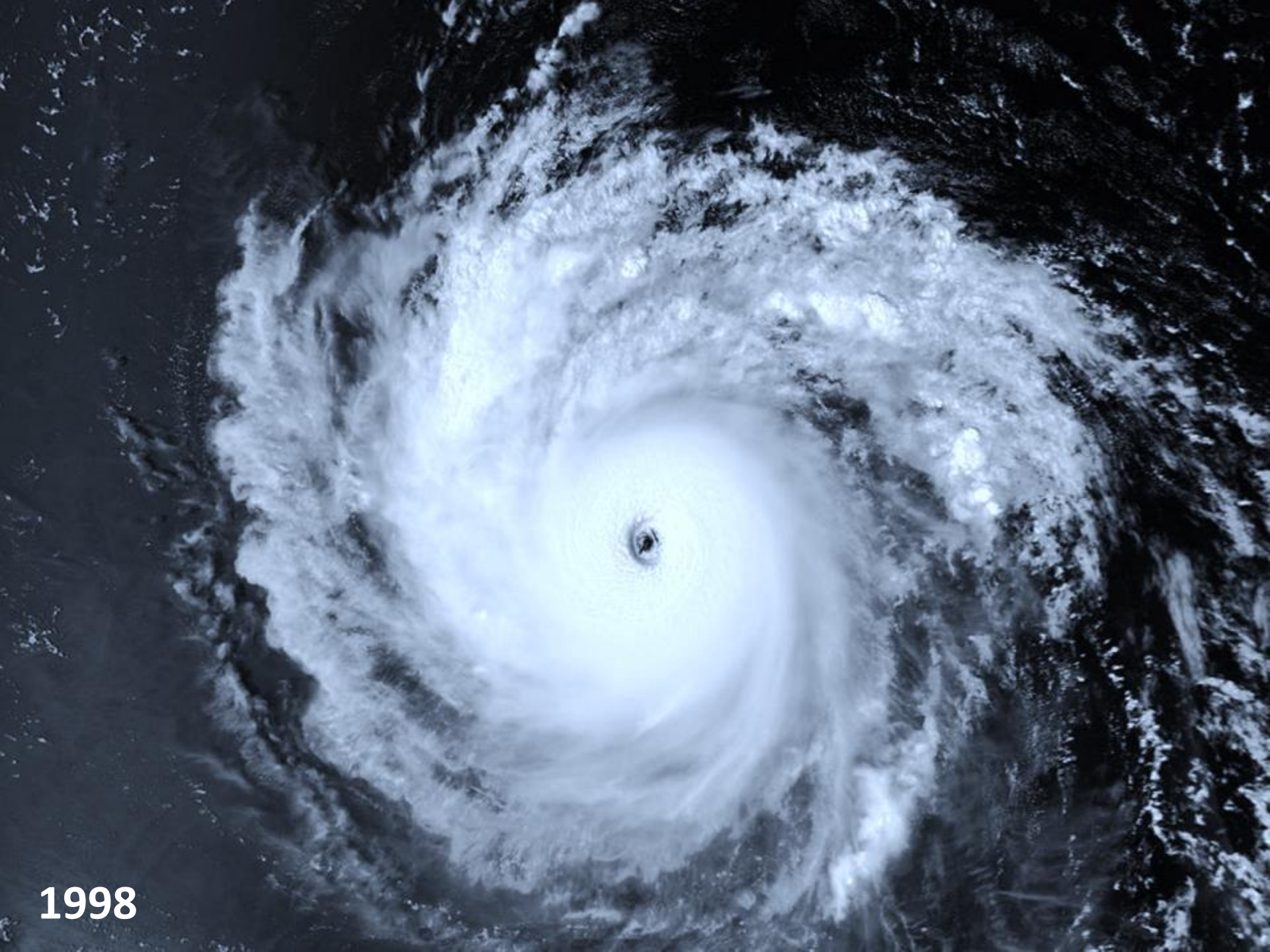


M3: Leadership for Improvement in Complex Healthcare Systems

Choluteca Bridge, Honduras

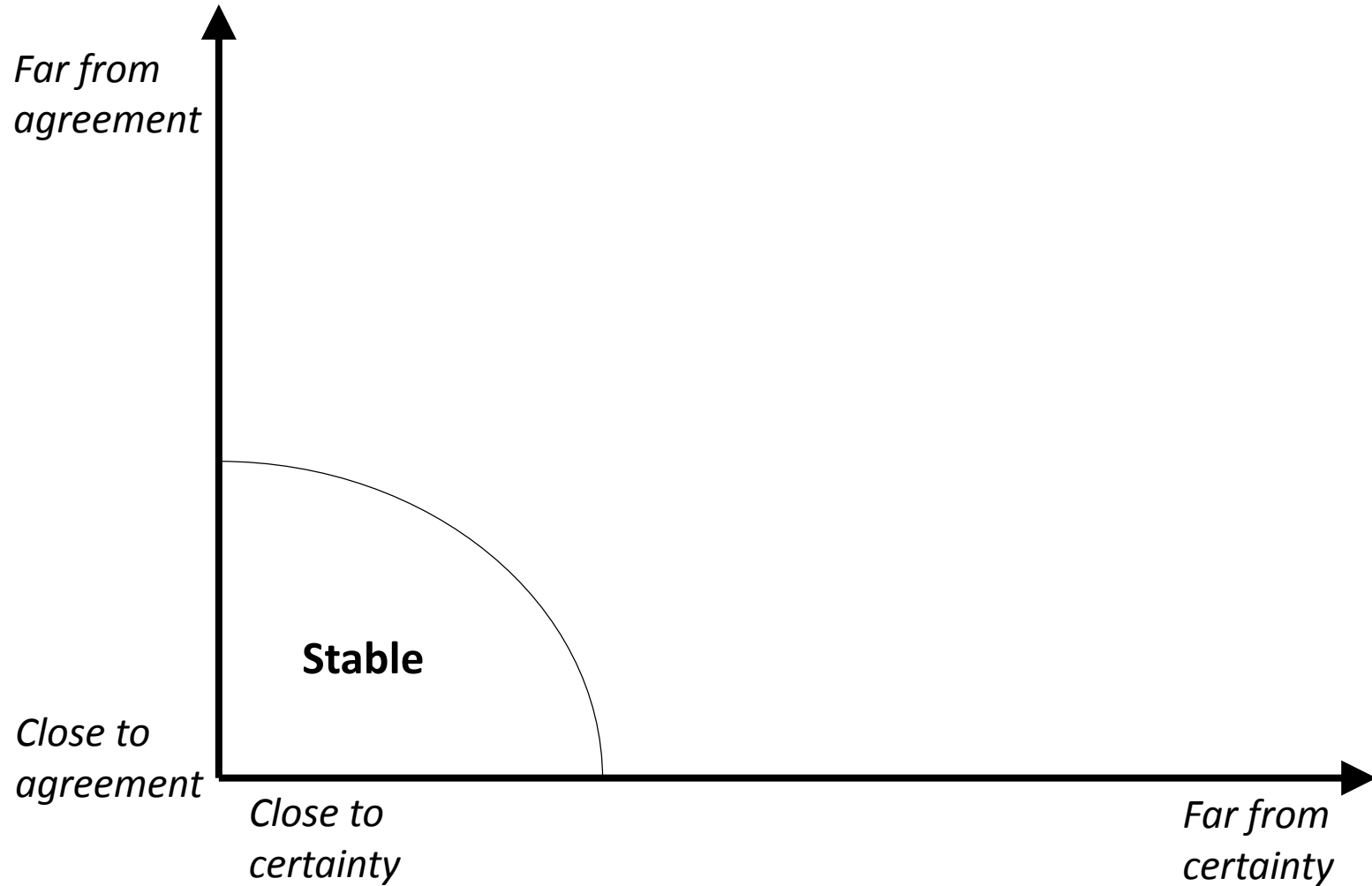




1998

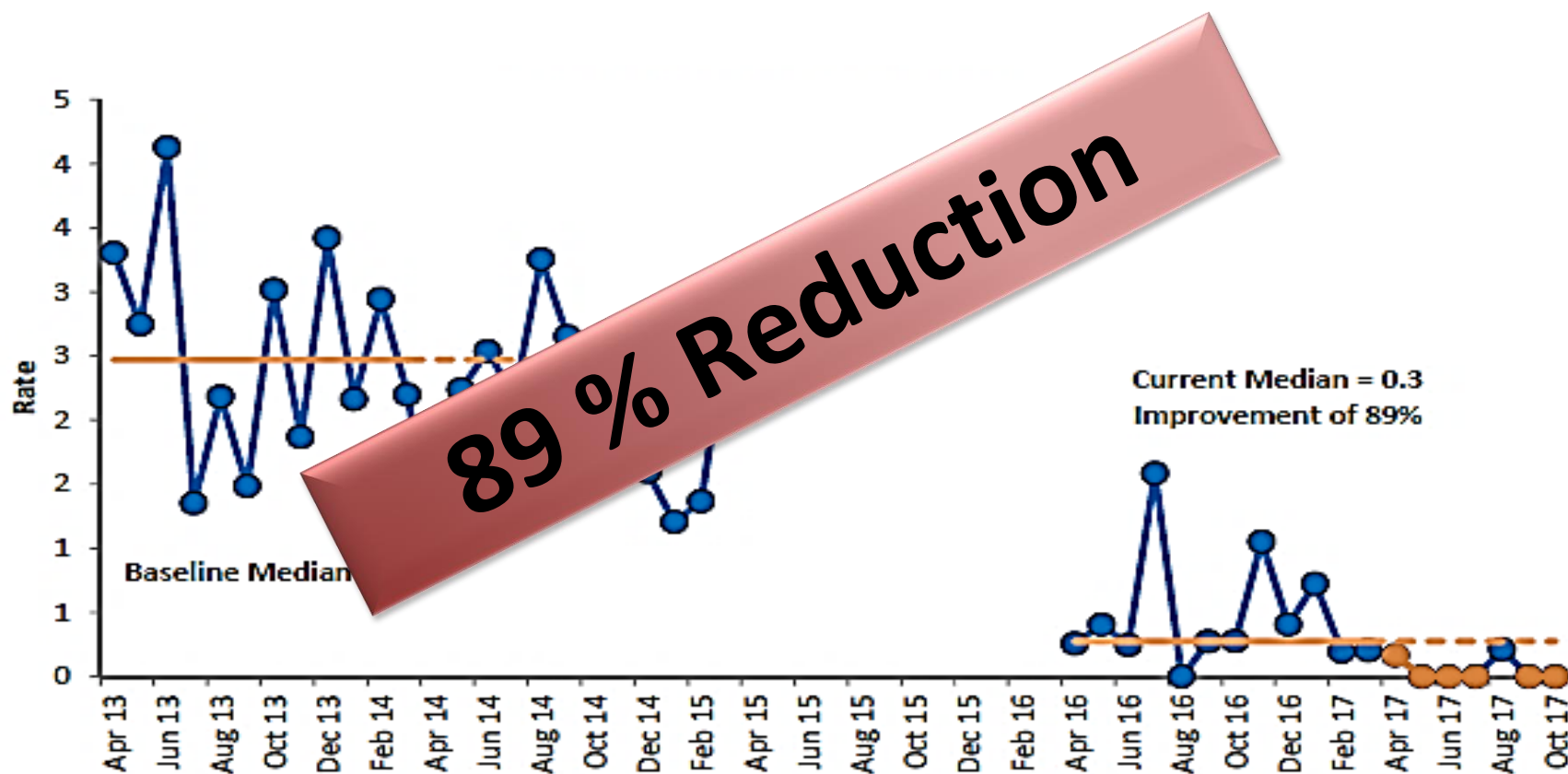


The Nature of the Challenge

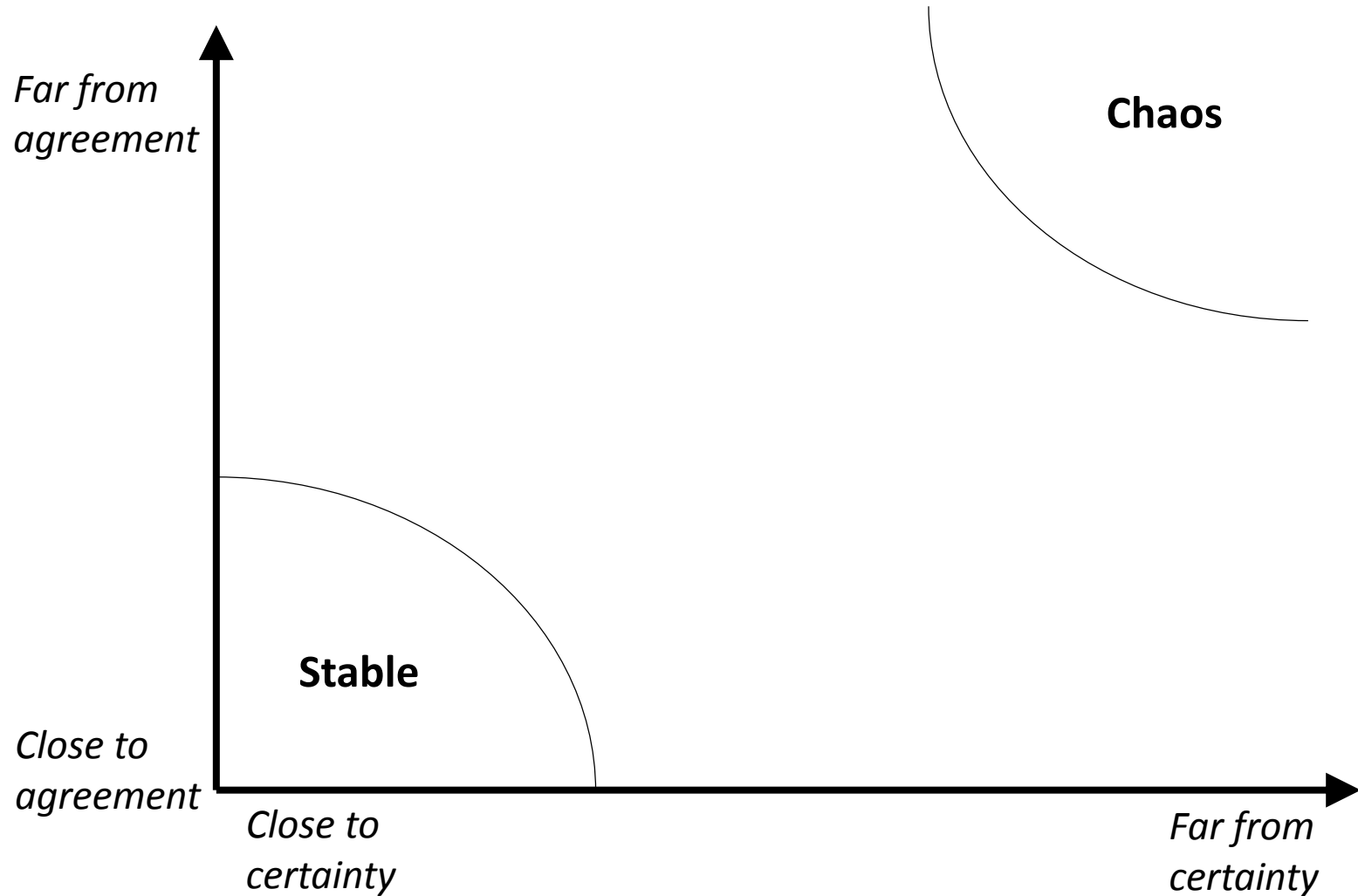




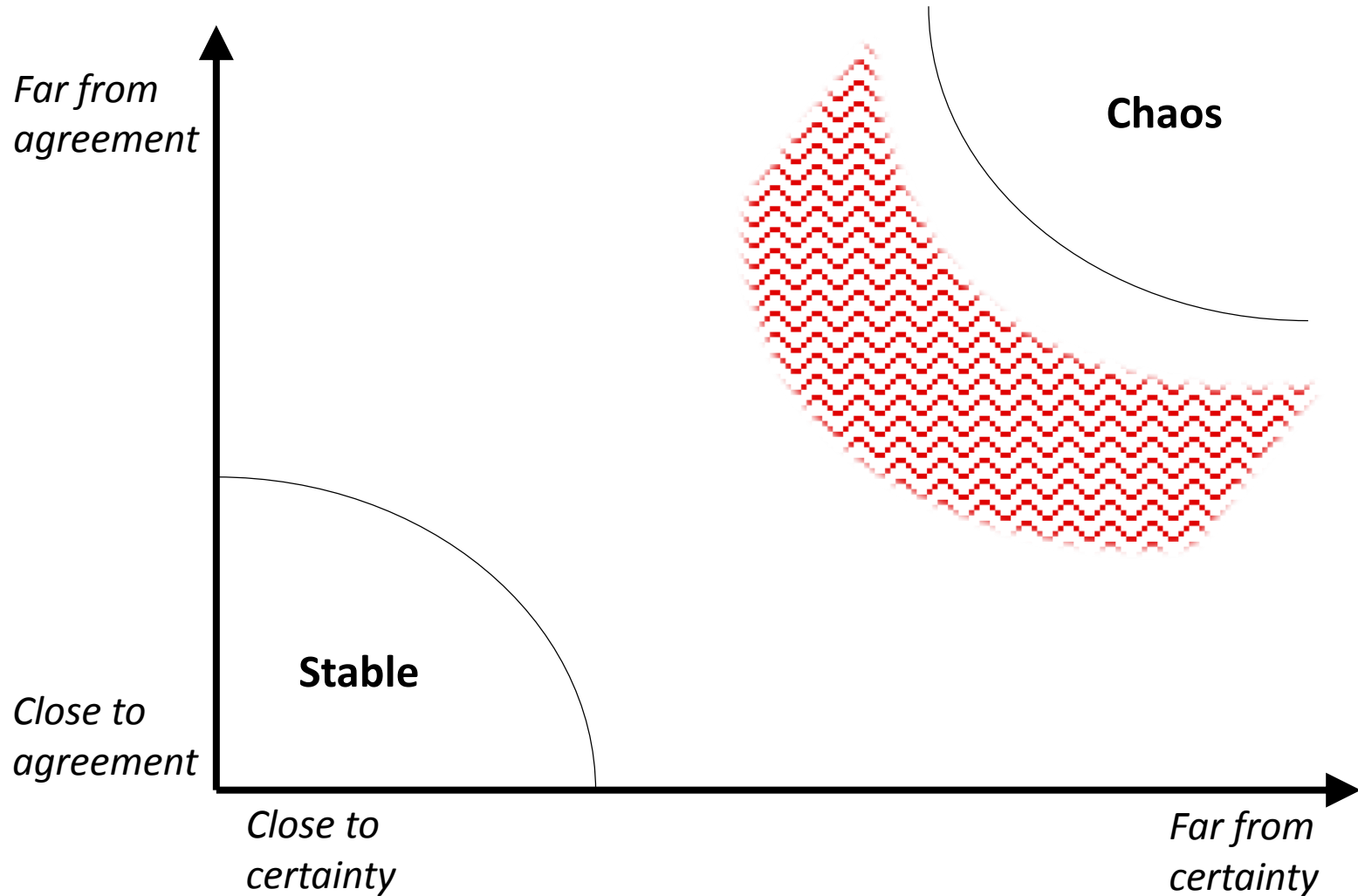
Rate of Ventilator Associated Pneumonia (VAP) for Scotland's 2 Paediatric Intensive Care Units April 2013 – October 2017



The Nature of the Challenge



The Nature of the Challenge





Source: Storybook Dads 2016

Visitation Day

my heart... 

my stomach... 

my mind...



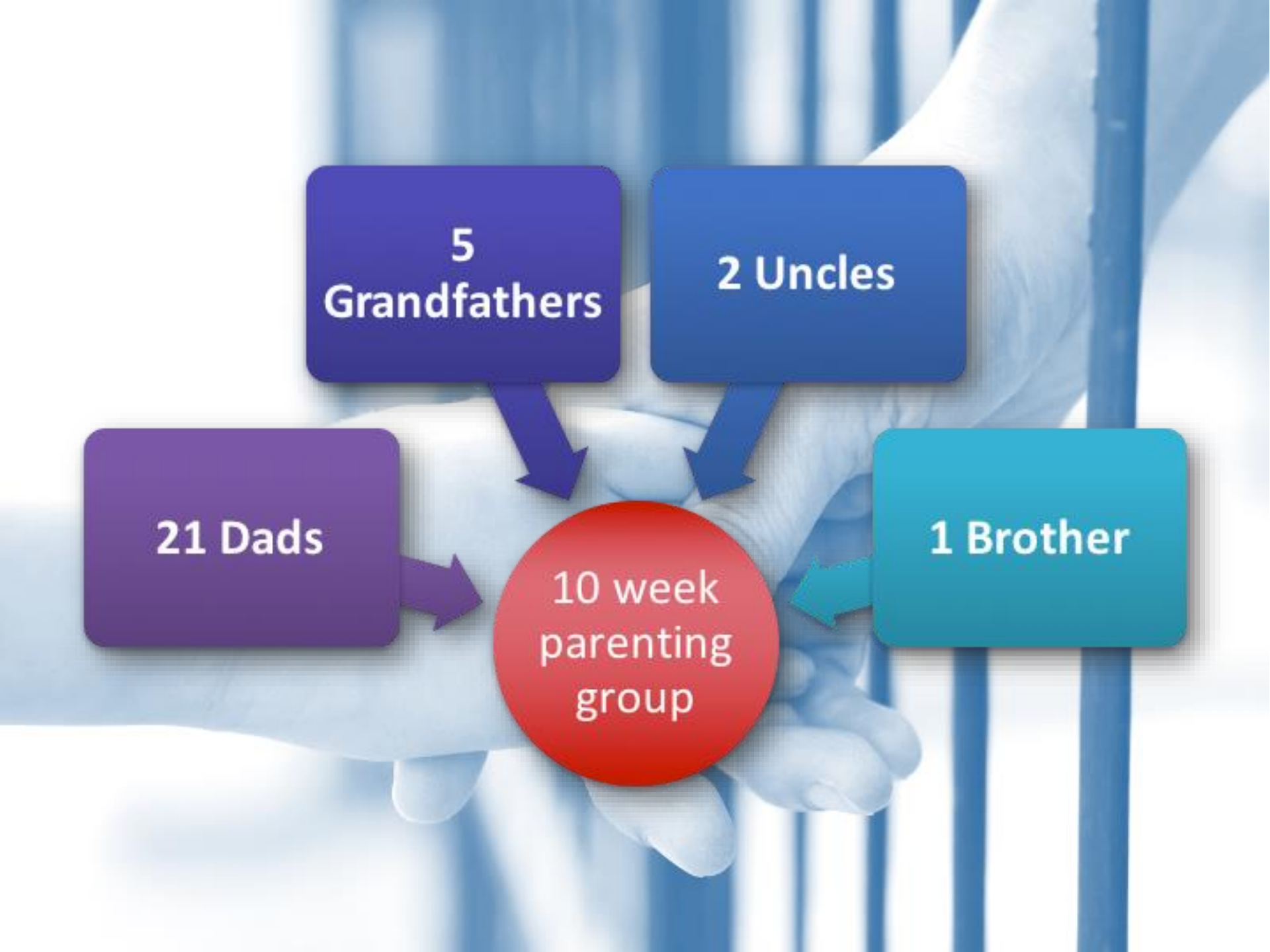
**5
Grandfathers**

2 Uncles

21 Dads

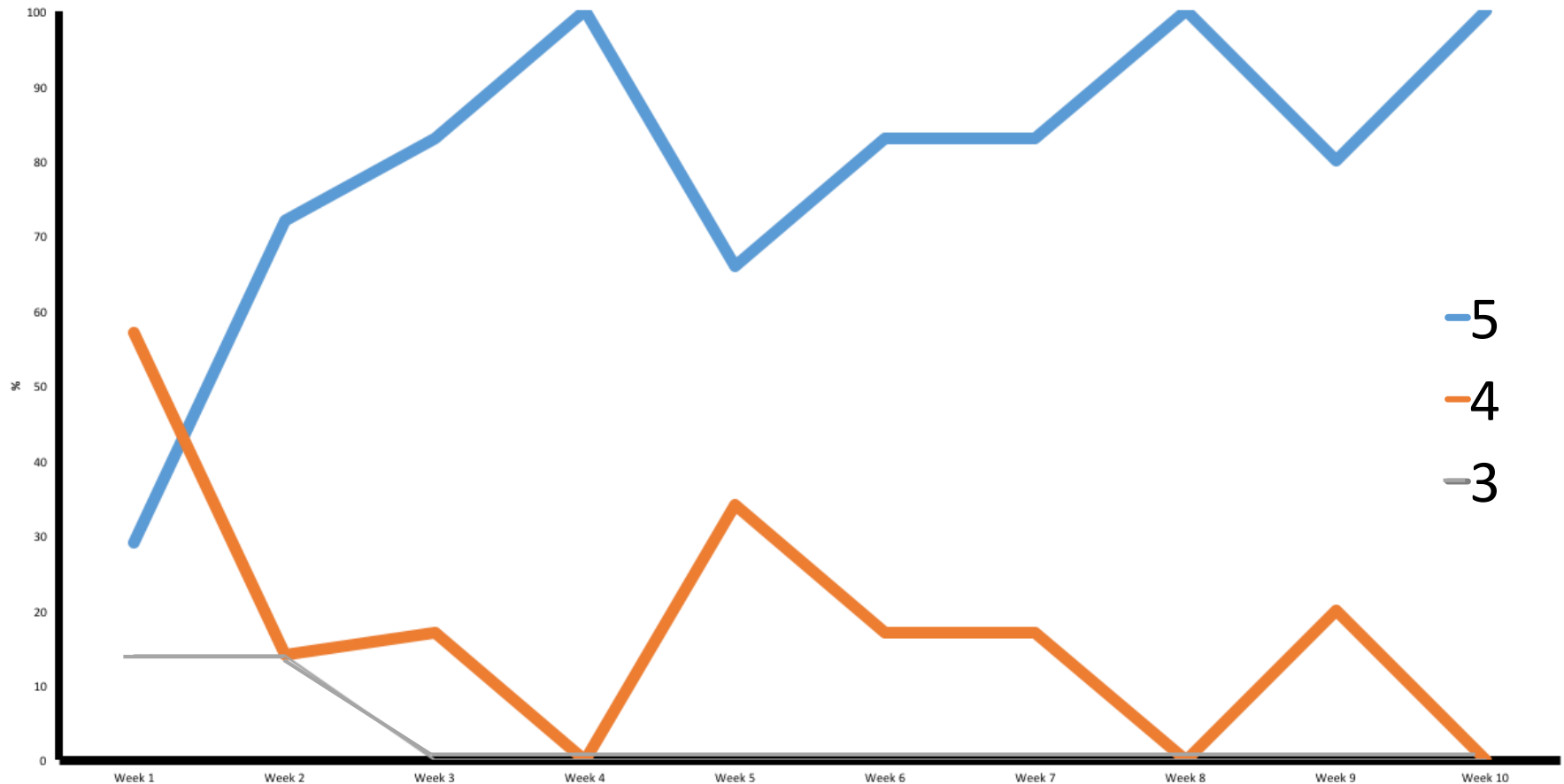
1 Brother

**10 week
parenting
group**



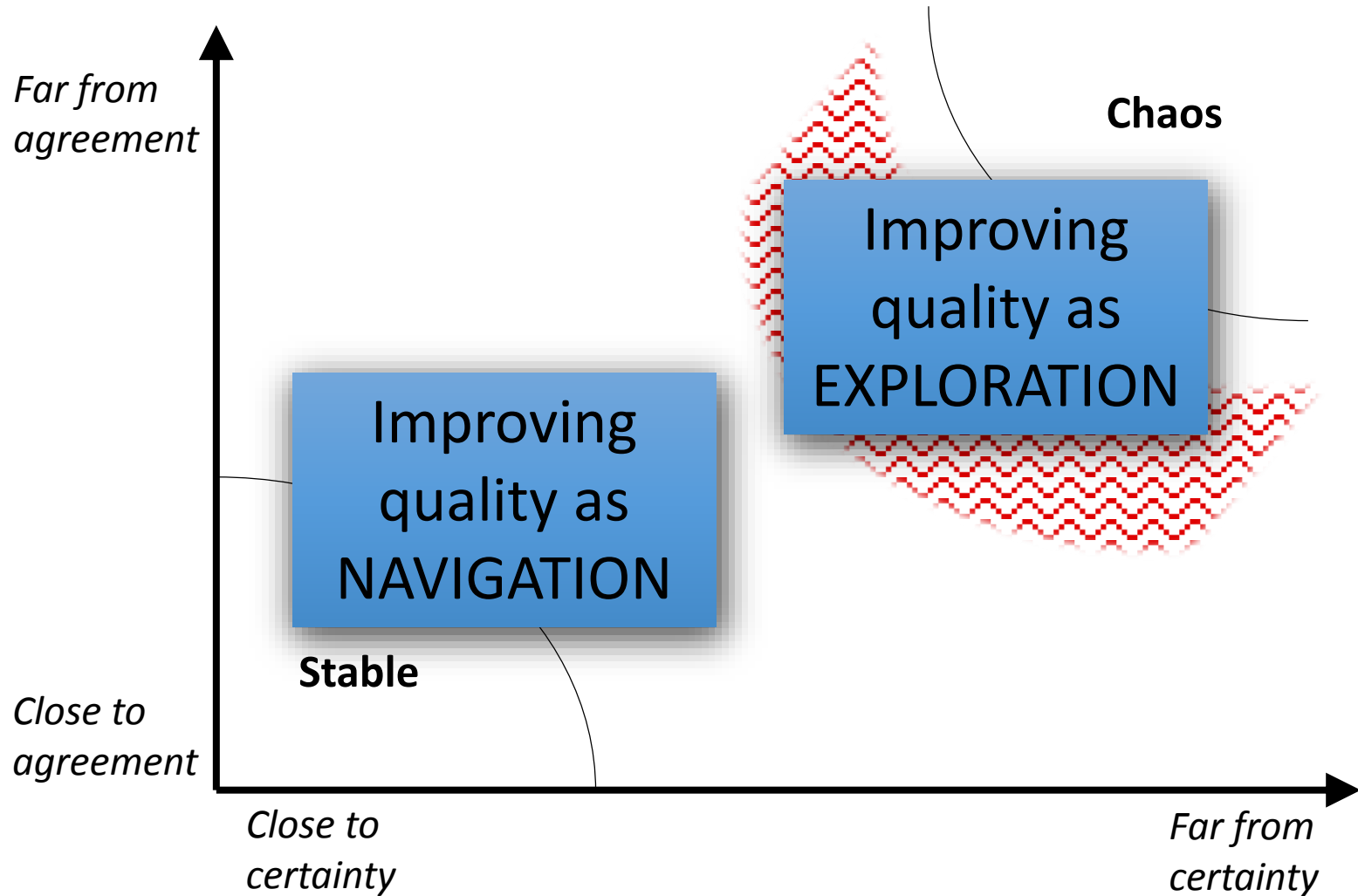
How helpful was the group to help you understand your child better?

1= low 5=high





The Nature of the Challenge



Complex Adaptive Systems

“A way of thinking about and analysing things by recognising complexity, patterns and interrelationships rather than focusing on cause and effect.”

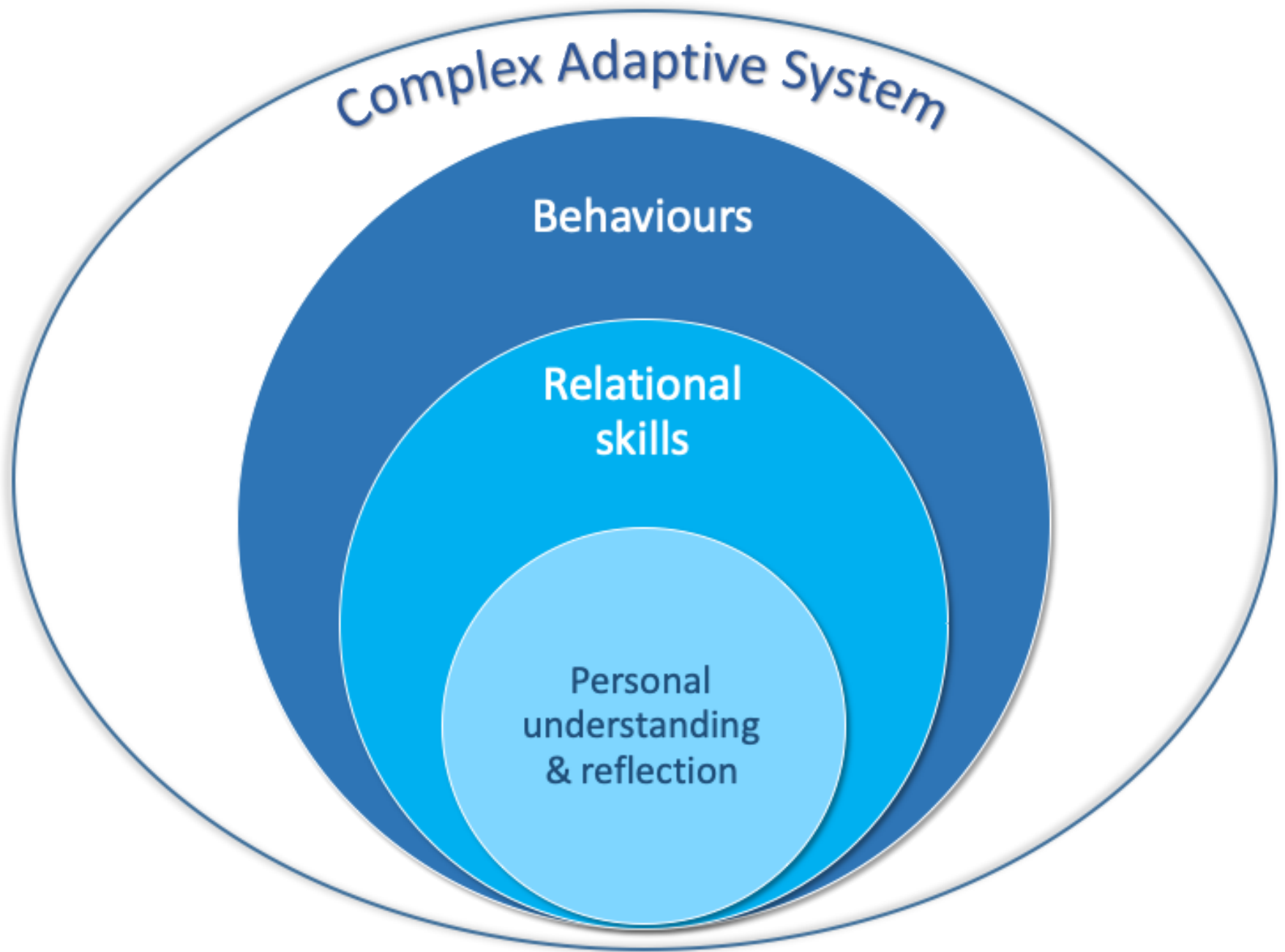


Murmurations





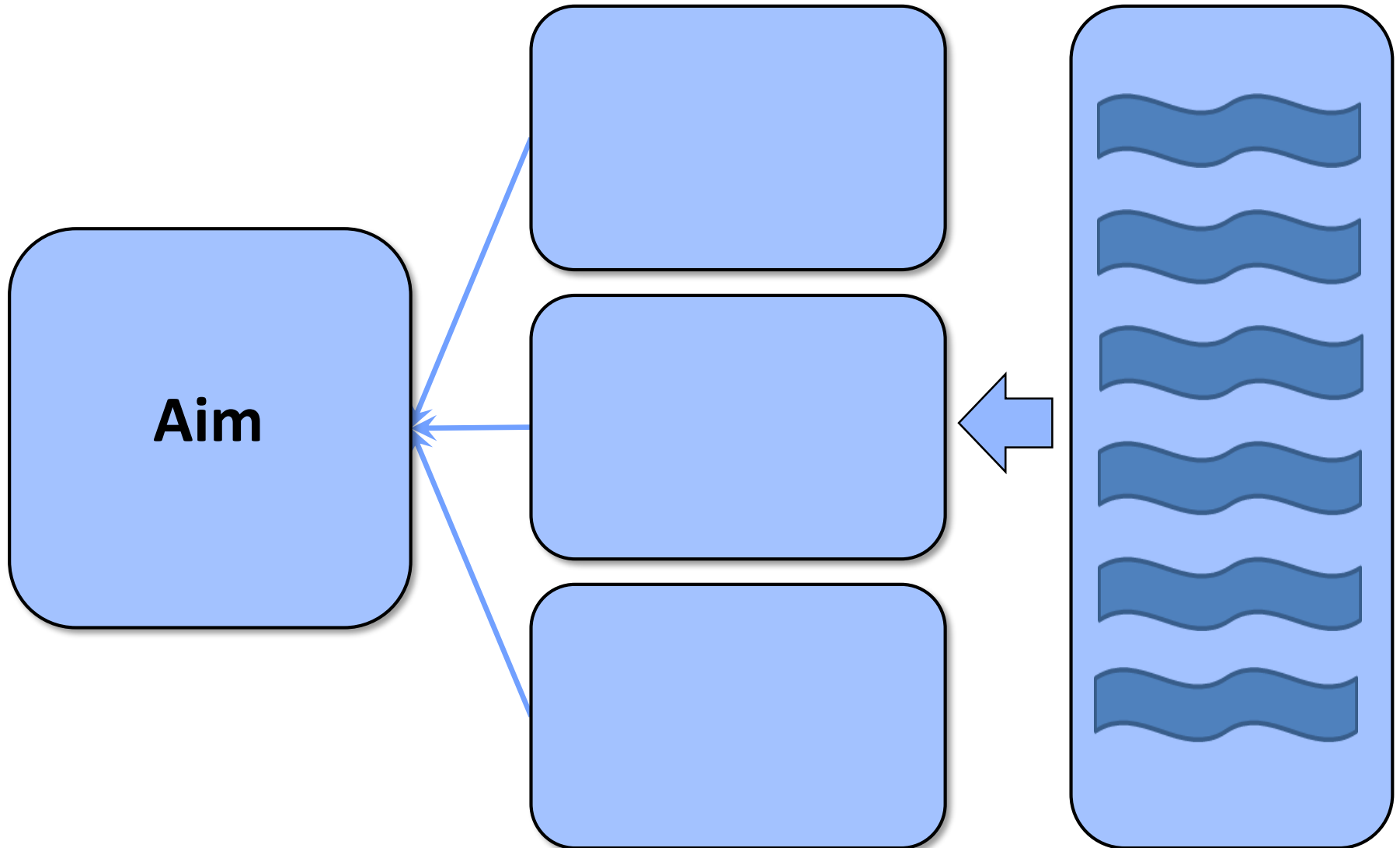
Source: Amanda Tipton



Aim

**Primary
Drivers**

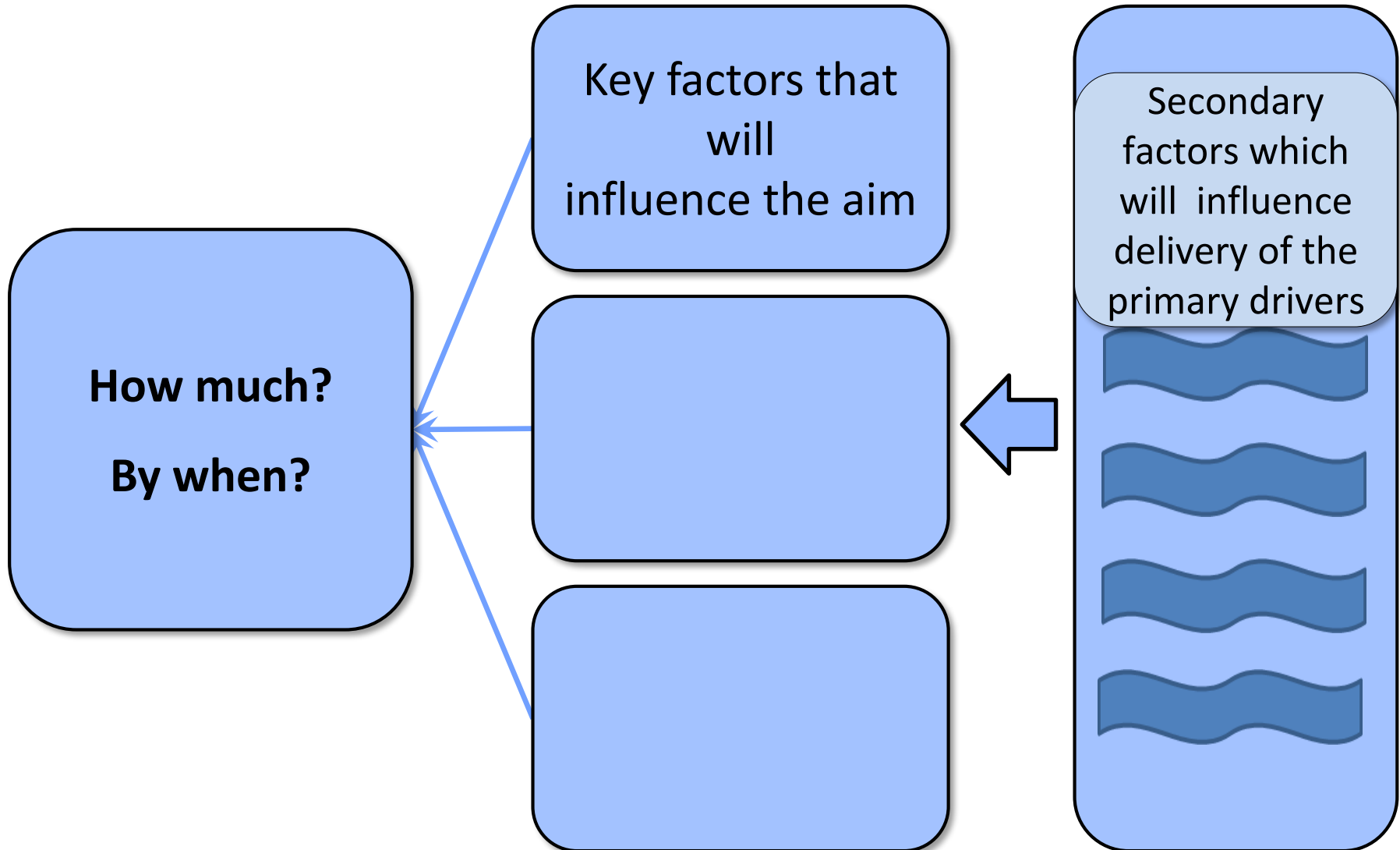
**Secondary
Drivers**



Aim

**Primary
Drivers**

**Secondary
Drivers**



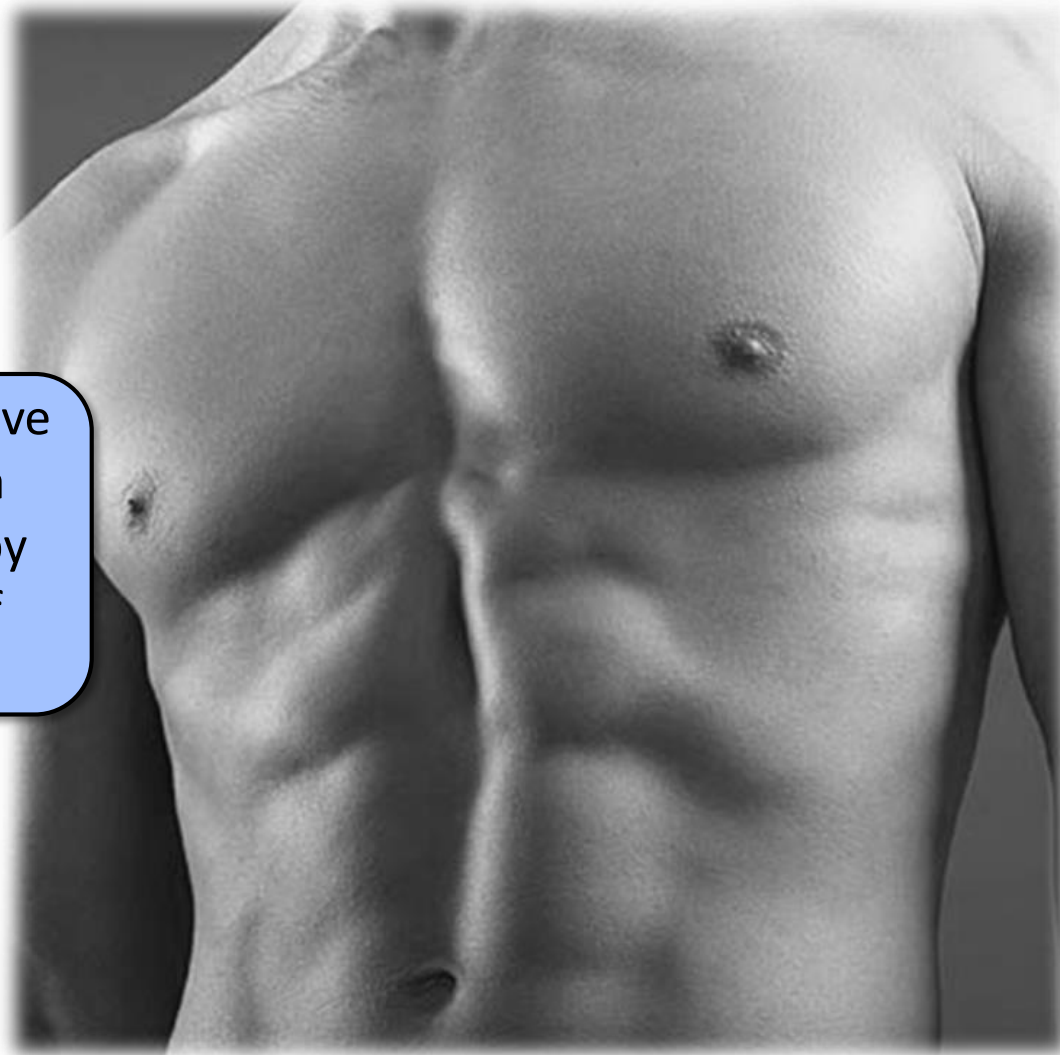
Improving Jason's Silhouette

Aim

Primary Drivers

Secondary Drivers

Jason will have
achieved a
BMI of 23 by
the end of
April 2020



Improving Jason's Silhouette

Aim

Primary Drivers

Secondary Drivers

**Daily
calorie
count**

**Number of
calories per
meal**

Calories in

Limit daily intake

Substitute with low calorie
foods

Avoid alcohol

**Average
drinks/week**

Calories out

Work out 5 days

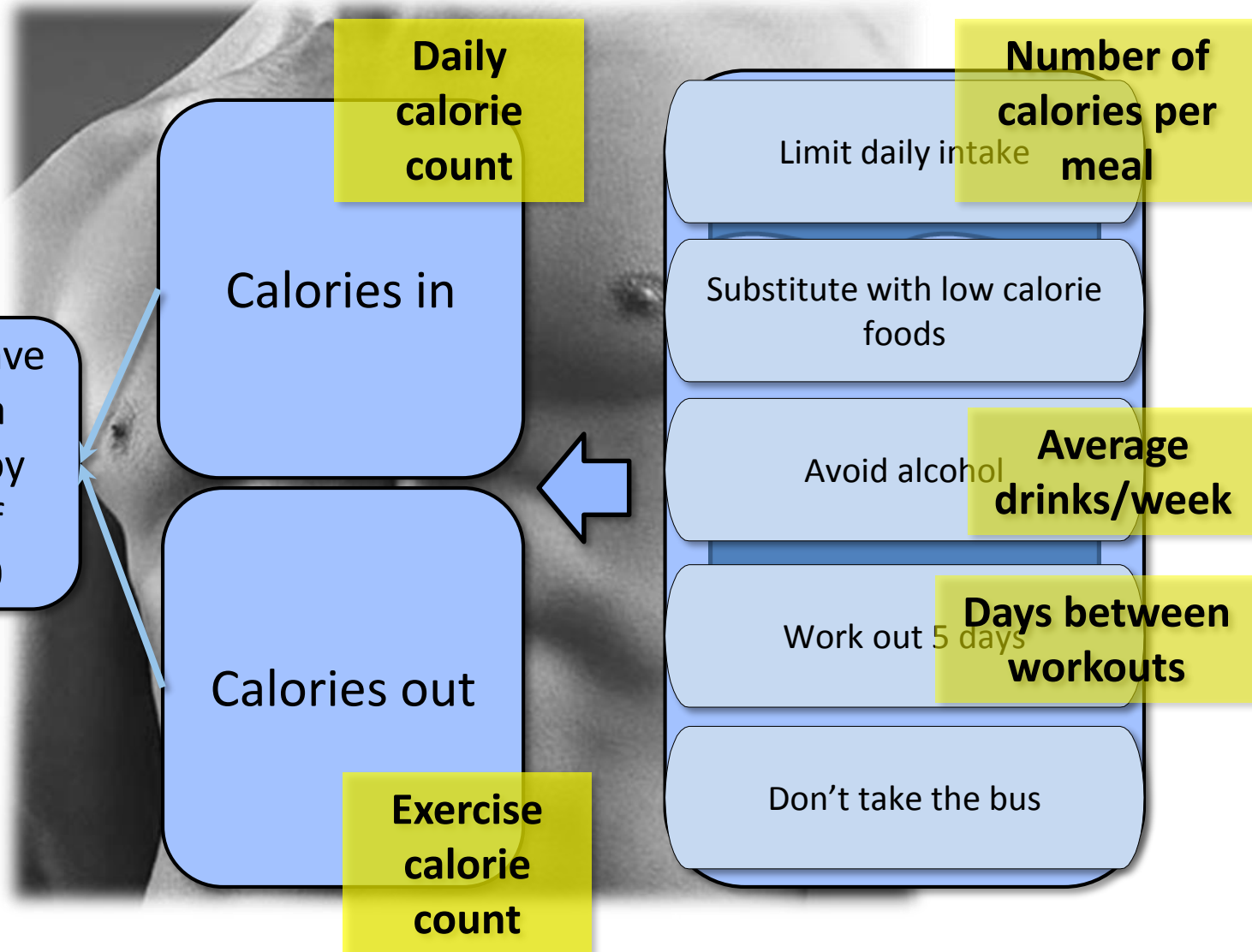
**Days between
workouts**

**Exercise
calorie
count**

Don't take the bus

Jason will have
achieved a
BMI of 23 by
the end of
April 2020

**Weight,
BMI**



Improving Jason's Silhouette

Aim

Primary Drivers

Secondary Drivers

Change Ideas

Jason will have achieved a BMI of 23 by the end of April 2020

Calories in

Calories out

Limit daily intake

Substitute foods

Avo

Work

Don't take the bus

Track Calories

Plan

Substitute alcohol for water

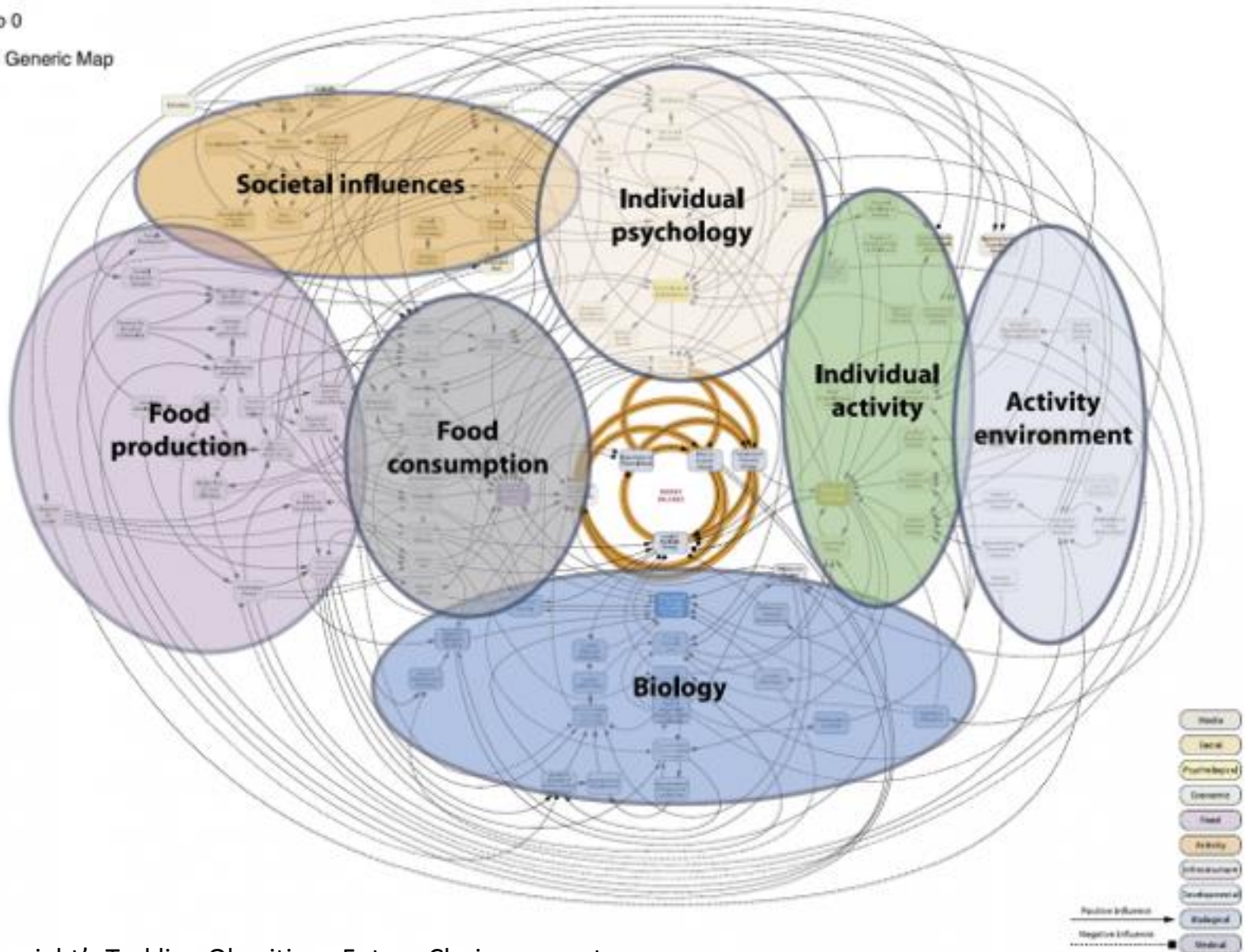
The changes that can be tested out to achieve the secondary drivers



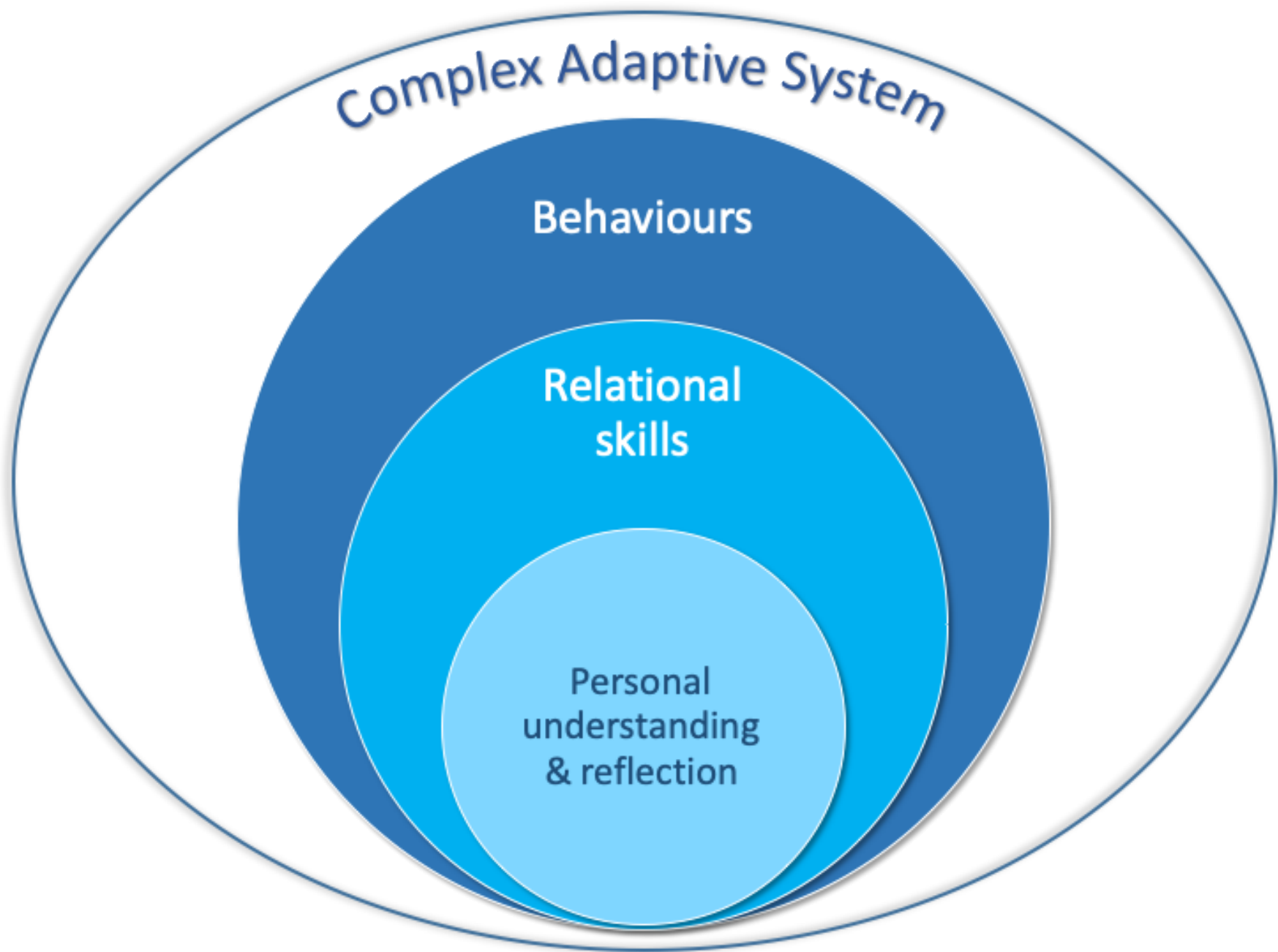
Obesity Systems Map

Map 0

Full Generic Map



Source: Foresight's Tackling Obesities - Future Choices report.



Aim

Primary Drivers

Secondary Drivers

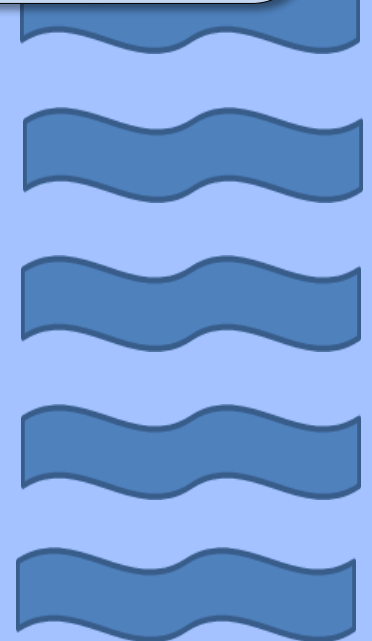
By the end of 2020, I will be the best improvement leader in my organisation

Personal Understanding & Reflection

Relational Skills

Behaviours

Secondary factors which will influence delivery of the primary drivers





Complex Adaptive System

Behaviours

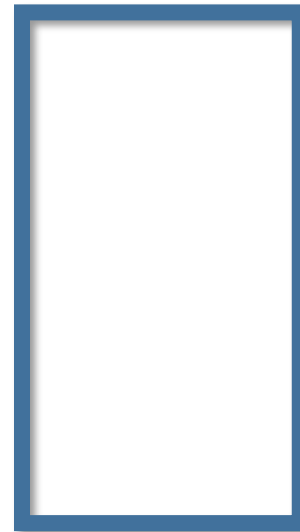
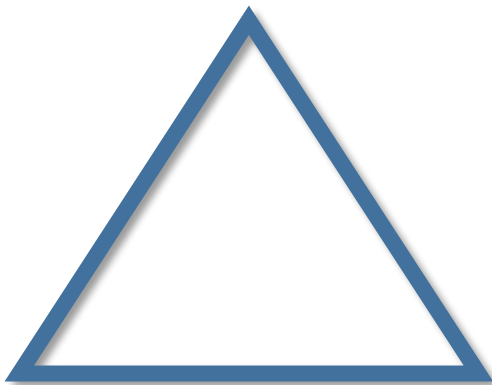
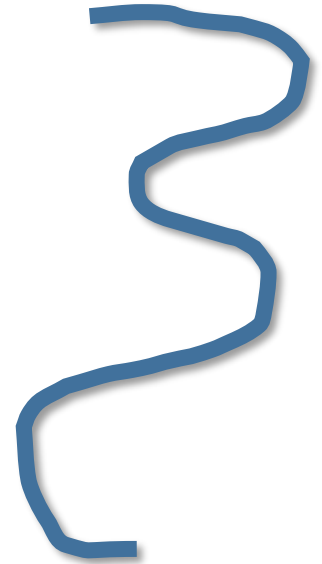
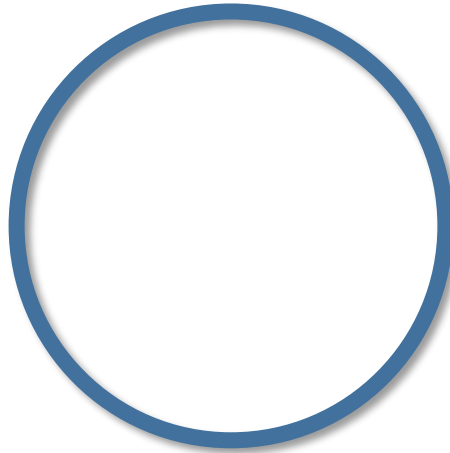
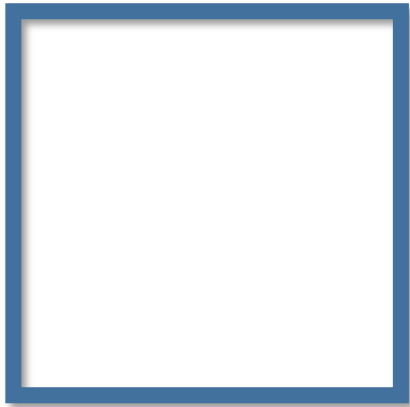
Relational
skills

**Personal
understanding
& reflection**

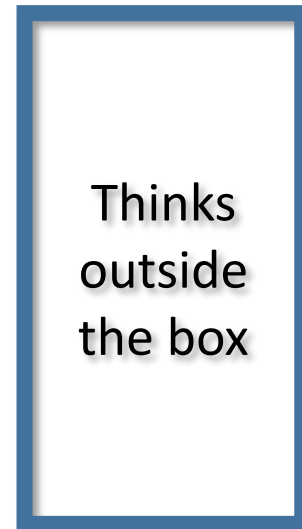
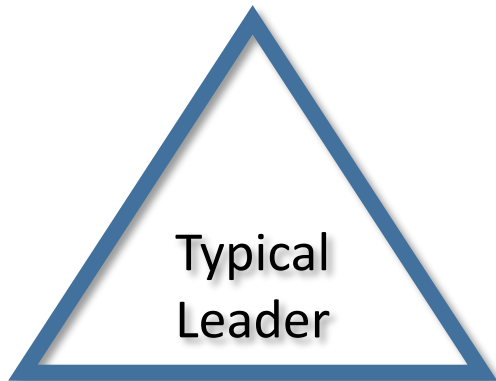
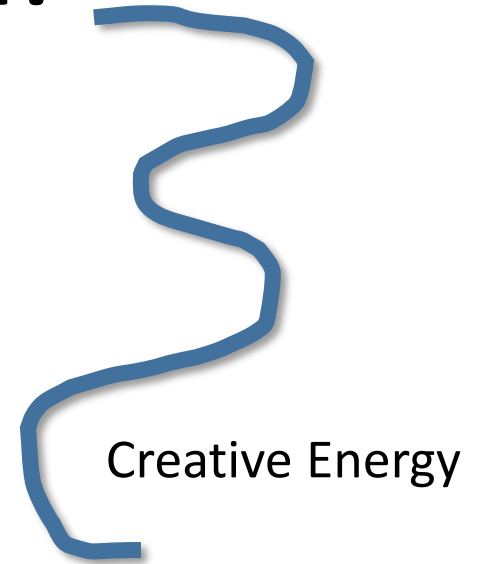
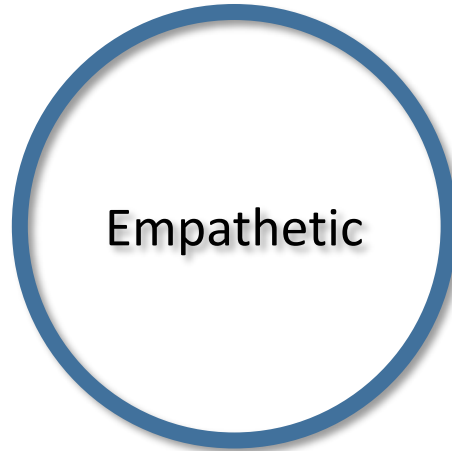




What shape are you?



What shape are you?





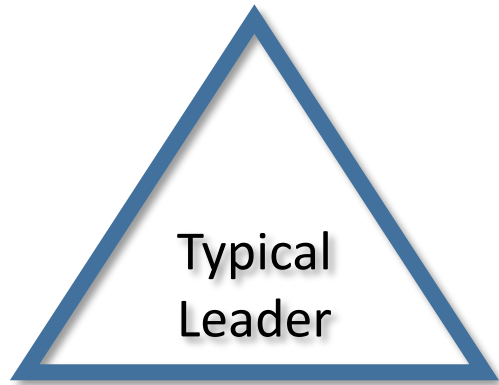
Analytical

Squares are organized, work hard, love structure and order in the universe. They dislike situations where they don't know what's expected. Squares prefer working alone, are logical, sequential thinkers, and they often collect loads of data and file it so it's easy to locate. They have trouble saying, "I've got enough information," and making a decision. They strive to label everything as black or white.

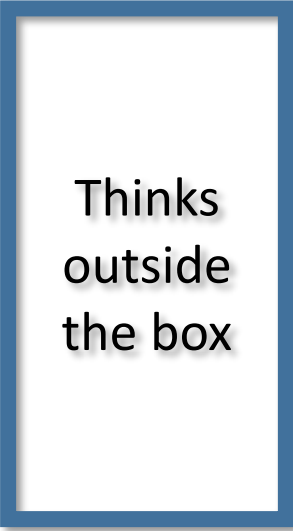


Empathetic

Circles get their energy from other people and work well with others due to their ability to communicate and empathize. They read people and can spot a phony right off. Circles like harmony and have more difficulty in dealing with conflict or making unpopular decisions. Circles can be swayed by other people's feelings and opinions. They can be very effective managers in egalitarian business structures. Circles like to talk!

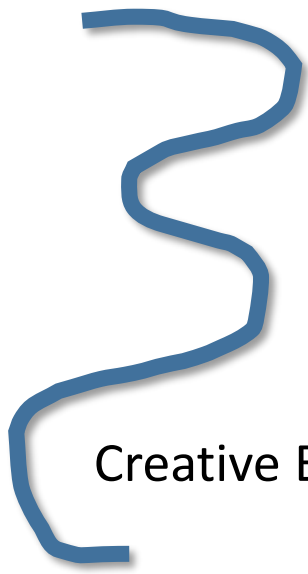


Triangles are leaders, decisive and able to focus on the goal. They are self-confident and carry strong opinions. Triangles can be dogmatic and shoot from the hip. They like recognition and put stock in status symbols. American business has been run by triangles, and this shape is most characteristic of men. A huge positive is that they can communicate well with all the other personalities.



Thinks
outside
the box

Rectangles are a seeker and an explorer who is always searching for ways in which to grow and change. Rectangles often ask themselves “Who am I? What is the world about?” They are the most receptive of the five shapes to new learning. Rectangles are the least attached to a specific ideology and often cause their co-workers confusion when changing from day-to-day. Most people go through rectangular periods when they’re in a state of change.



Creative Energy

Squiggles are creative, a “what if” person who’s always thinking of new ways to do something. Squiggles are starters, but struggle with finishing because their mind never stops as they leap from A straight to Z. They do not like highly structured environments and can’t tolerate the mundane due to their shorter attention span. If Squiggles don’t get excitement at work, they’ll cause it elsewhere in life.

Aim

**Primary
Drivers**

**Secondary
Drivers/Change Ideas**

**By the end of
2020, I will
be the best
improvement
leader in my
organisation**

**Personal
Understanding &
Reflection**

Relational Skills

Behaviours



Southcentral Foundation



Alaska Native People Shaping Health Care

Complex Adaptive System



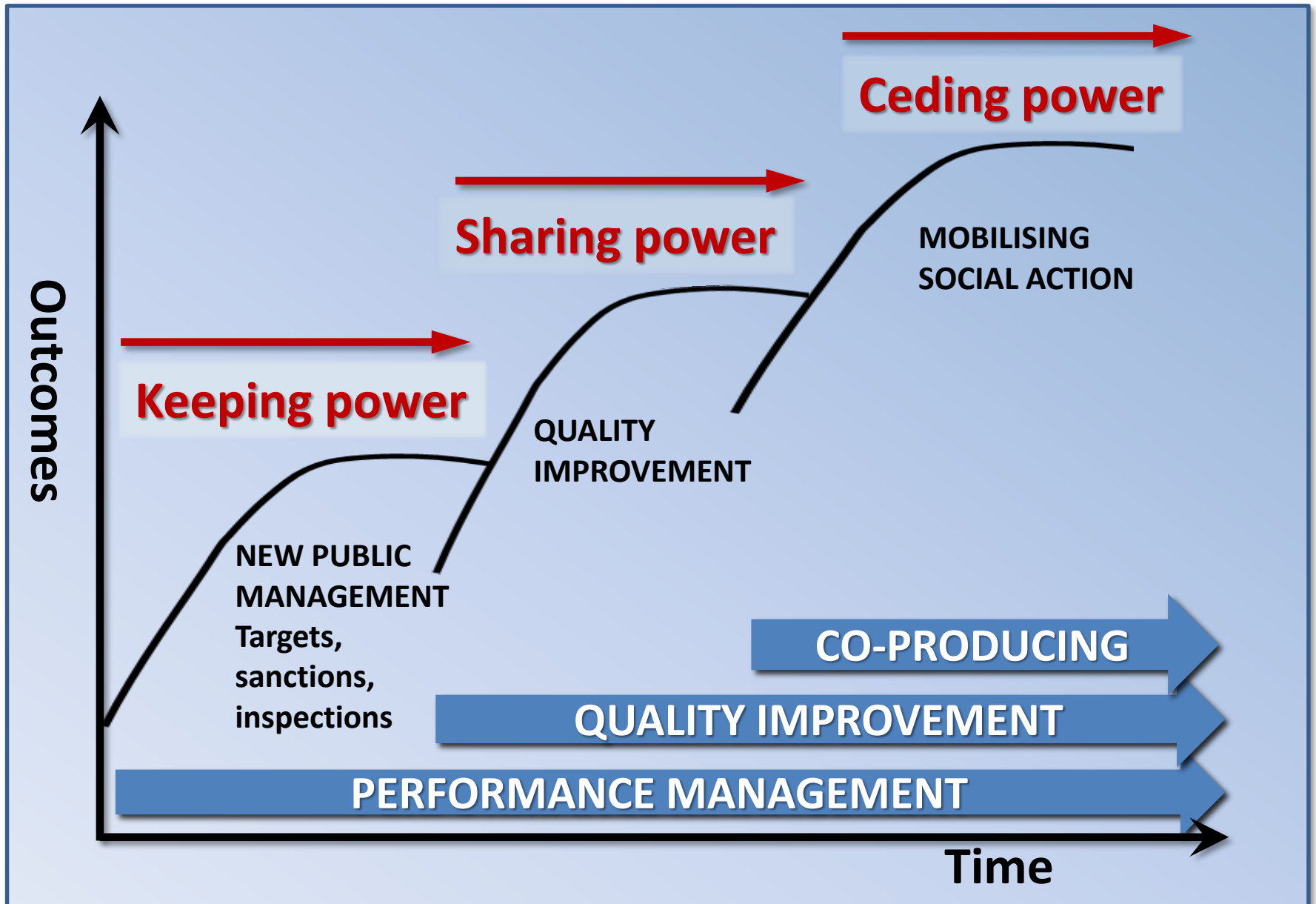
```
graph TD; A[Complex Adaptive System] --- B(Behaviours); B --- C(Relational skills); C --- D(Personal understanding & reflection)
```

Behaviours

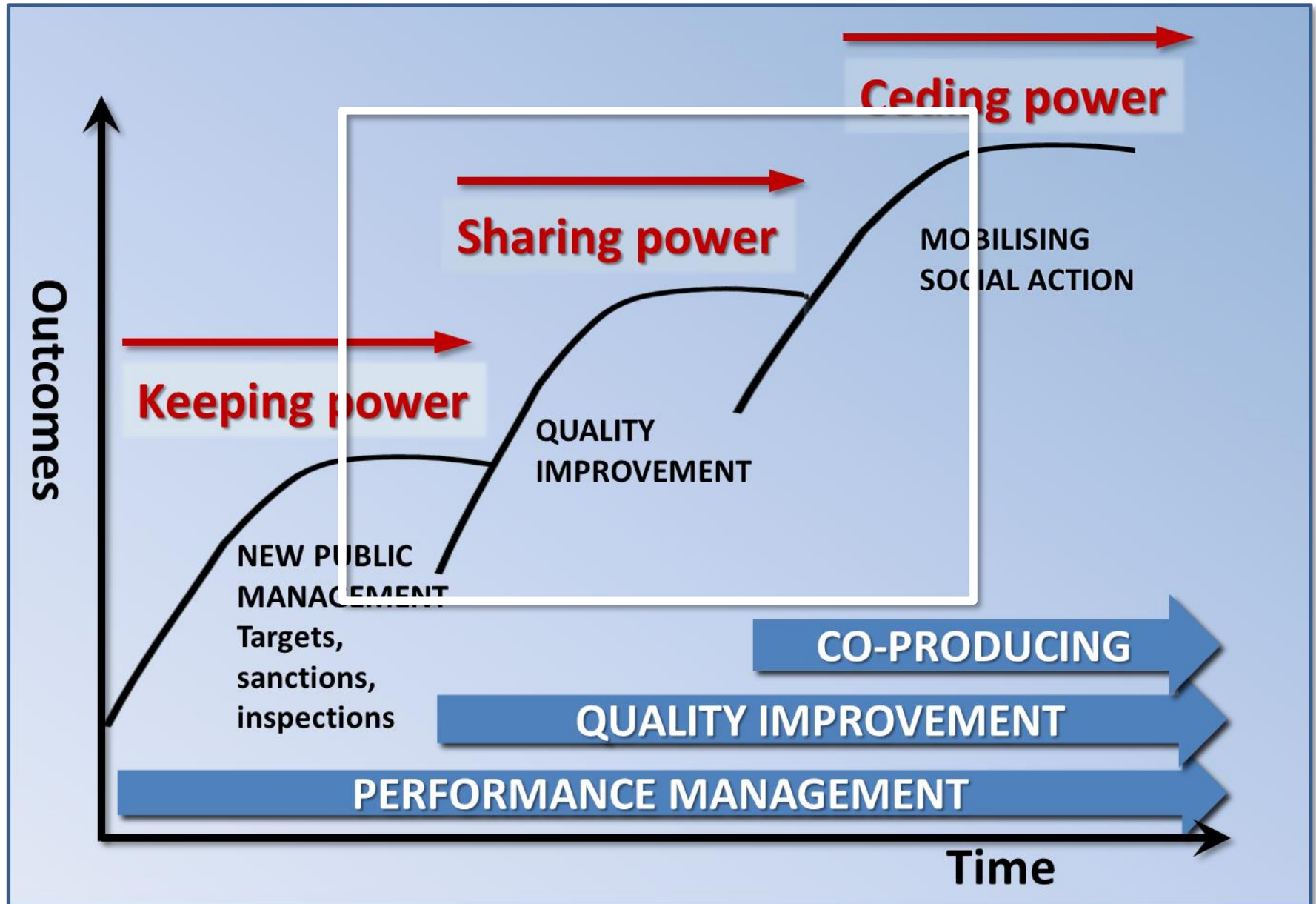
**Relational
skills**

**Personal
understanding
& reflection**

Getting to the Third Curve



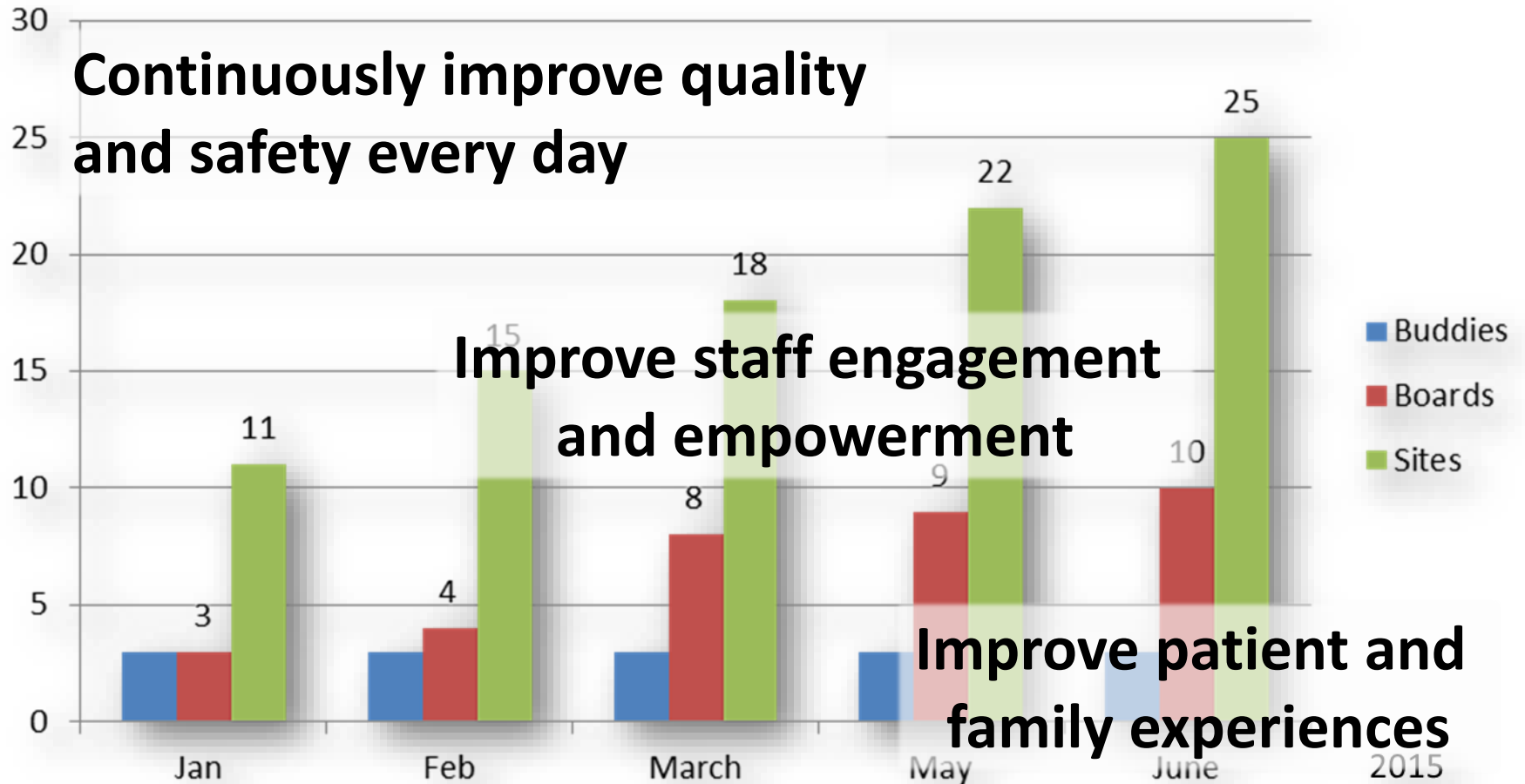
Getting to the Third Curve



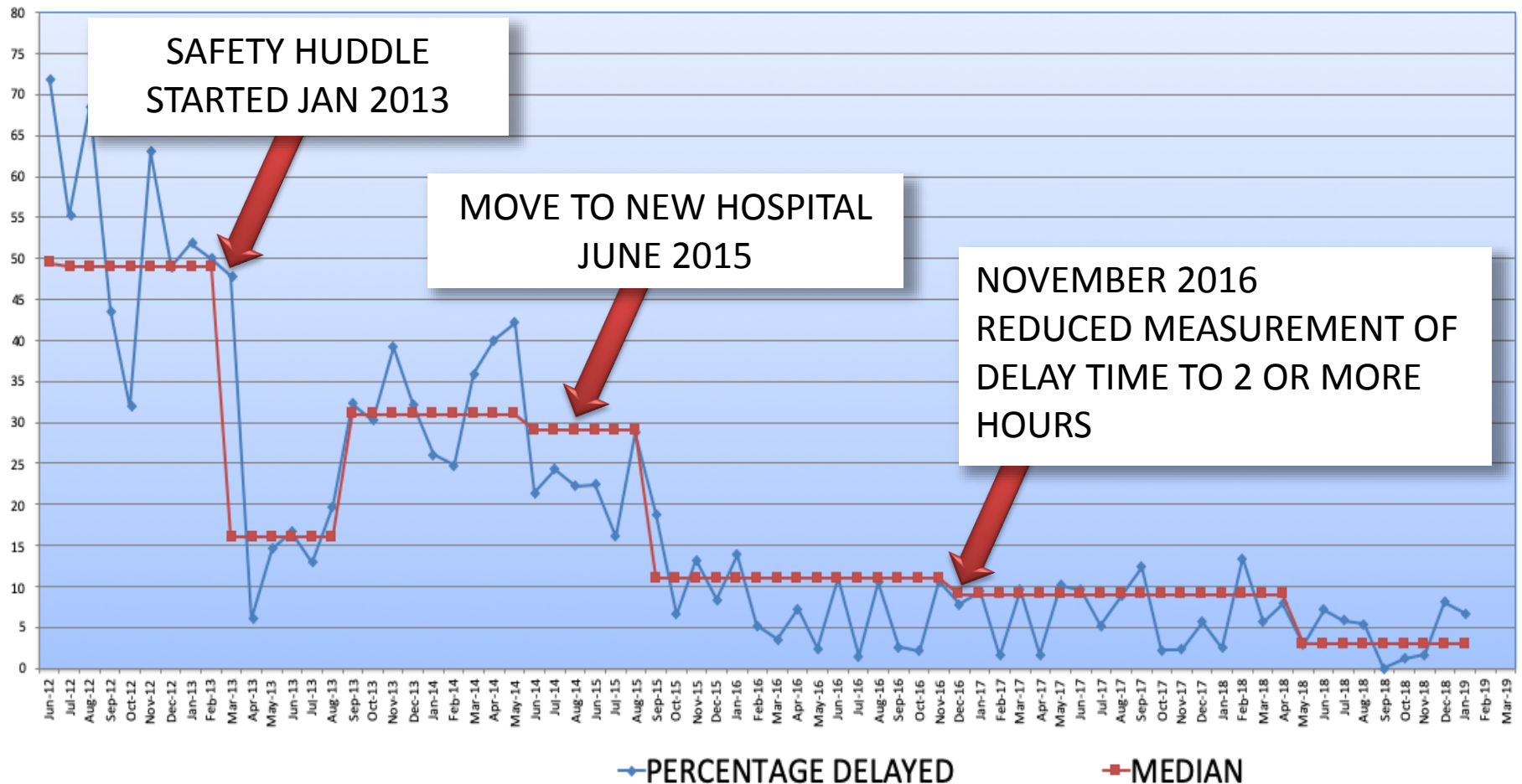


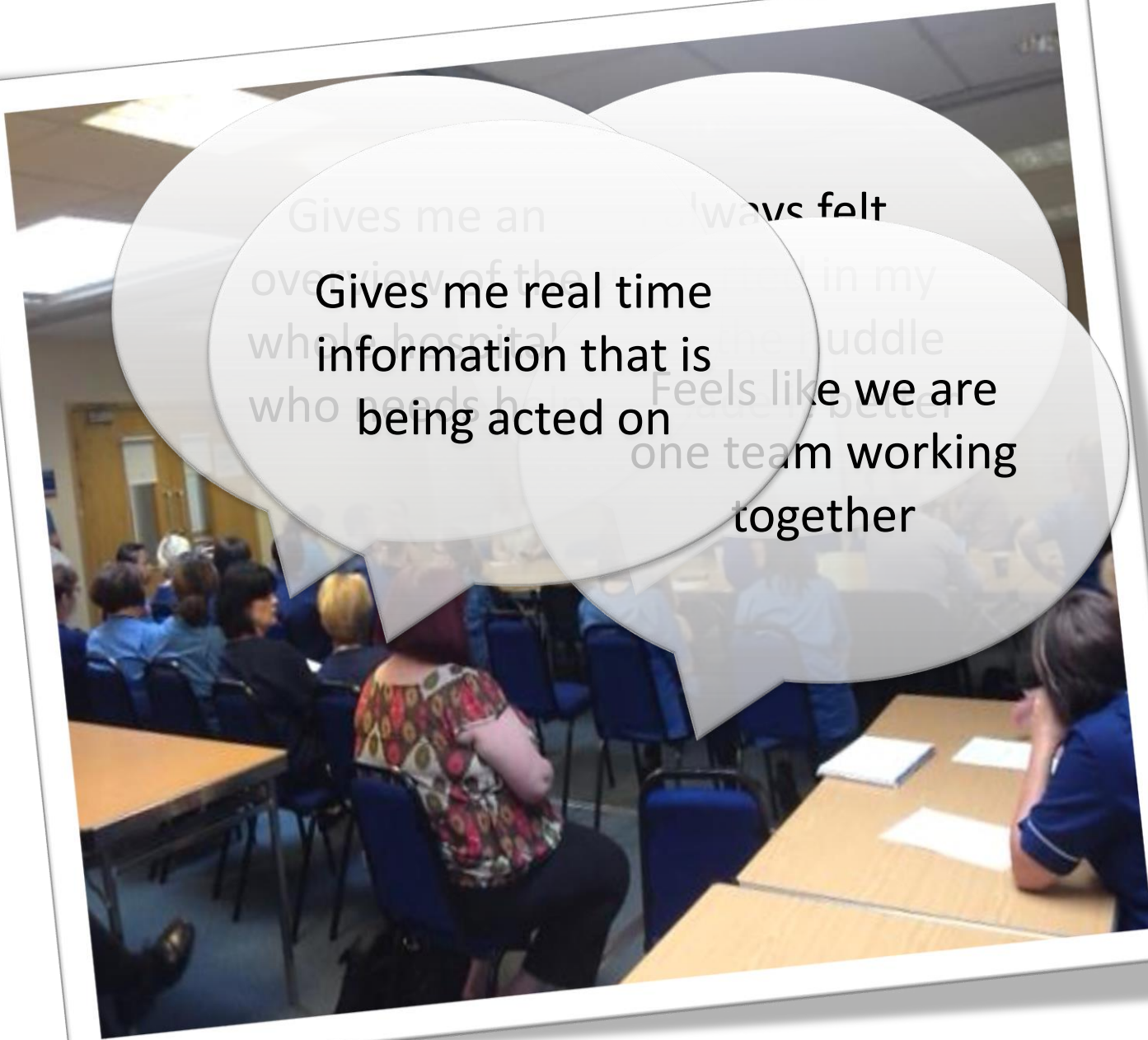


Scotland's Hospital Safety Huddles



Royal Hospital for Sick Children, Yorkhill, PICU Total Delayed Discharges





Gives me an
overview of the
whole hospital
who sends him
being acted on

I always felt
in my
bubble we are
one team working
together

Aim

**Primary
Drivers**

**Secondary
Drivers/Change Ideas**

**By the end of
2020, I will
be the best
improvement
leader in my
organisation**

**Personal
Understanding &
Reflection**

Relational Skills

Behaviours



Framework for Improving Joy in Work



Complex Adaptive System



```
graph TD; A[Complex Adaptive System] --- B(Behaviours); B --- C(Relational skills); C --- D(Personal understanding & reflection)
```

Behaviours

Relational
skills

Personal
understanding
& reflection

High Impact Leadership Behaviours

Person Centeredness

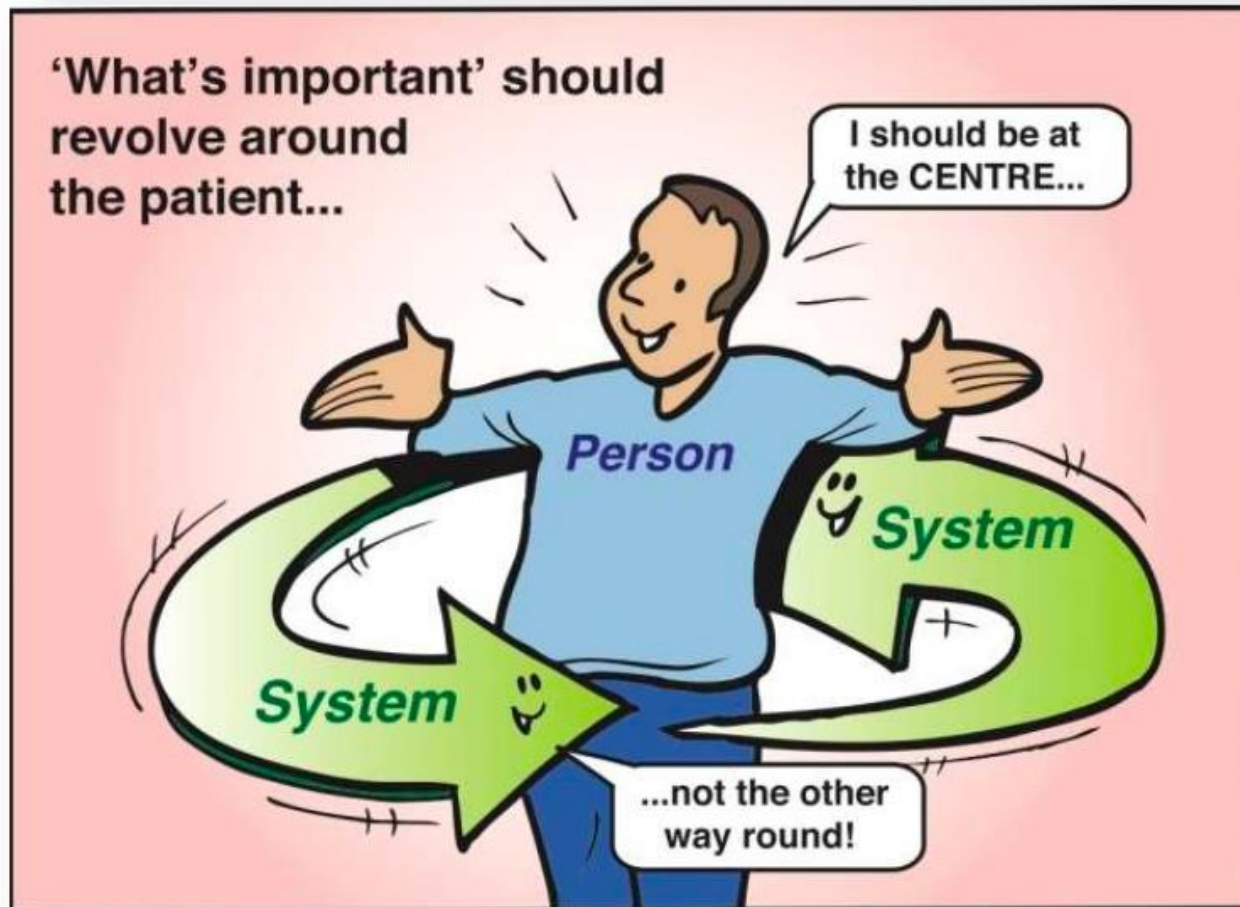
Front Line Engagement

Relentless Focus

Transparency

Boundarilessness

Person Centeredness

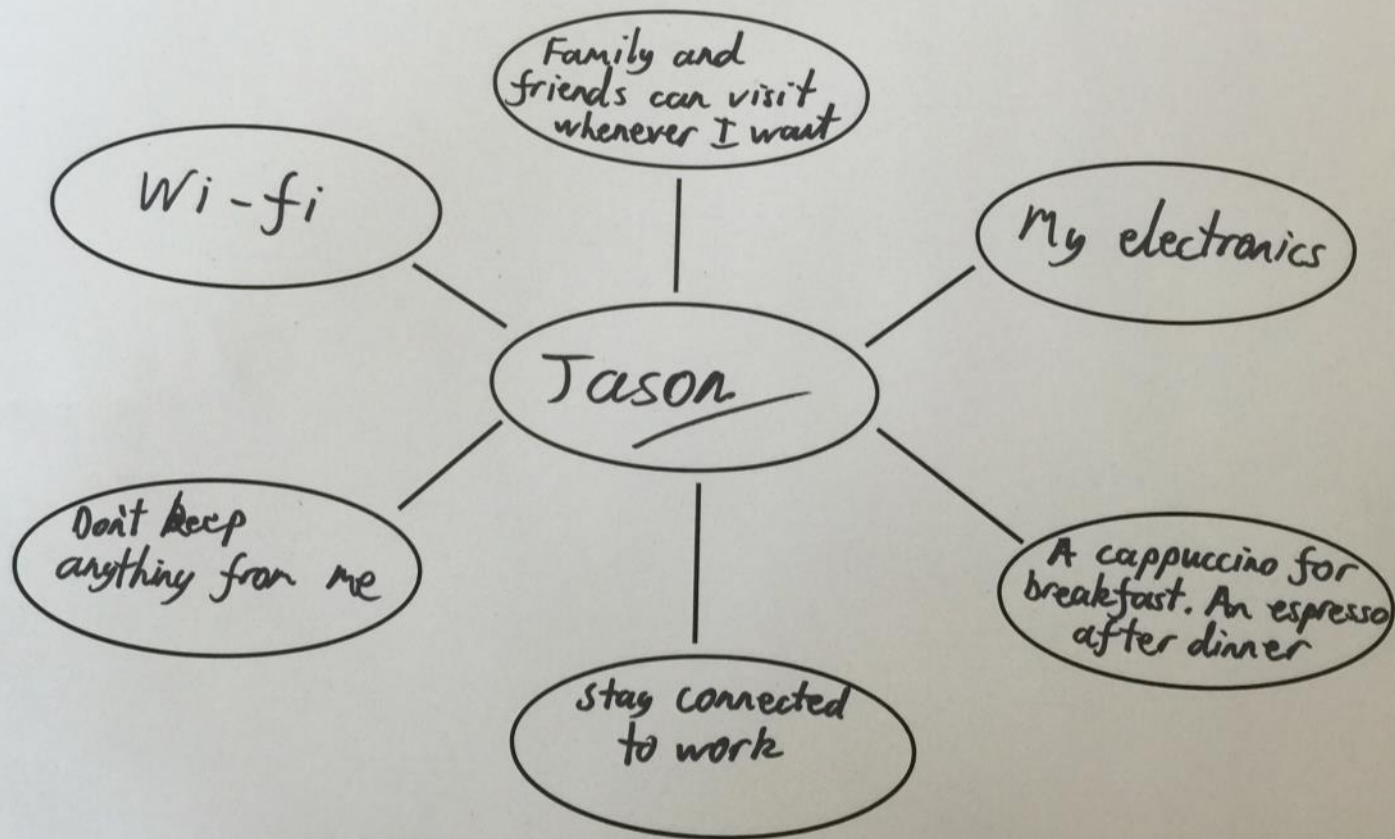


A grayscale photograph of a nurse in a white uniform and stethoscope leaning over a hospital bed, smiling at an elderly female patient. The patient is wearing a patterned hospital gown and has medical equipment connected to her arm. The background shows a typical hospital room setting with medical monitors and equipment.

From...
“What’s the matter?”
to
“What matters to you?”



What Matters to You?



**Draw your own “What Matters To You”
and share it with your neighbour**

What Matters to You?

```
graph TD; A([Your name]) --- B([ ]); A --- C([ ]); A --- D([ ]); A --- E([ ]); A --- F([ ]); A --- G([ ])
```

The diagram consists of a central oval containing the text "Your name". Six lines radiate from this central oval to six surrounding empty ovals, arranged in a circular pattern. The entire diagram is set against a light gray background with a thin white border.

Front Line Engagement

A DESK IS A DANGEROUS
PLACE FROM WHICH TO
VIEW THE WORLD.

- John Le Carre

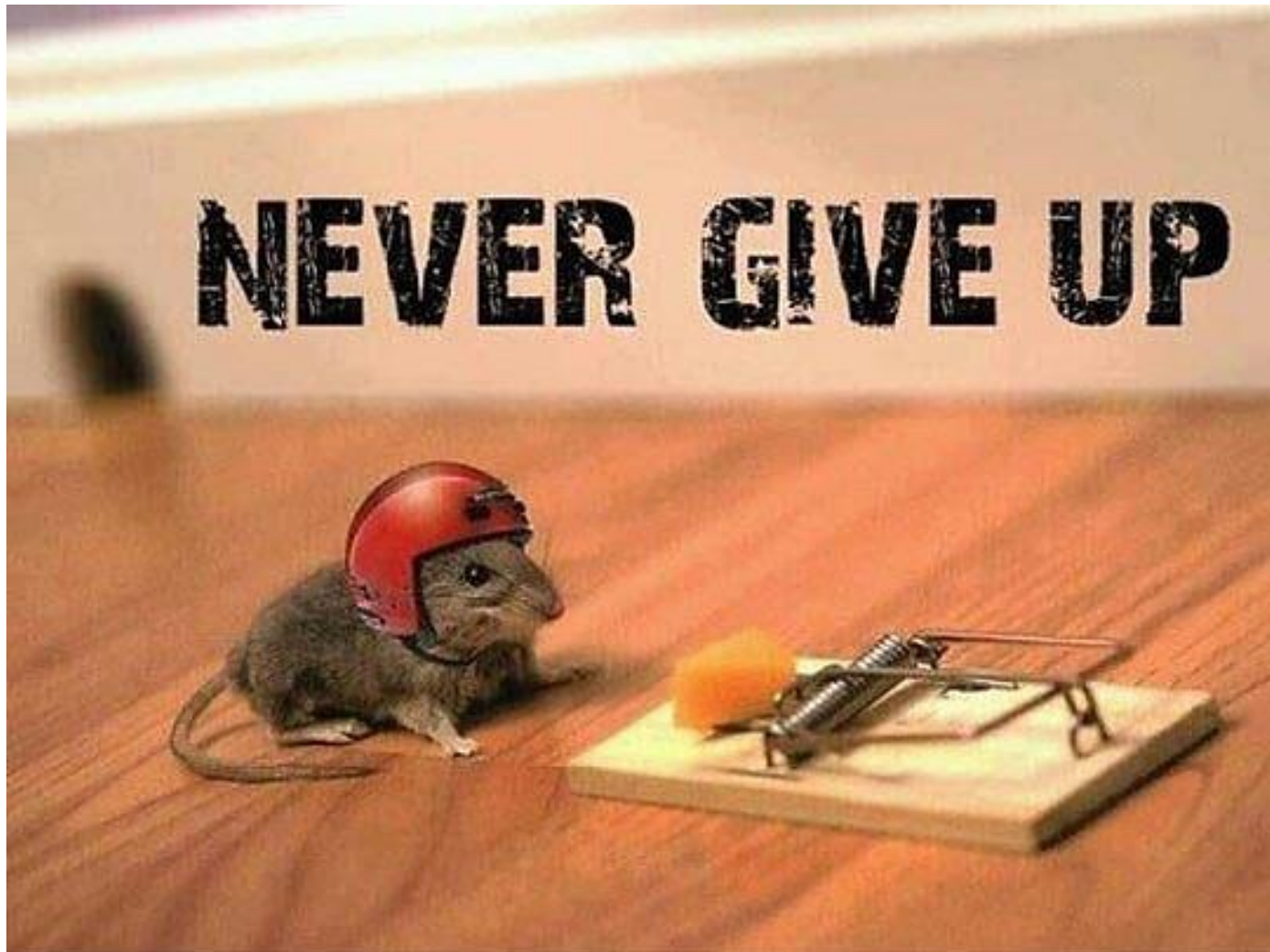


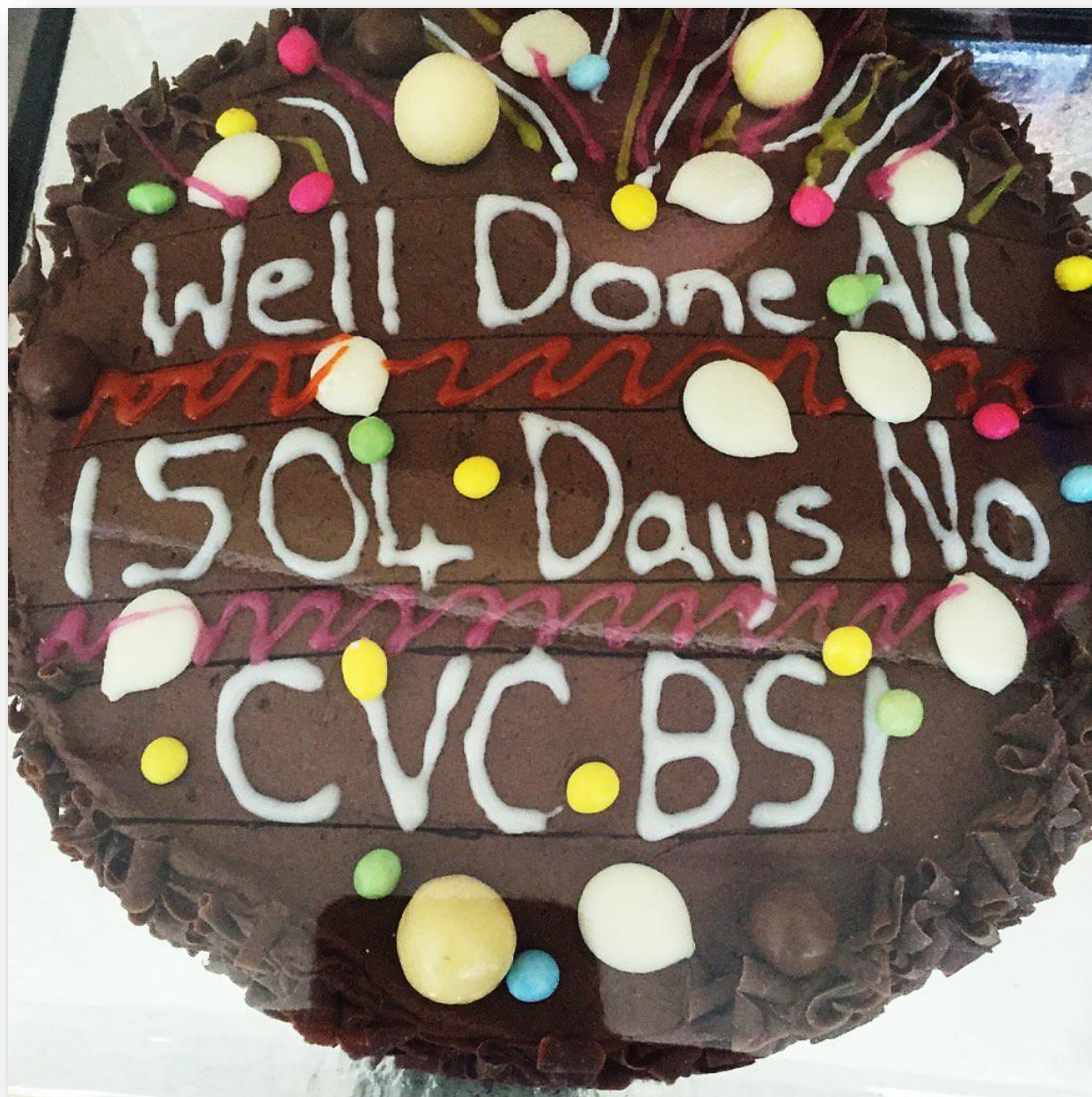
Since 2008.....

**....over 1,700 leadership
walkrounds have been
conducted in Scotland.**



Relentless Focus





ORKNEY DIALYSIS UNIT HAD ~



**Hospital Associated
Infections**

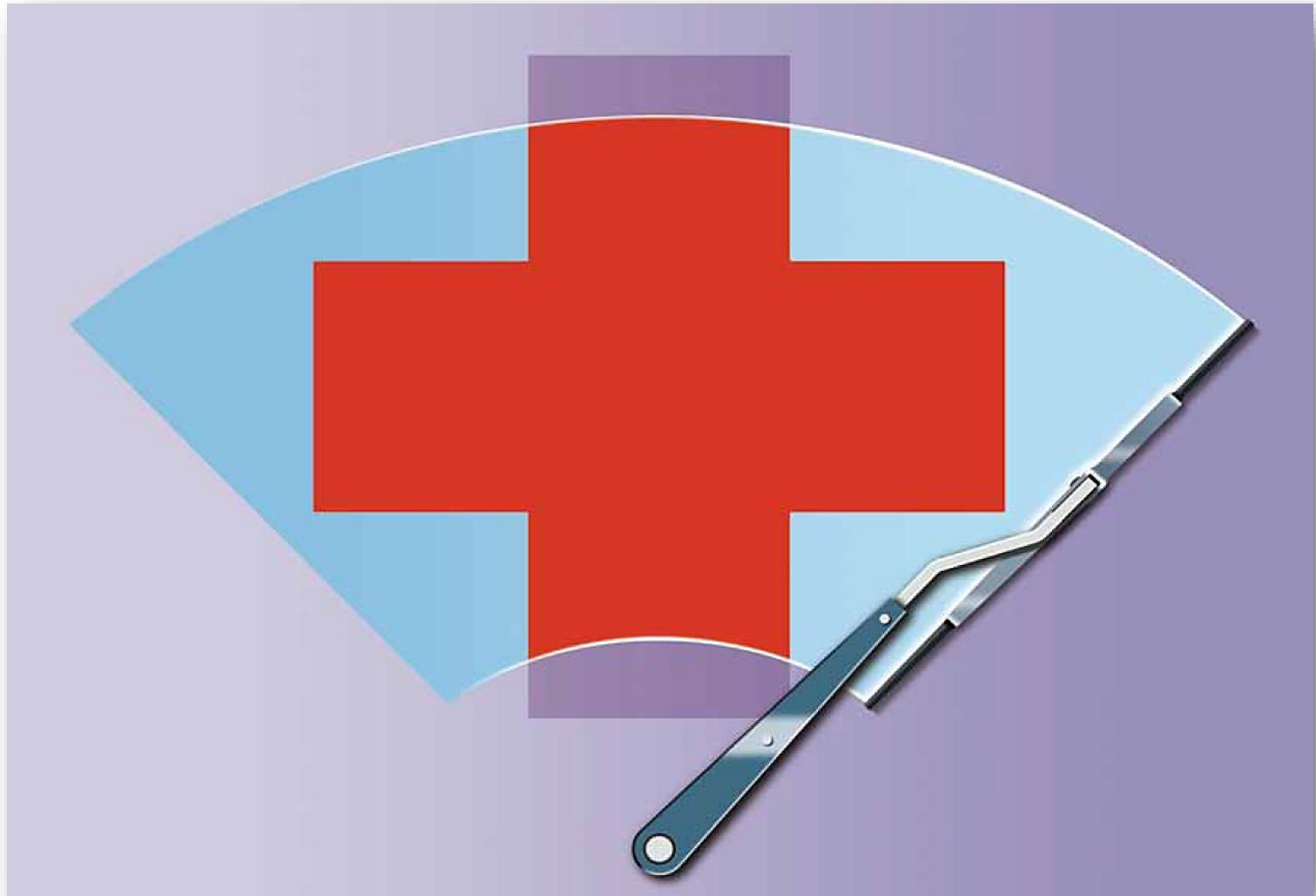


MRSA incidences

Since opening in July 2006



Transparency





**Care
Opinion**

What's your story?

3,200

stories shared (*21% increase
on previous year*)

98%

stories are responded to

66

**stories led to system
changes**



SEPSIS

Aim - To implement actions to support early recognition and intervention to reduce hospital mortality rates due to sepsis.

Sepsis is when infection in one part of the body spills over to have effects on all the body systems. This can lead to multi-organ failure and death, especially if not recognised and treated promptly.

Sepsis is a leading cause of death and harm. Sepsis is a complication of severe infection characterised by a systemic inflammatory response.

Mortality rates
30% to 50% for severe sepsis
40% to 70% for septic shock.

DUPLICATE FORM → 1x COPY MEDICAL NOTES
1x COPY IN SEPSIS FORM BOX FOR AUDIT.

SEPSIS 6 SHOULD BE ACTED UPON WITHIN 1 HR OF IDENTIFYING SEPSIS.

*** MEDICAL EMERGENCY ***

Seizures
A small seizure through out usually is benign, provide clear evidence of periodic compression and development of severe sepsis.

Seizure is a marker for infection.

Mortality rates associated with severe sepsis:

< 40 years	20%
40-60 years	30%
> 60 years	50%

Altered Mental State

Mental function is often altered. Mild disorientation or confusion is especially common in elderly individuals. Agitation, anxiety, agitation, and, rarely, coma are manifestations of severe sepsis. The most common of mental, neurophysiology is not known, altered mental state and confusion may play a role.

Respiratory Rate

During the sepsis response, respiratory rate cannot increase from the blood or normal. The earliest clinical sign of sepsis is often a rapid respiratory rate. This may be due to hyperventilation by systemic, local, or lung pathology, pulmonary embolism, or a combination of several of these factors. Hyperventilation occurs as a result of pulmonary pathology, shunting of deoxygenated blood through the lungs or pulmonary embolism secondary to respiratory failure. Hyperventilation during early sepsis may lead to respiratory alkalosis, but this is often replaced by metabolic acidosis due to respiratory failure and hypoxemia.

Urine output

Urine output is a good indicator of circulating volume and renal function, and therefore essential for good sepsis management and the prevention of acute kidney injury.

Temperature

Patients usually present with fever or hypothermia. A normal temperature on presentation is uncommon but may occur in sepsis, the elderly, and the severely immunosuppressed. Fever, hypothermia, and rigors may indicate hypothermia and sepsis. Hypothermia or hypothermia is more common in the elderly and in individuals with pre-existing neurological disorders. Low normal body temperature is not usually a feature of sepsis, but may indicate severe sepsis or hypothermia in the early phase.

Changes

Changes in vital signs and high flow oxygen may indicate severe sepsis or hypothermia.

FALLS

Don't Fall for it!
Safe steps to reducing Falls...
FALLS are the most common patient safety incident in all inpatient settings
FALLS can result in severe injury and death
FALLS are everyone's business

F FOOTWEAR
ENCOURAGE SAFE FOOTWEAR
FLEXIBLE VISITING
AID AIDS, POSSESSIONS & CALL BELL IN REACH
LIGHTING & ENVIRONMENT
STIMULATION

NON-SLIP SOCKS OR SHOES WITH GRIP

DO NOT LEAVE AIDS OUT OF REACH. THIS IS RESTRAINT.

All spare time should be used to engage patients in activity.

LOOKING FOR PATTERNS OF FALLS IN WARD 1

WARD 1. MEASLES CHART ANY FALL TO BE I

EVERY FALL OR NEAR MISS SHOULD HAVE 14/15 BP ECG MEDICAL REVIEW POST FALLS BUNDLE

THE OUTCOME OF ALL THESE SHOULD THEN INFORM BE EVIDENT IN CARE PLAN TO REDUCE FURTHER RISK!

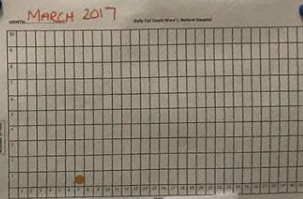
CAUTI

REMOVE ASAP WHEN NOT REQUIRED

REDUCES RISK OF BACTERIAL CONTAMINATION

ENSURE BAG IS ALWAYS BELOW LEVEL OF BLADDER IN BED APPLY NIGHT BAG!

CONTINENCE



Early identification and treatment of sepsis

Boundarilessness



Multi-agency Collaborative...

Education

Social care

Health

Justice

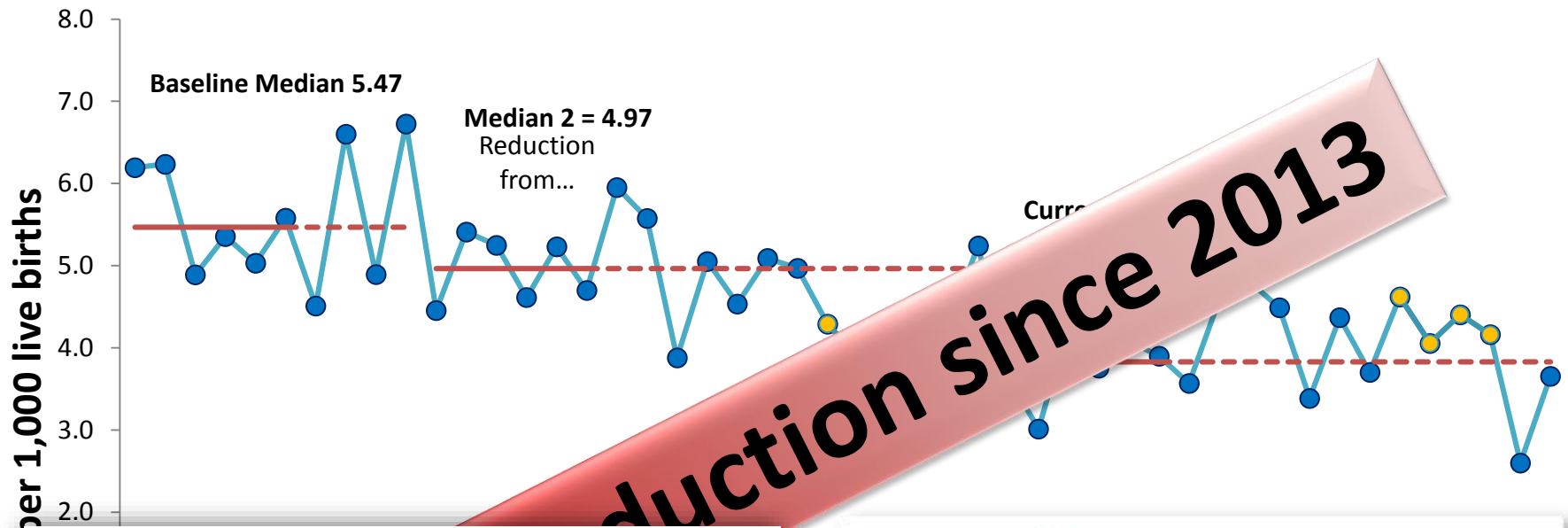
Families

Police

Third Sector

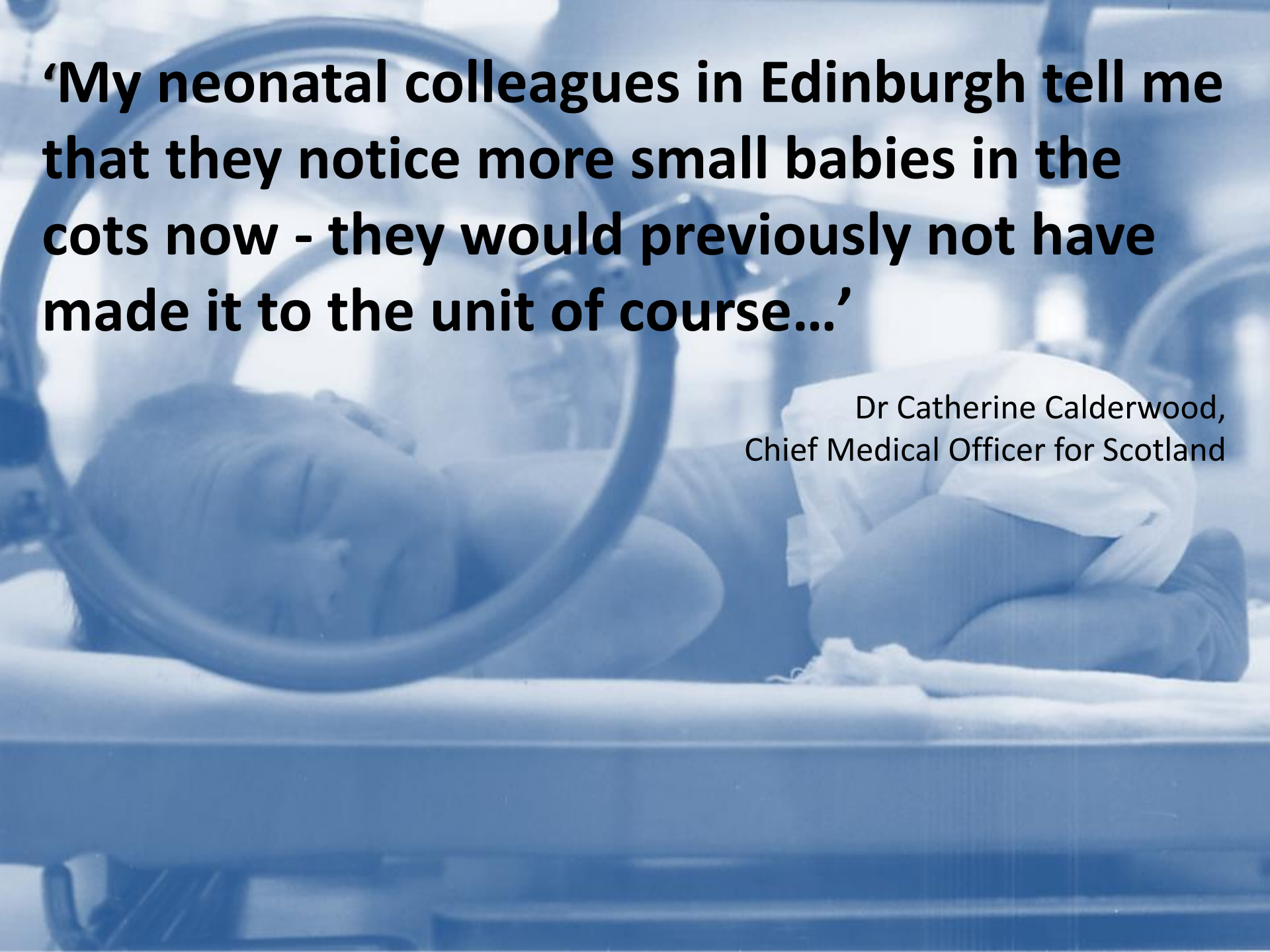


Scottish Stillbirth Rate (per 1000 births) 2007 - 2018



**Children and
Young People
Improvement
Collaborative**





‘My neonatal colleagues in Edinburgh tell me that they notice more small babies in the cots now - they would previously not have made it to the unit of course...’

Dr Catherine Calderwood,
Chief Medical Officer for Scotland

Aim

**Primary
Drivers**

**Secondary
Drivers/Change Ideas**

**By the end of
2020, I will
be the best
improvement
leader in my
organisation**

**Personal
Understanding &
Reflection**

Relational Skills

Behaviours



Table Exercise: Boundarilessness

- Bring out your phones / Look at your diaries
 - Map out what teams & organisations you have worked with for the last month
 - What was the nature of the interaction
 - Building relationships? Delivering work with other teams? Shifting work to others? Learning from others? Sharing information?
 - Look for themes / be Honest
 - Share what you have learned and what you need to improve

High Impact Leadership Behaviours Self Assessment Tool



High Impact Leadership Behaviors Self-Assessment Tool

This self-assessment tool is intended to help leaders understand and improve their effectiveness by practicing the high impact behaviors. The questions and statements under each behavior are not intended to be prescriptive, but rather examples of specific actions/behaviors which support the concept. Each question is scored on a 0-4 point scale. There is no "passing" score. Instead, the scoring is intended to help leaders identify the subset of leadership behaviors which may need additional effort and focus.

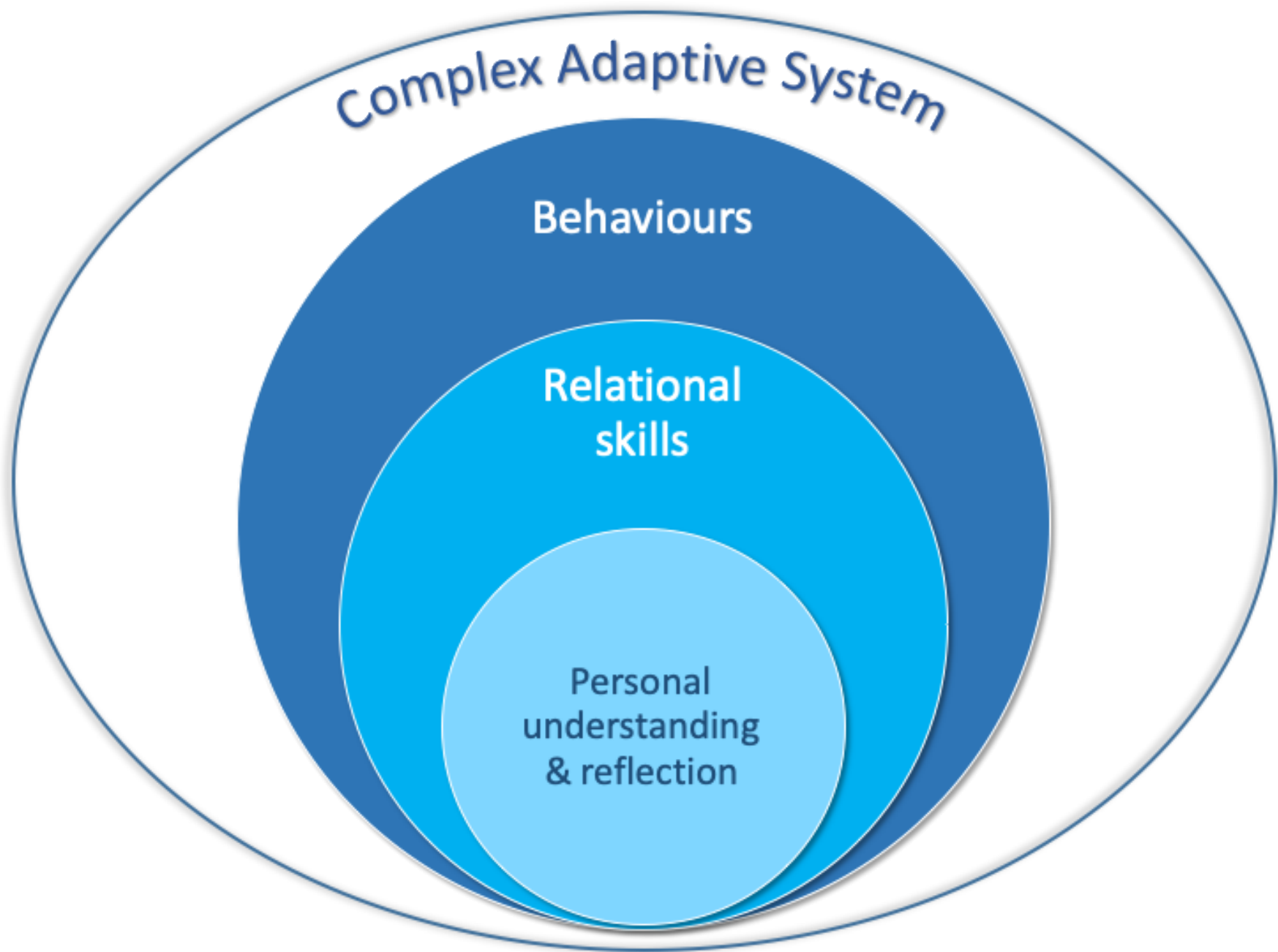
Leaders may also find it useful to have their associates and team members utilize this tool to provide a "360 degree" view of an individual's leadership behaviors and or find it useful as a tool to provide feedback on the senior leadership team's collective practice of the High Impact Leadership Behaviors.

A. Person-centeredness: *Be consistently person-centered in word and deed*

1. How frequently do you talk with community members and others outside the organization about their care issues, desires and expectations?
2. How frequently do you include patients and/or community representatives as members of improvement teams, departmental/leadership meetings or Board Meetings?
3. How frequently do you visit with patients and families in the care setting and talk with them about the care provided?
4. How frequently do you review patient experience and safety data and meet with others to drive improvement in the results?
5. How frequently do you use patient stories and experiences to build will or shape culture with those you lead?

0	1	2	3	4
Never	Quarterly	Monthly	Weekly	Daily

Section Score _____



Ingredients for: The Cake



flour



sugar



eggs



vanilla



butter



milk



baking powder



salt

Ingredients...

IHI White Paper: High-Impact Leadership

Swensen S, Pugh M, McMullan C, Kabcenell A. High-Impact Leadership: Improve Care, Improve the Health of Populations, and Reduce Costs. IHI White Paper. Cambridge, Massachusetts: Institute for Healthcare Improvement; 2013.

www.ihl.org/resources/Pages/IHIWhitePapers/HighImpactLeadership.aspx

IHI High-Impact Leadership: Developing Core Leaders

Michael Pugh, MPH, Anne Peach, RN, MSN, Dave Munch, MD, Amy DeYoung, MBA, RRT, Cindy L. Reed, MBA, R.T.,(R)(MR)

http://app.ihl.org/Events/Attachments/Event-2916/Document-6322/Presentation_Slides.pdf

The Health Foundation: Complex adaptive Systems Evidence Scan

https://www.health.org.uk/publications/complex-adaptive-systems?gclid=EAlaIqobChMIsoB5K6_5AIVDLTtCh0GhgFEEAAYASAAEgKTO_D_BwE

The Scottish Improvement Journey: a nationwide approach to improvement

<https://www.gov.scot/publications/scottish-improvement-journey-nationwide-approach-improvement-compiled-2016-17/>







Thank you