PQIP Perioperative Quality Improvement Programme

Insights from the national Perioperative Quality Improvement Programme

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Health Foundation Improvement Science Fellow 2015-18

Midlands Medical 2018

What I’m going to talk about

- Why this, why now?
- What we have found
- What we have learned
- What we will be doing in the future

Improving perioperative care: key challenges

1. Knowledge and Knowledge mobilisation

2. Tightrope: Quality Assurance vs. Quality Improvement

Improving perioperative care: key challenges

1. Knowledge and Knowledge mobilisation

Knowledge and Knowledge mobilisation

What are we doing?

What should we be doing?

How do we need to change?

How do we change?

Knowledge and Knowledge mobilisation

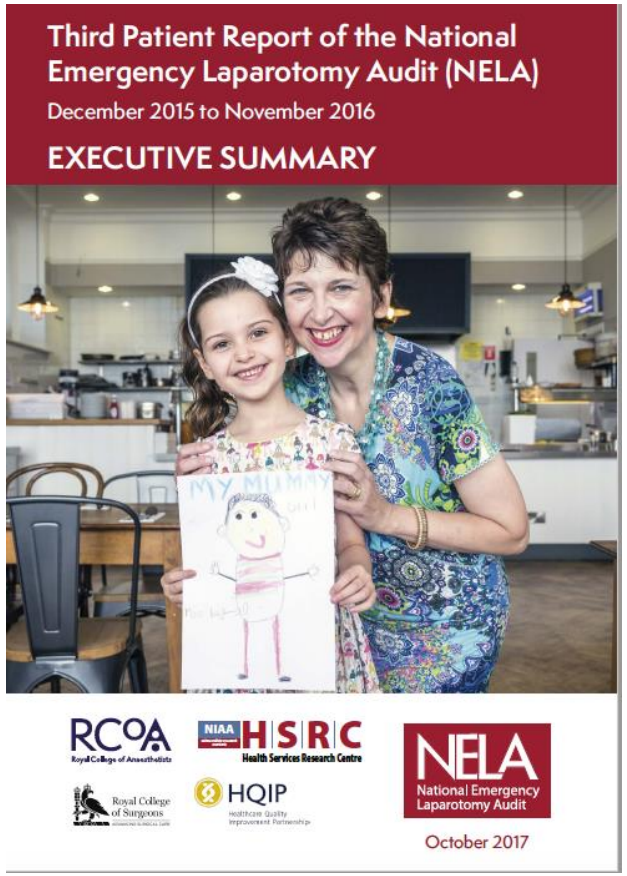
What are we doing?

What should we be doing?

How do we need to change?

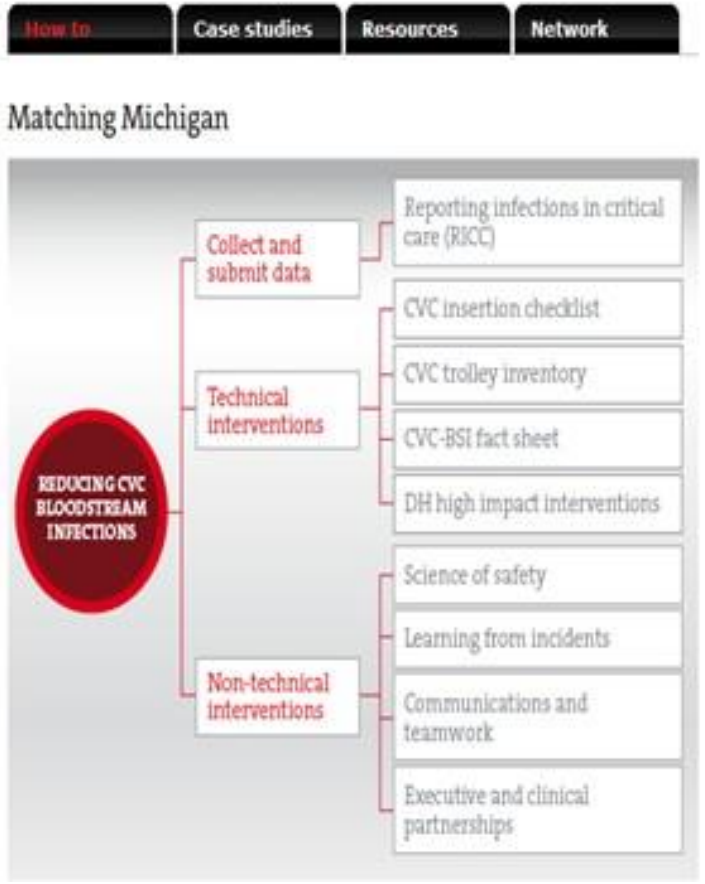
How do we change?

“Measurement for improvement”



Safety Thermometer

It's not just counting ... It's caring



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Do you know your outcomes?

- Are your processes reliable?
- How do your patients do? (not just 30-day mortality)

Knowledge and Knowledge mobilisation

What are we doing?

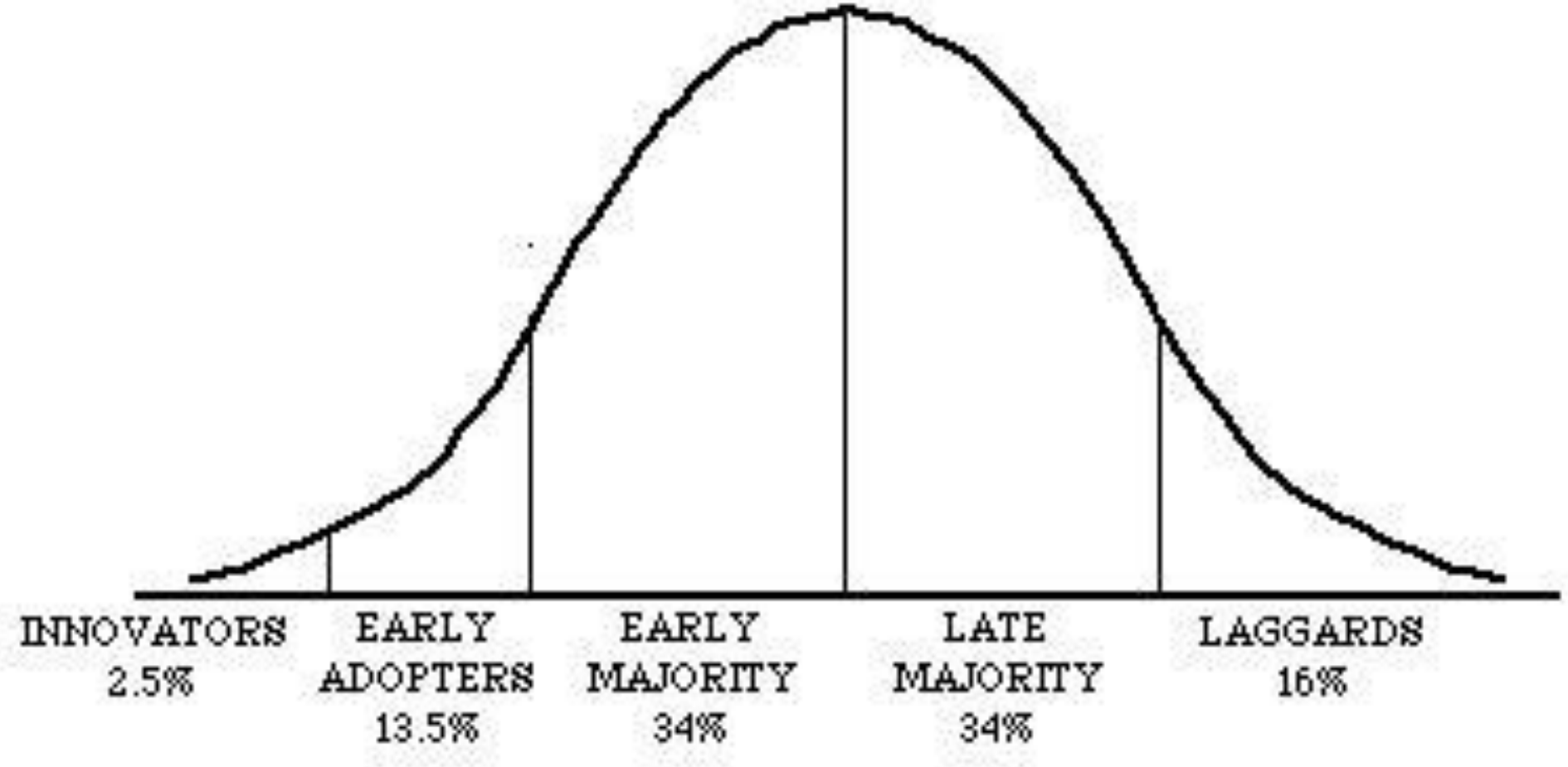
What should we be doing?

How do we need to change?

How do we change?

Evidence Based Medicine

Knowledge Mobilisation



Diffusion of Innovation: Rogers, 1962

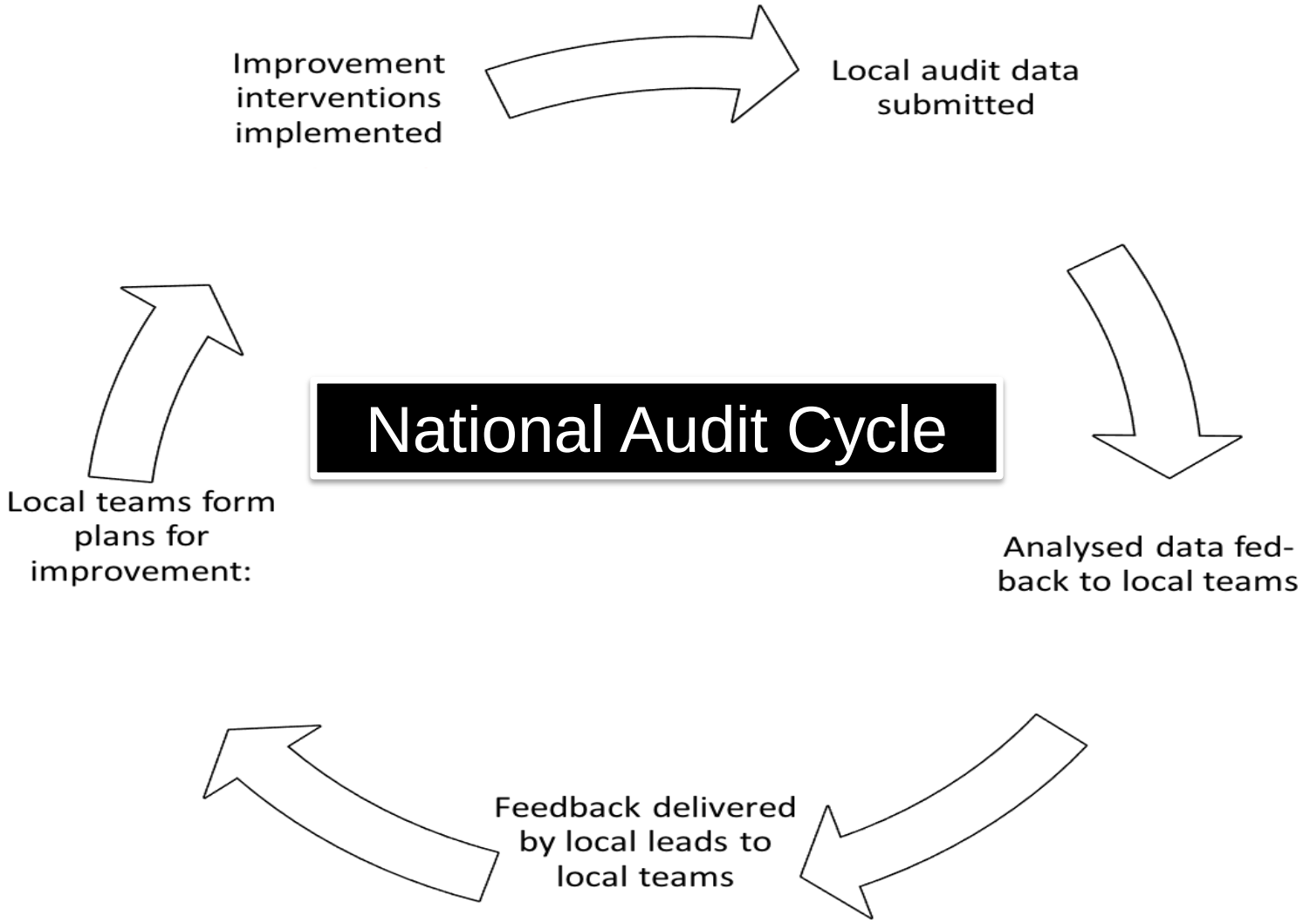
Knowledge and Knowledge mobilisation

What are we doing?

What should we be doing?

How do we need to change?

How do we change?


National Audit Cycle
Improvement interventions implemented
Local audit data submitted
Analysed data fed-back to local teams
Feedback delivered by local leads to local teams
Local teams form plans for improvement:

Knowledge and Knowledge mobilisation

What are we doing?

What should we be doing?

How do we need to change?

How do we change?

Improvement methodology

Understand context

Leadership

Resilience

Summary so far…

- We don’t know a lot about a lot
- Data are important and can be helpful
- Implementation of best practice takes time and energy

Challenge 2:

Quality Assurance vs. Quality Improvement

You are in: Health: Background Briefings: **The Bristol heart babies**

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Monday, 15 March, 1999, 23:27 GMT

Bristol heart surgeon sacked

Mr Dhasmana: contract terminated by Bristol Royal Infirmary

One of the surgeons at the centre of the Bristol heart babies scandal has been sacked.

Janardan Dhasmana will no longer be able to operate on adults at Bristol Royal Infirmary.

Mr Dhasmana was one of three doctors implicated in the deaths of 29 babies at the hospital between 1988 and 1995. Others were left seriously brain damaged after heart surgery.

WATCH/LISTEN REAL MEDIA
ON THIS STORY
BBC News
The BBC's Richard Hannaford reports

Top The Bristol heart babies stories now:

- Bristol surgeon loses High Court bid
- 'Up to 100 babies died needlessly'
- I'm not perfect, says Bristol surgeon
- Baby surgeon: I was scapegoat
- Surgeon admits skills were in question
- Roylance: I knew nothing
- Baby death claims 'exaggerated'
- Bristol baby surgeon breaks down

Links to more The Bristol heart babies stories are at the foot of the page.

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Transparency

Accountability

Responsibility

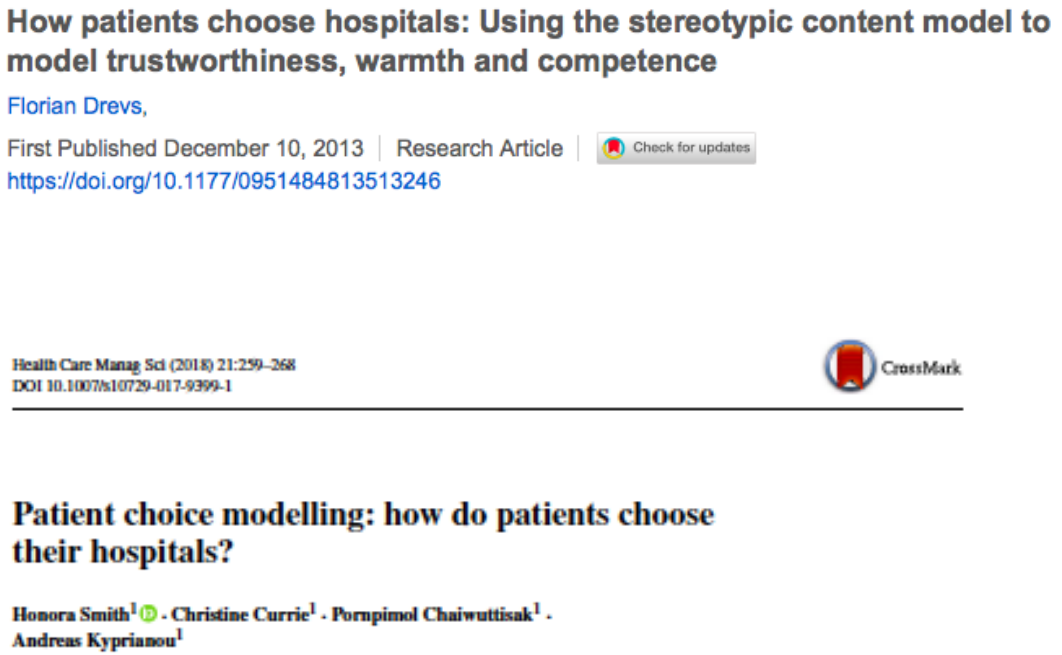
Transparency

Accountability

Responsibility

What matters to patients?

- Car parking
- Proximity
- Size



How patients choose hospitals: Using the stereotypic content model to model trustworthiness, warmth and competence

Florian Drevs,

First Published December 10, 2013 | Research Article | Check for updates

https://doi.org/10.1177/0951484813513246

Health Care Manag Sci (2018) 21:259–268
DOI 10.1007/s10729-017-9399-1

CrossMark

Patient choice modelling: how do patients choose their hospitals?

Honora Smith[1] · Christine Currie[1] · Pornpimol Chaiwuttisak[1] · Andreas Kyprianou[1]

People like competition….?

Transparency

Accountability

Responsibility


COURTESY MEDICAL REALITIES

Surgeon-specific mortality data are misleading and harmful

December 2015 Br J Cardiol 2015;22:132–3 doi:10.5837/bjc.2015.038 Leave a comment

Click any image to enlarge

Authors: Ravi De Silva

Show details

Effect of public reporting of surgeons' outcomes on patient selection, "gaming," and mortality in colorectal cancer surgery in England: population based cohort study

Abigail E Vallance,[1] Nicola S Fearnhead,[2] Angela Kuryba,[1] James Hill,[3,4] Charles Maxwell-Armstrong,[5] Michael Braun,[6] Jan van der Meulen,[1,7] Kate Walker[1,7]

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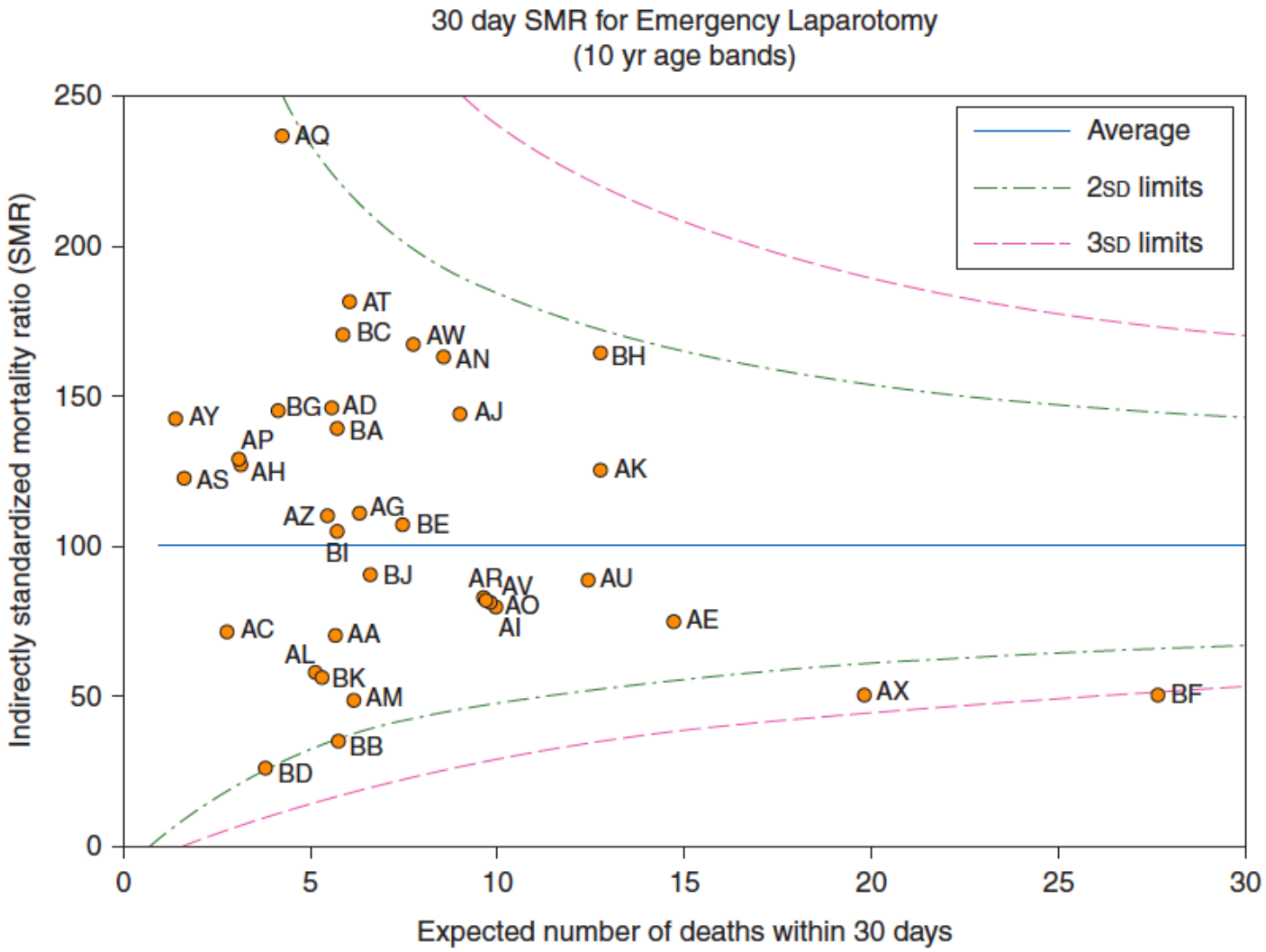
30 day SMR for Emergency Laparotomy
(10 yr age bands)
Indirectly standardized mortality ratio (SMR)
Expected number of deaths within 30 days
Average
2SD limits
3SD limits
0
50
100
150
200
250
0
5
10
15
20
25
30
AQ
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BE
BI
BJ
AR
AV
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AM
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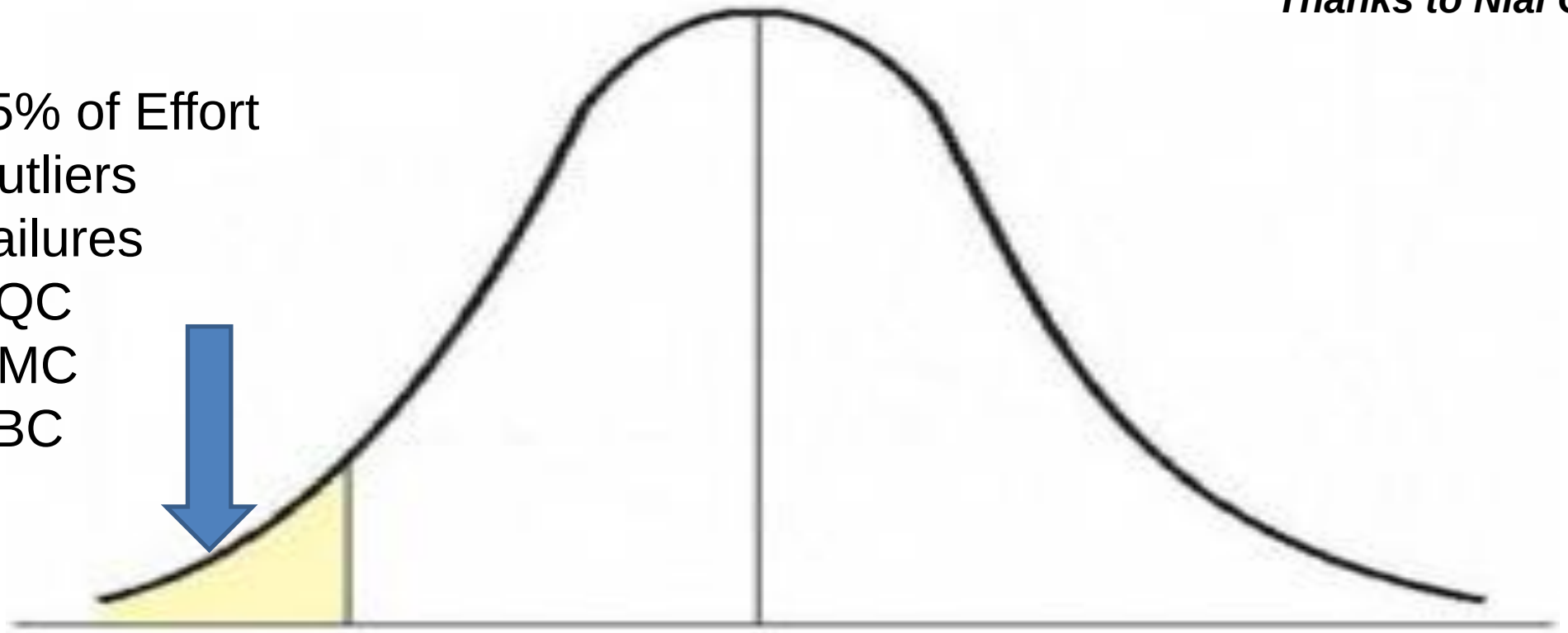
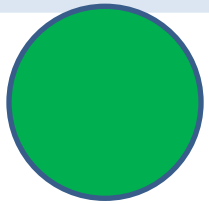
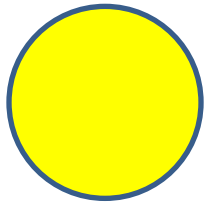
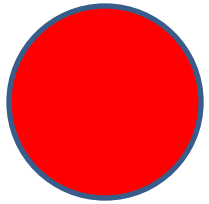
“Quality Assurance”

Thanks to Nial Quiney

- 95% of Effort
- Outliers
- Failures
- CQC
- GMC
- BBC

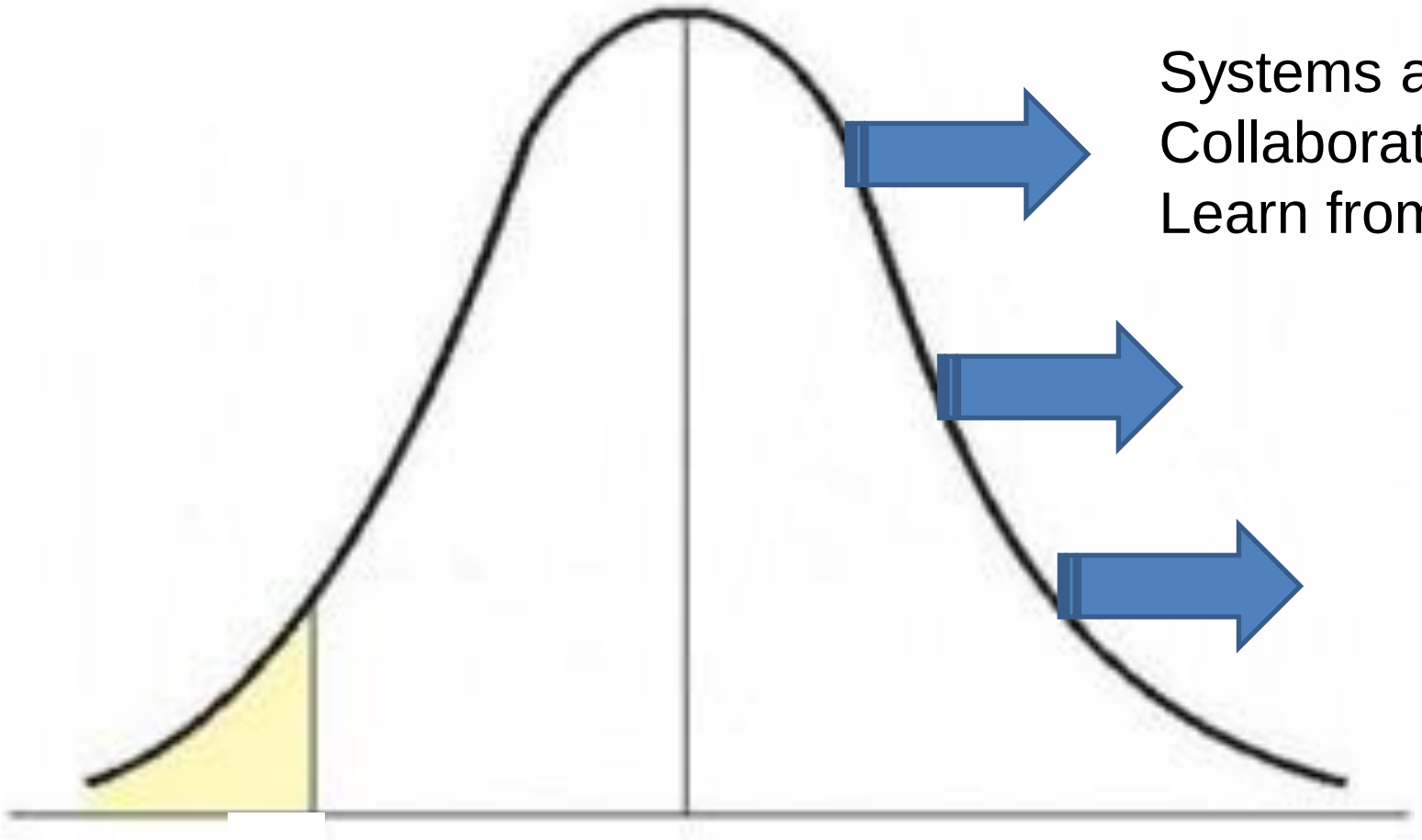


RAG ratings

‘What we think it says’		‘What we do with it’
Good		
Caution. What is happening? Be prepared to do something		
OMG! What is happening Need to do something….		

IHI Leaders 2017

Quality Improvement



Systems approach
Collaborate and learn together
Learn from the best

Accountability

Transparency

Responsibility

Blame?

Any good foreman knows how clever a frightened work force can be. In fact, practically no system of measurement - at least none that measures people's performance - is robust enough to survive the fear of those who are measured […]

The inspector says, "I will find you out if you are deficient." The subject replies, "I will therefore prove I am not deficient" - and seeks not understanding, but escape.

(Berwick, 1989:53)

Social Science & Medicine 198 (2018) 157–164

Contents lists available at ScienceDirect

Social Science & Medicine

journal homepage: www.elsevier.com/locate/socscimed

Taking the heat or taking the temperature? A qualitative study of a large-scale exercise in seeking to measure for improvement, not blame

Natalie Armstrong[a,*], Liz Brewster[b], Carolyn Tarrant[a], Ruth Dixon[c,d], Janet Willars[a], Maxine Power[e], Mary Dixon-Woods[f]

QI not QA

Financially incentivised

Frontline staff do data capture

But….data publicly reported

One of the things that we, and still do now, is to make clear that this isn't about comparing organisations, it's about using the information within your organisation to do quality improvement - to understand how good you are, and then to track your progress as you make changes that you hypothesise will improve the outcomes for patients, that's what it's useful for

(NHS-Safety Thermometer Team Member 4)

My biggest bugbear about it is [despite] the very clear statements […] that it shouldn't be used to measure organisations or to compare organisations, that is exactly what it has done.

(Site R, Senior Staff 1)

[Staff perceived the NHSST] "to be a blame allocation device influenced first, by accountability and managerialism and, second, by specific features of the programme, including public reporting, financial incentives, and ambiguities about definitions that amplified the concerns"

"In consequence, organisational participants, while they identified some merits of the programme, tended to identify and categorise it as another example of performance management, rich in potential for blame."

"Thus, the search to optimise the benefits of measurement by controlling the risks of blame remains challenging"

Challenges (solutions) for healthcare improvement

People

Culture and engagement

Data & monitoring

Sustainability

Dixon-Woods et al.
BMJ Quality & Safety 2012


PQIP
Perioperative Quality
Improvement Programme

Aims

1. Describe and analyse epidemiology of:
   - evidence based processes of care
   - morbidity & mortality
   - patient reported outcome & disability free survival
   - failure to rescue

2. Support clinicians in using data for improvement
3. Evaluate effectiveness of a national strategy for QI

Methods

Major surgery

Validated process and outcome measures

Evidence based improvement methodology

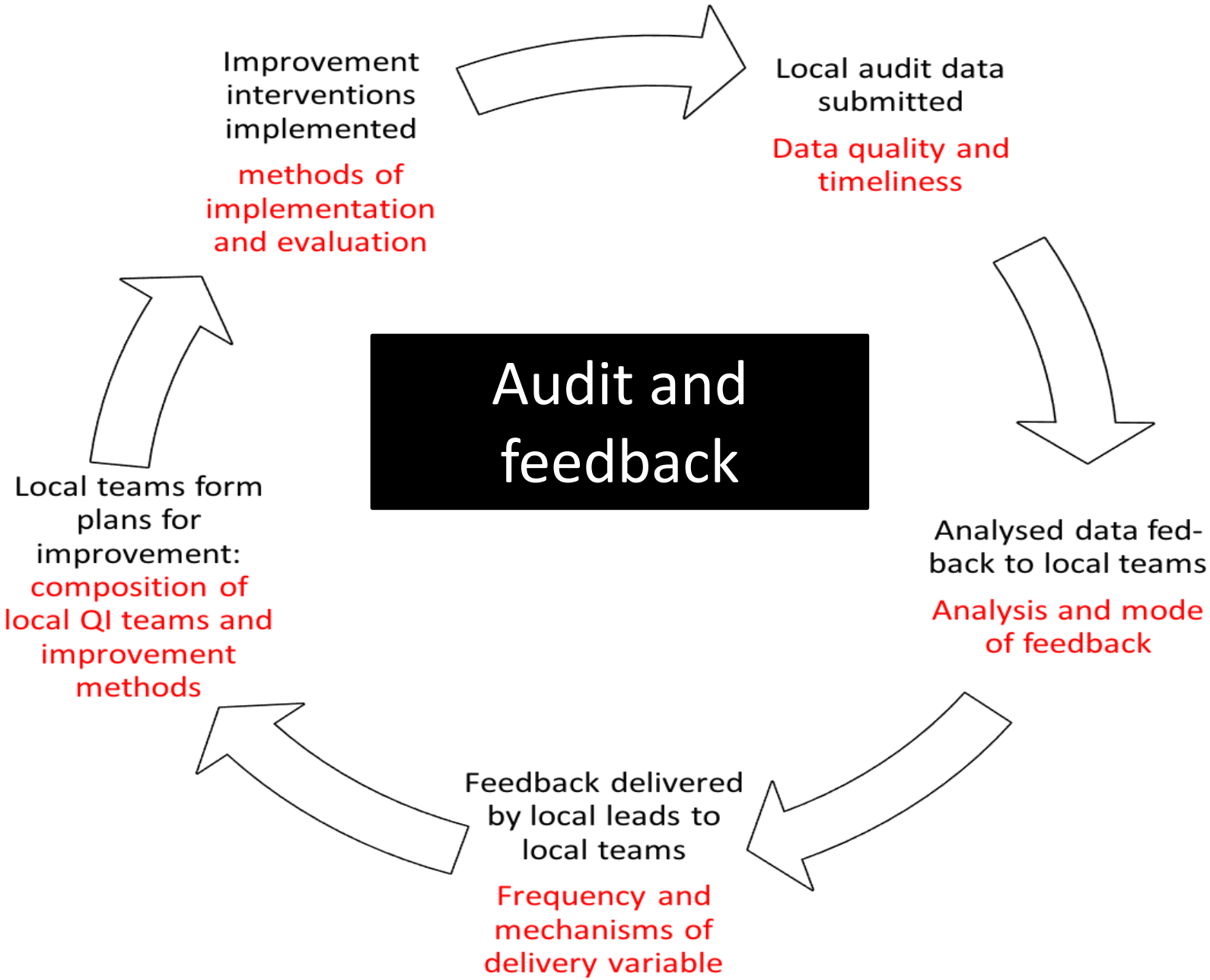
We’ve got to make life easier for you

Less time measuring, more time improving

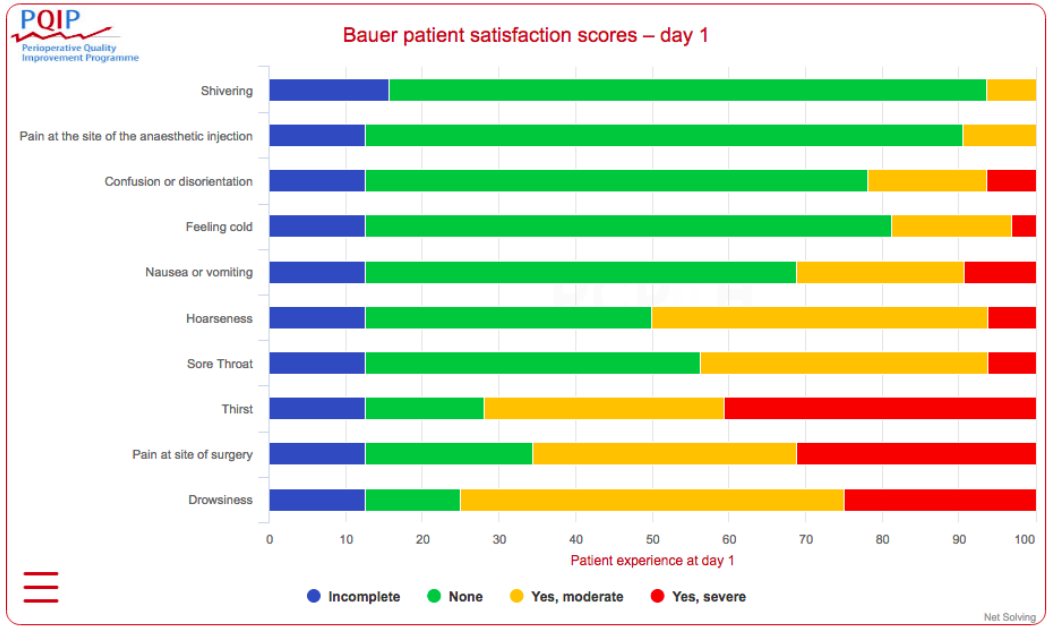
vs.

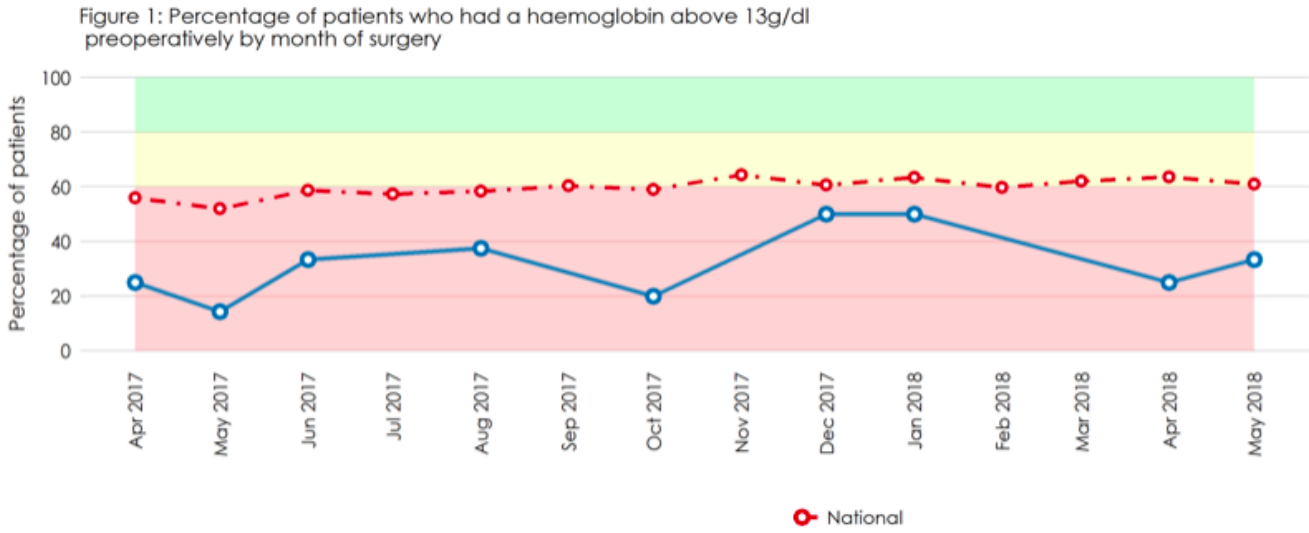
Valid, believable data

Effective use of data


Audit and feedback
Local audit data submitted
Data quality and timeliness
Analysed data fed-back to local teams
Analysis and mode of feedback
Feedback delivered by local leads to local teams
Frequency and mechanisms of delivery variable
Local teams form plans for improvement:
composition of local QI teams and improvement methods
Improvement interventions implemented
methods of implementation and evaluation

Dashboards and Quarterly reports





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Building knowledge and engagement

Improvement tools

Click on any of the links below to download the relevant documents:-

- How to create a simple run chart (PDF)
- How to create a simple SPC chart (PDF)
- How to use the model for improvement PQIP (PDF)
- How to Driver Diagrams PQIP (PDF)
- How-to Process Map PQIP (PDF)
- Model for Improvement Planning Work sheet (PDF)
- Process Mapping Facilitation How-to Guide PQIP (PDF)
- Run chart template (XLSX)
- SPC chart template (XLSX)

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Library

Patient Risk Factors

- 1.6.BMJ 1 Barnard - Is social deprivation an independent predictor of outcomes following cardiac surgery
- 1.6.NCBI 2 Charlton - Impact of deprivation on occurrence outcomes and health care costs of people with multiple morbidity
- 1.7 home 1 Finlaysson - Major abdominal surgery in nursing home residents
- 1.7 home 2 Neuman - Survival and functional outcomes after hip fracture surgery among nursing home residents
- 1.16 BMI 1 Hainer - Obesity paradox does exist
- 1.16 BMI 2 Turrentine - The relationship between BMI and 30 day mortality risk
- 1.16 BMI 3 Nepogodiev - Determining surgical complications in the overweight - DISCOVER
- 2.6 Sodium 1 Cecconi Preoperative abnormalities in serum sodium
- 2.8 Urea 1 Goren - Perioperative acute kidney injury
- 2.9 Creatinine 1 Mooney - Preoperative estimates of glomerular filtration rate as predictors of outcome
- 2.10 Albumin 1 Gibbs - Preoperative serum albumin level as a predictor of operative mortality and morbidity
- 2.12 Haemoglobin 1 Musallam - Preoperative anaemia and postoperative outcomes
- 2.22 cerebro 1 Liao - Outcomes after surgery in patients with previous stroke
- 2.24 dementia 1 Hugo - Dementia and Cognitive Impairment
- 2.32 alcohol 1 Oppedal - Preoperative alcohol cessation prior to elective surgery

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Download the new PQIP App!

Click here to download the new PQIP App, providing easy access to quality improvement resources and the latest updates and notifications on everything to do with PQIP.

Available for free on both iPhone and Android!

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Perioperative Quality Improvement Programme

ANNUAL REPORT 2017-18

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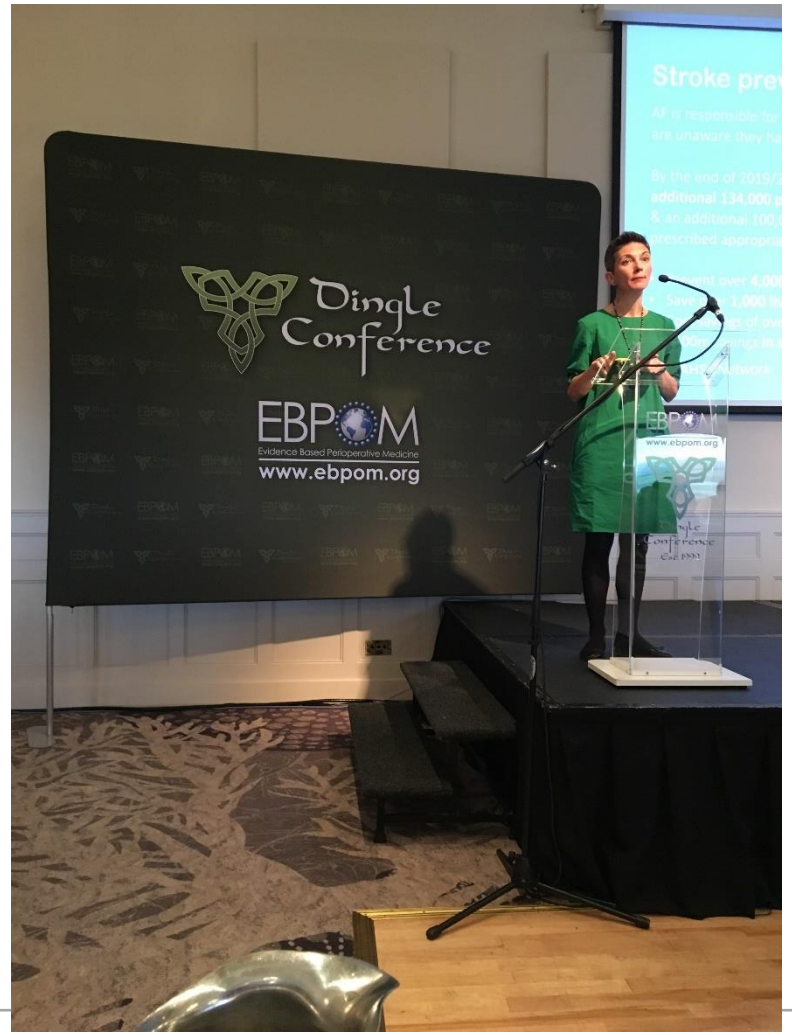
This morning

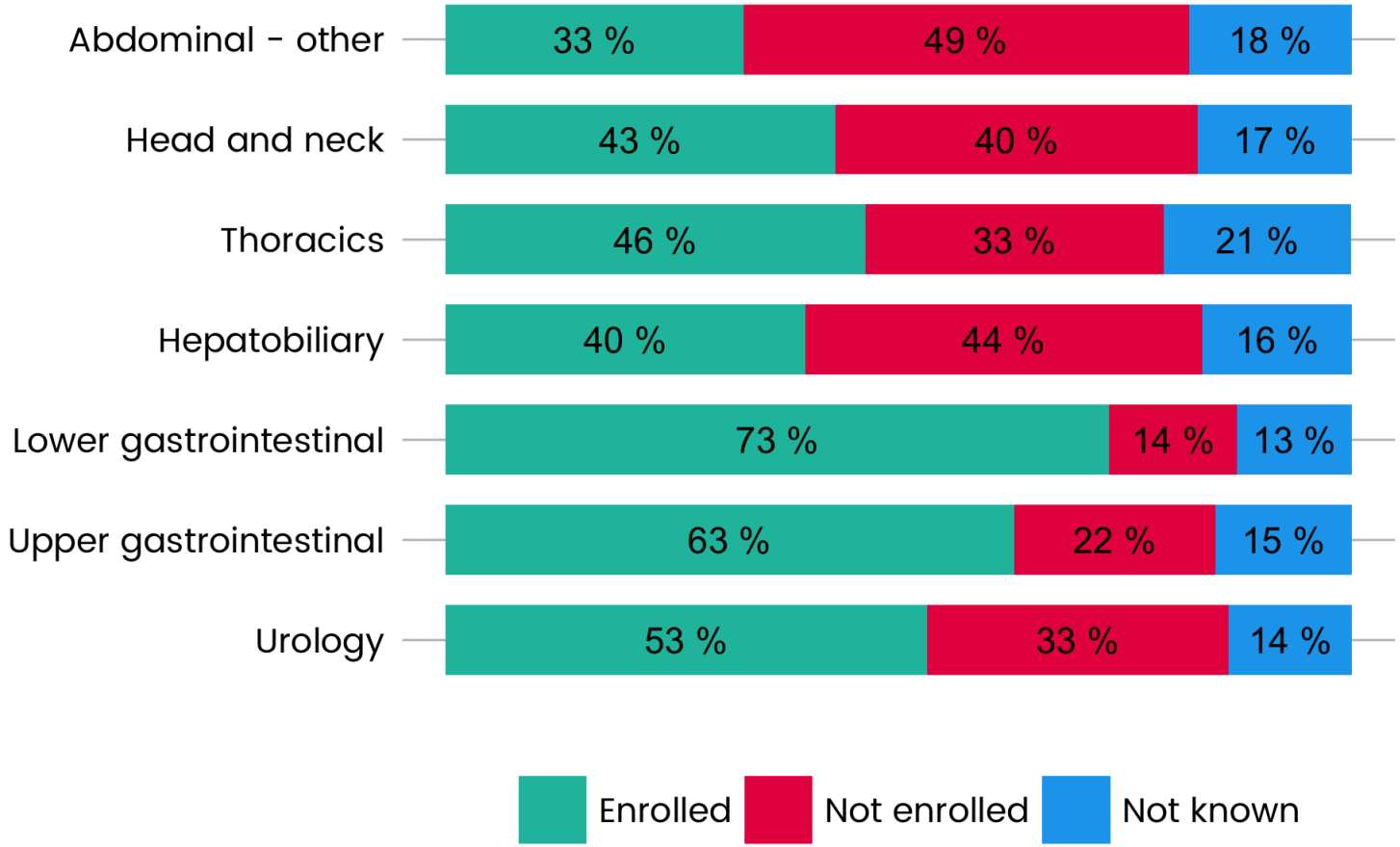


"We should just do it….but we are just not doing it…"

Preoperative assessment

No documented individualised risk assessment	33%
Anaemia	41%
HbA1C not known	31%

Enhanced recovery



Enhanced Recovery…?

Carbohydrate preloading

47%

64% for patients on ER pathway

Warming devices

97%

CO monitoring

31%

No NGT in recovery

91%

*Lower gastrointestinal patients

No drains in recovery

57%

*Lower gastrointestinal patients

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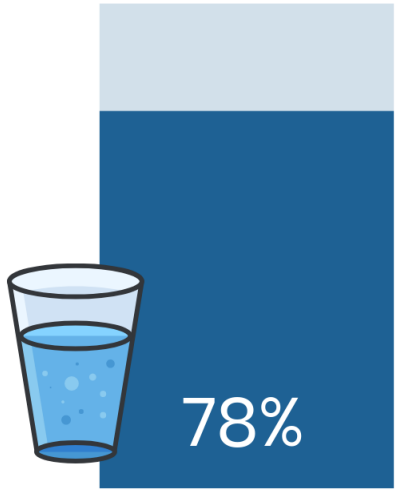
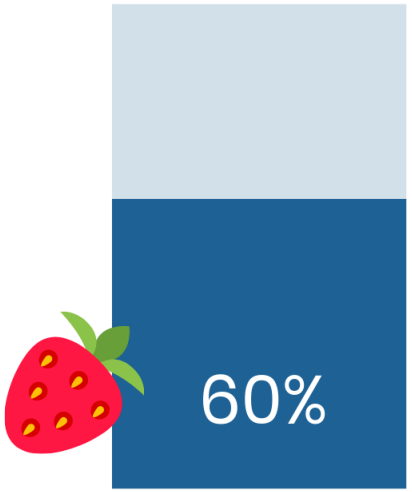
Drinking



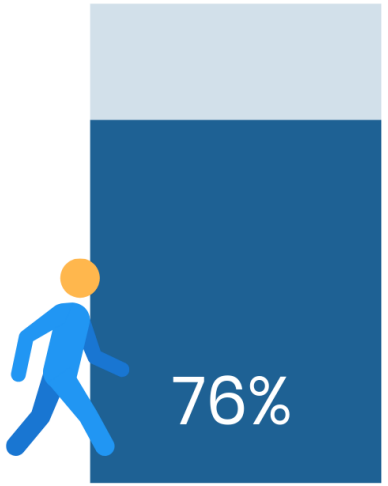
range
32-96% between sites
35-93% between specialtie

Eating



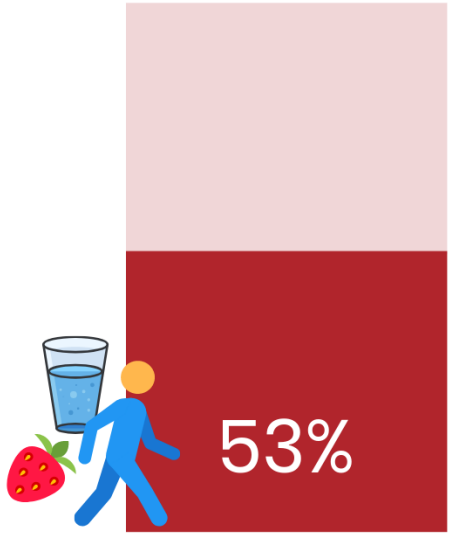
range
7-90% between sites
15-92% between specialties

Mobilising



range
43-93% between sites
56-88% between specialties

DrEaMing



range
4-84% between sites
14-83% between specialties

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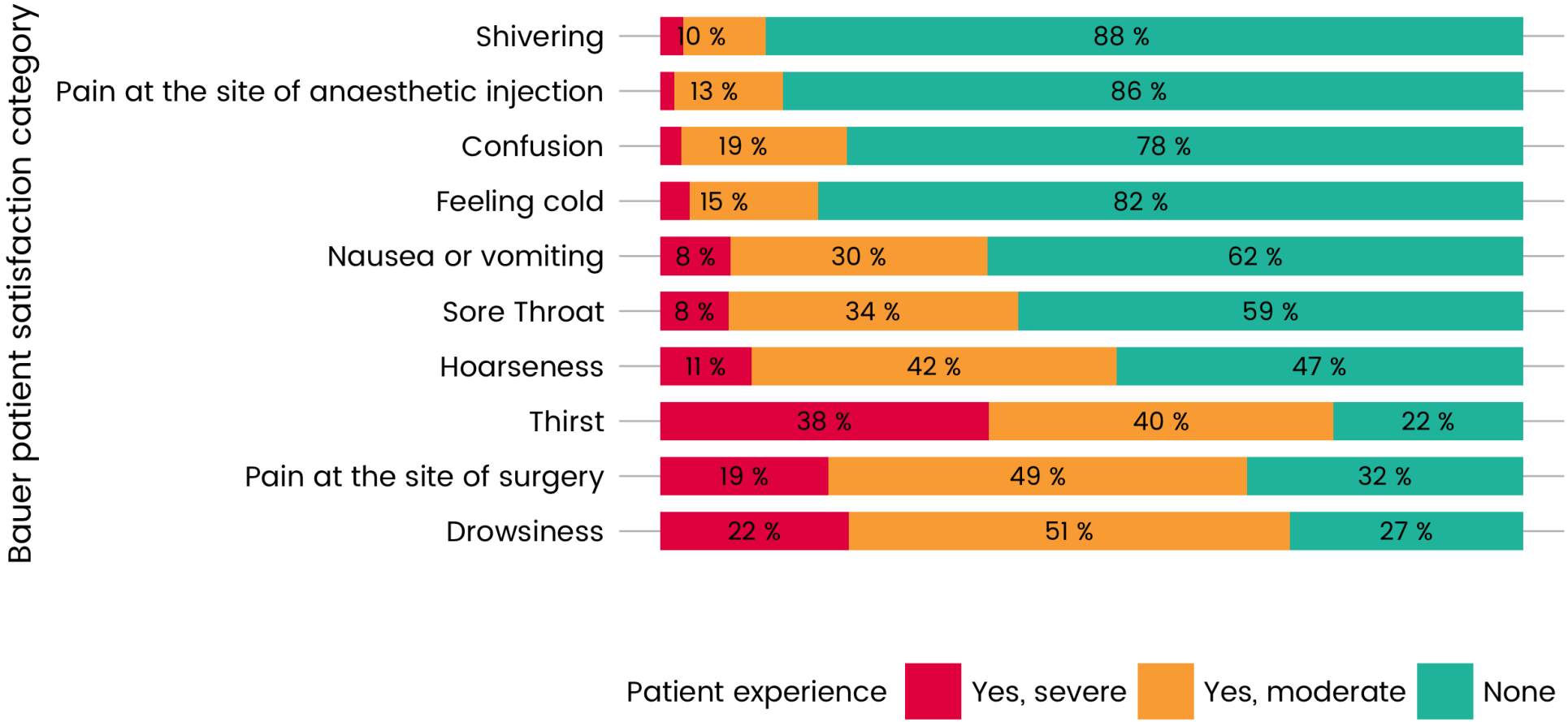
Postoperative pain and opiates

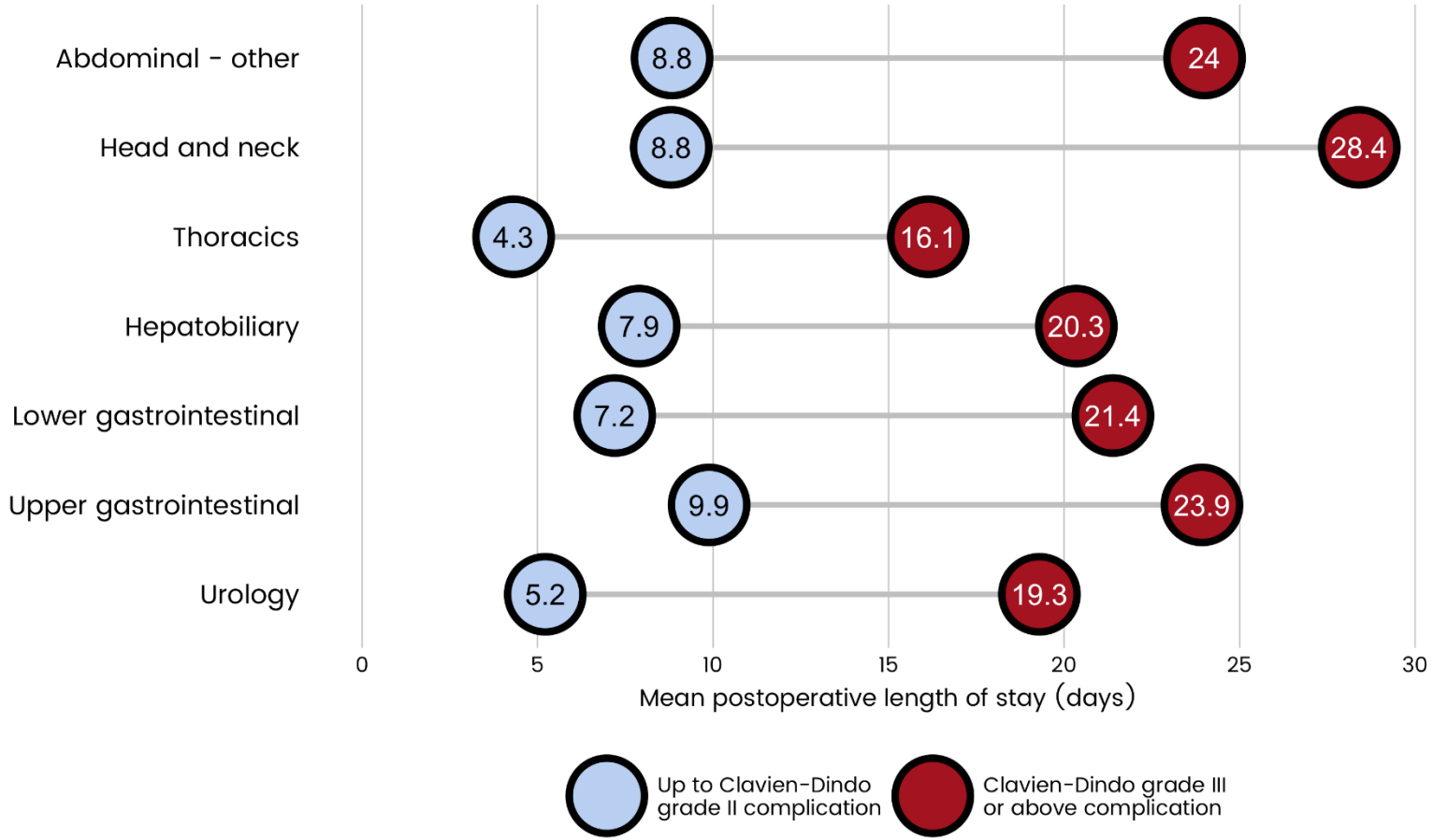
31% reported moderate or severe pain in recovery

7% receiving parenteral opioids on day 7

Patient reported outcomes



Postoperative complications and length of stay



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Using evidence and data to improve the care of surgical patients

PQIP's Top 5 National Improvement Opportunities for 2018-19

1. Anaemia & Diabetes

2. Individualised Risk Assessment

3. Enhanced Recovery

4. Individualised Pain Management

5. Drinking, Eating, Mobilising (DrEaMing)

Why these priorities?

- Important to patients
- Support improved outcomes

- **Achievable**

Since April…

- >90 hospitals now enrolling patients
- >12,000 patients recruited
- Sharing of learning
- Greater surgical engagement

What have we learned?

Communication

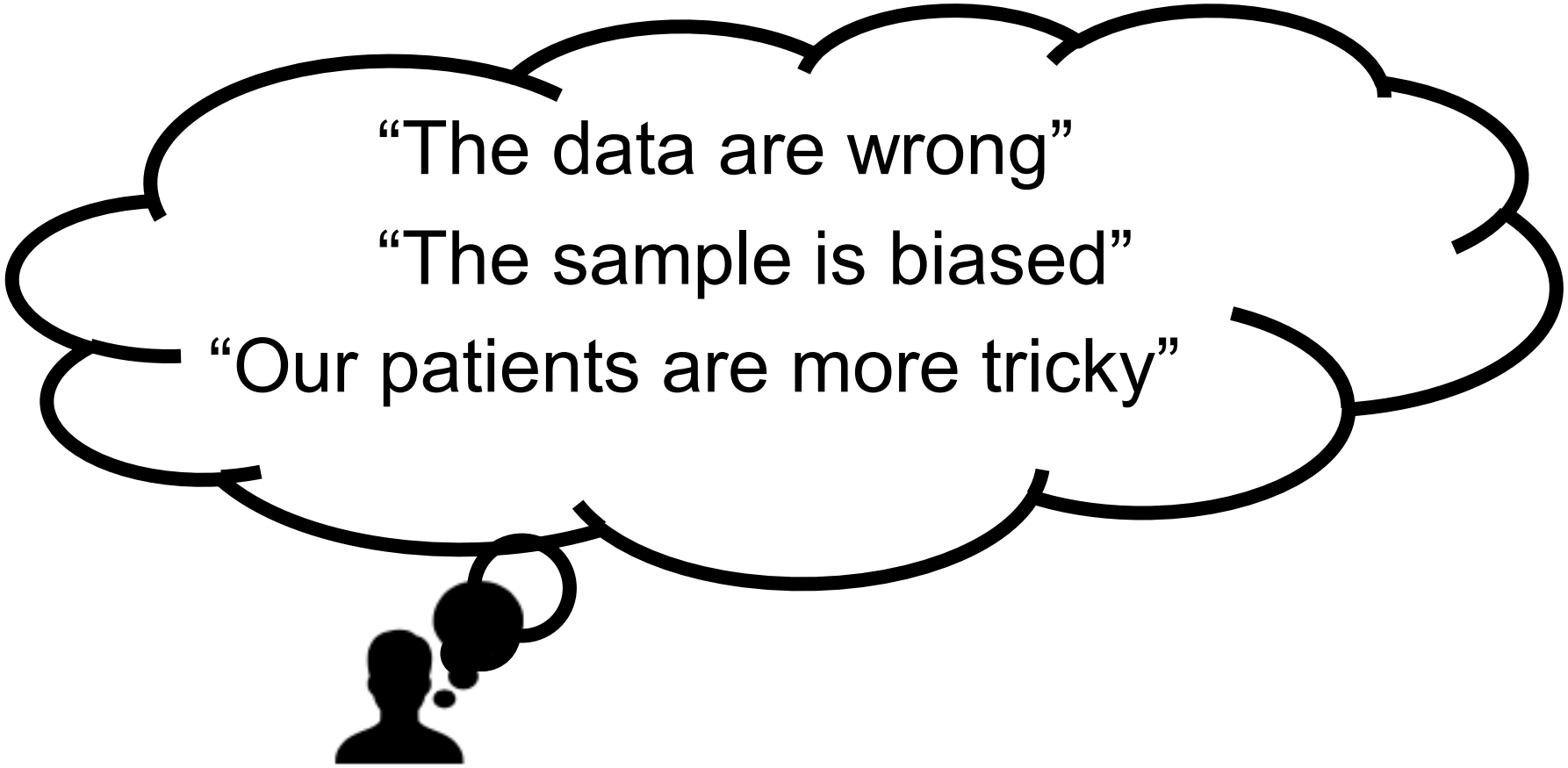
[Staff perceived the NHSST] "to be a blame allocation device influenced first, by accountability and managerialism and, second, by specific features of the programme, including public reporting, financial incentives, and ambiguities about definitions that amplified the concerns"

"In consequence, organisational participants, while they identified some merits of the programme, tended to identify and categorise it as another example of performance management, rich in potential for blame."

"Thus, the search to optimise the benefits of measurement by controlling the risks of blame remains challenging"

"a well-intentioned programme theory, while necessary, may not be sufficient for achieving goals for improvement in healthcare systems dominated by institutional logics that run counter to the programme theory"

Challenges


“The data are wrong”
“The sample is biased”
“Our patients are more tricky”

Positive deviance

From Wikipedia, the free encyclopedia

Positive deviance (PD) is an approach to behavioral and social change based on the observation that in any community there are people whose uncommon but successful behaviors or strategies enable them to find better solutions to a problem than their peers, despite facing similar challenges and having no extra resources or knowledge than their peers. These individuals are referred to as positive deviants.[1][2][3]

The concept first appeared in nutrition research in the 1970s. Researchers observed that despite the poverty in a community, some poor families had well nourished children. Some suggested using information gathered from these outliers to plan nutrition programs.[4][5]

Positive deviance

Arrowe Park
Bristol Royal Infirmary
Cumberland Infirmary
East Surrey
Royal Preston
Southmead
Warwick
Queen's Burton
Queen Elizabeth University Hospital (Gateshead)
Royal Lancaster Infirmary
Watford General
Royal Sussex County Hospital
Torbay
Broomfield
Churchill Oxford
Queen Victoria, East Grinstead
University College Hospital
Derriford
East Surrey
Russells Hall
Kings Mill
Royal Blackburn

What next?

Building our collaborative model

- Distribution of best practice guidance
- Sharing of pathways and data
- Bottom up communication

PQIP: evaluating whether it works

- Concurrent mixed methods evaluation of whether PQIP achieves goal of improving patient care & outcome
  - Quantitative
  - Qualitative (ethnography)
  - Health economic

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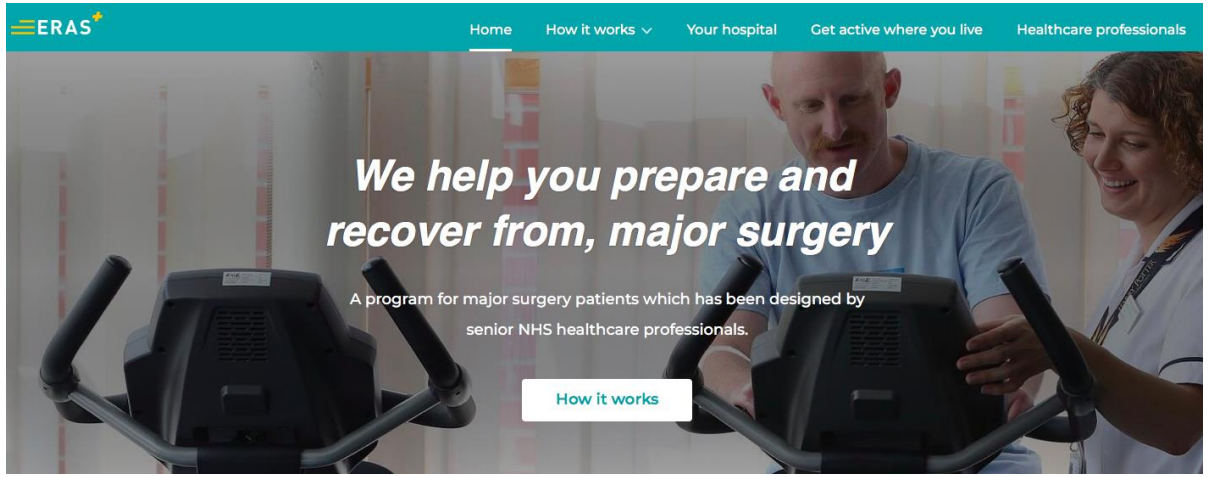
Collaborations and innovations

pomVLAD



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New data

- Risk prediction calculator
- Patient reported outcomes
- Long-term survival

Most importantly

Improved processes and outcomes of perioperative care

Better information for patients

Better understanding of how to use data for improvement

Increased capability for improvement by perioperative teams















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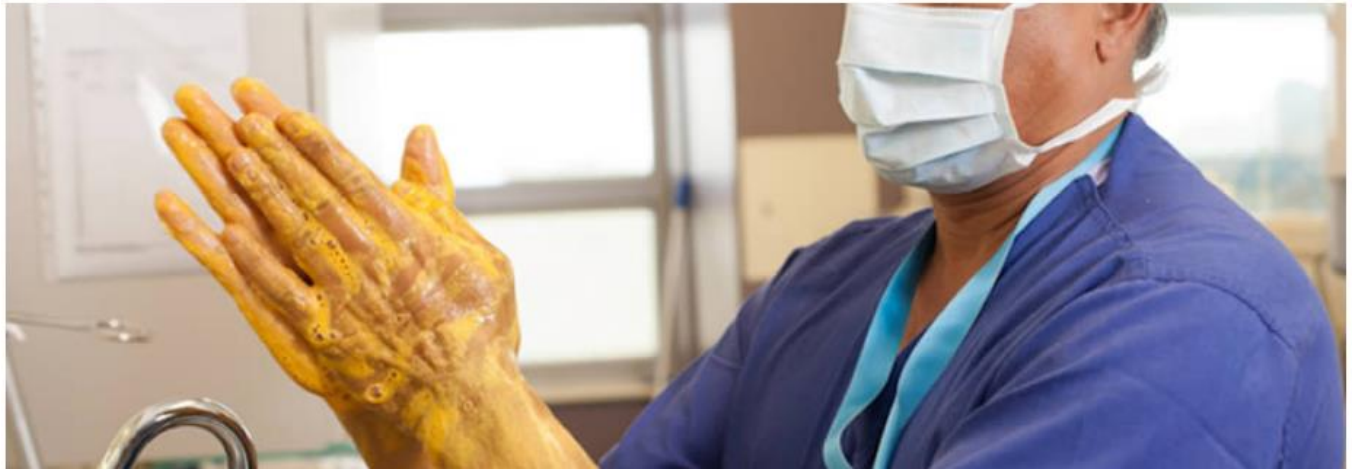
"A multidisciplinary initiative supporting local quality improvement to benefit patients undergoing major surgery."



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