

Can we (should we!) use patient-reported outcome measures to compare the quality of healthcare providers?

Professor John Browne
University College Cork

Overview

1. English policy context.
2. A simple example of how we can use PROMs in quality of care research.
3. Conceptual challenges.
4. A new research agenda.

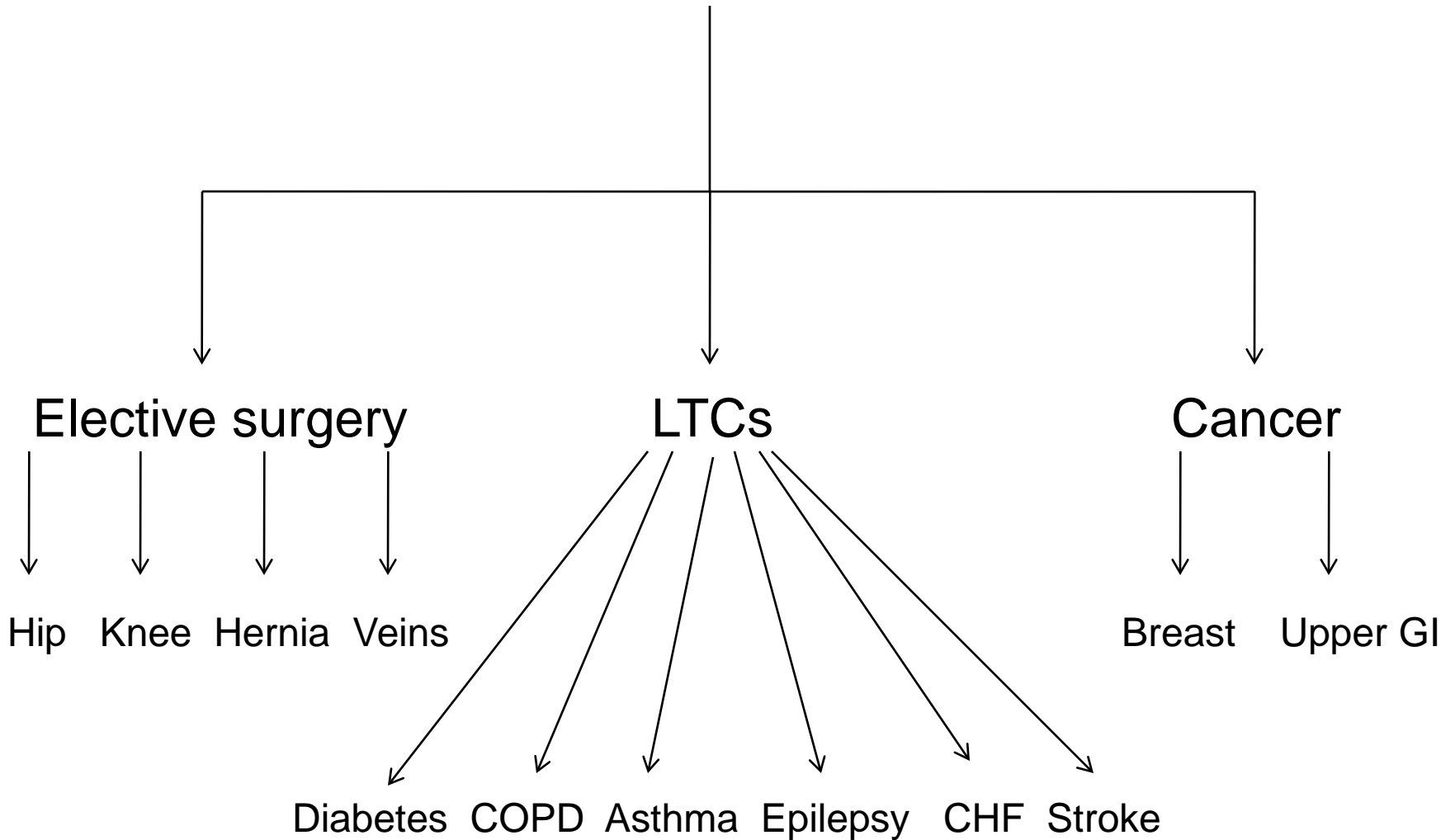
2008 NHS Next Stage Review: High Quality Care for All



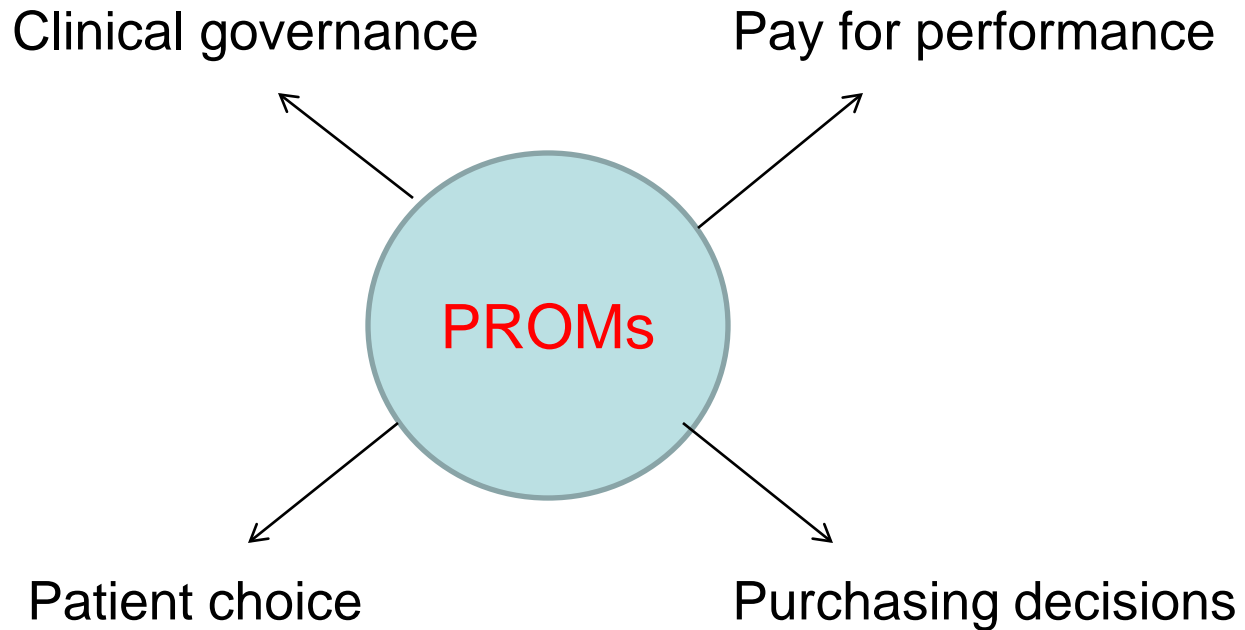
“We will make payments to hospitals conditional on the quality of care given to patients... “

“a range of quality measures [including] PROMs will be used.”

PROMs now being used across the NHS



How will PROMs be used?



A concrete example: Independent Sector Treatment Centres

Reduce
waiting
times

Expand
capacity
and choice



New models
of care

Privately run and owned
but free at point of access

Competition
for referrals

Problems with outcomes at ISTCs?

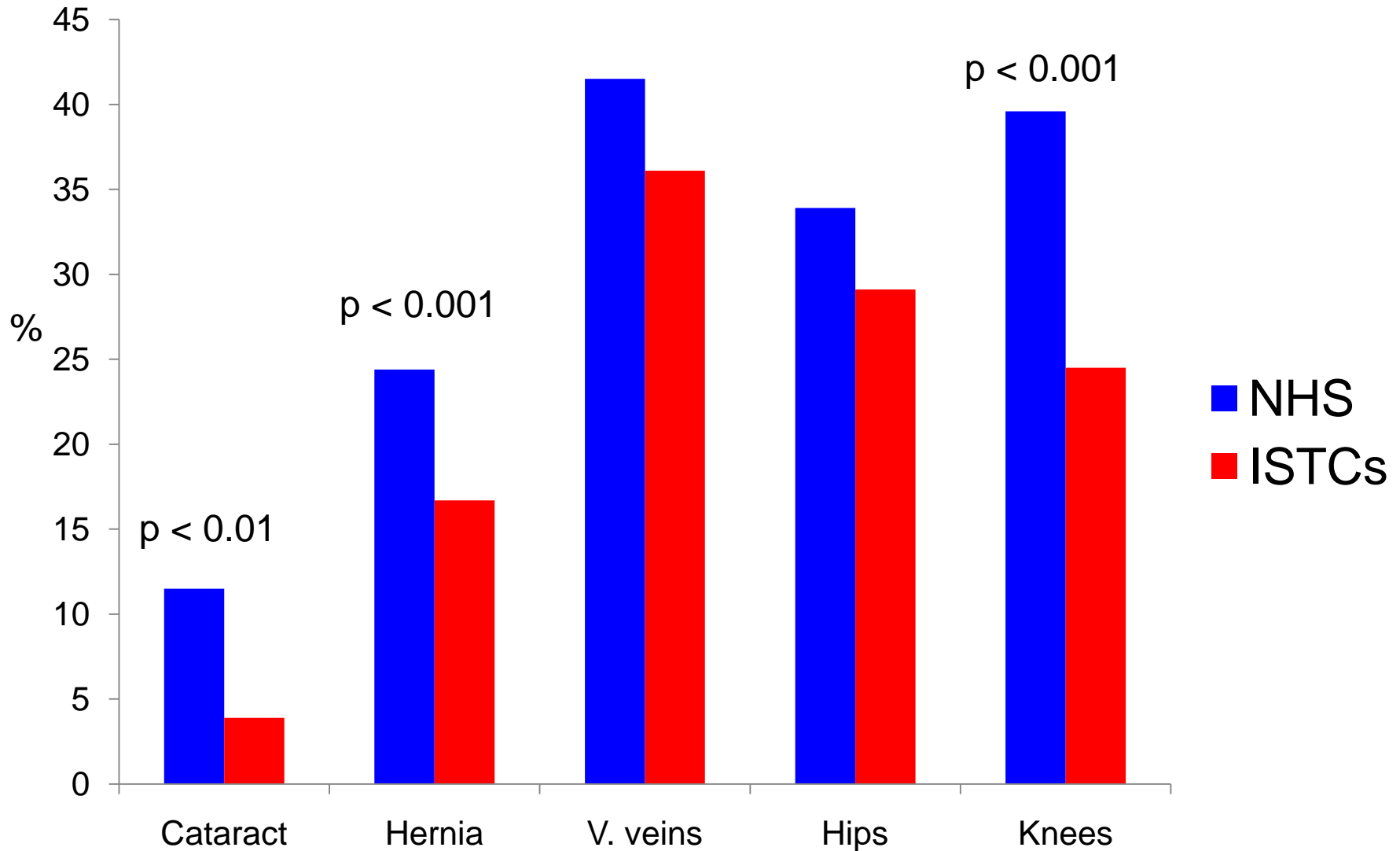
“Surgeons claim independent centres produce poor results” BMJ (2006)

"no hard, quantifiable evidence to prove that standards in ISTCs differed from NHS". House of Commons Health Committee (2006)

“straightforward comparisons of the quality of care have not been possible”. Healthcare Commission (2007)

“high revision rates for hip and knee replacements carried out in ISTCs” JBJS (2009)

NHS vs ISTCs: patient-reported complications (risk-adjusted)



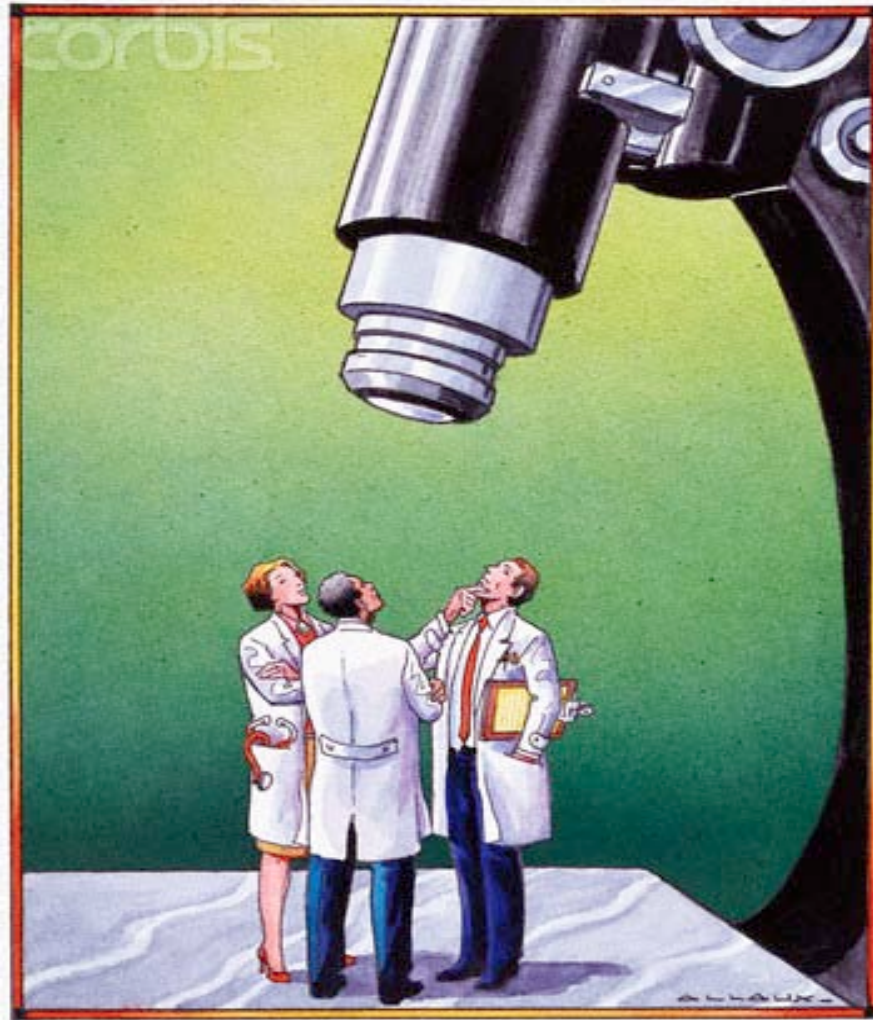
Summary

- We have demonstrated the usefulness of a retrospective analysis of PROMs data.
- Does this mean we should use PROMs to prospectively detect quality of care problems?

Prospective PROMs audit: The challenges

1. How might PROMs comparison improve quality?
2. Does it actually work?
3. How do turn PROMs into remedies?

1. How might routine PROM reporting improve quality? Hawthorne effect?



“may focus clinical minds on optimising treatment for a particular patient”
(Bridgewater 2007)

“[Hawthorne effect] data patterns prove to be entirely fictional.”

**NBER Working Paper
No. 15016**

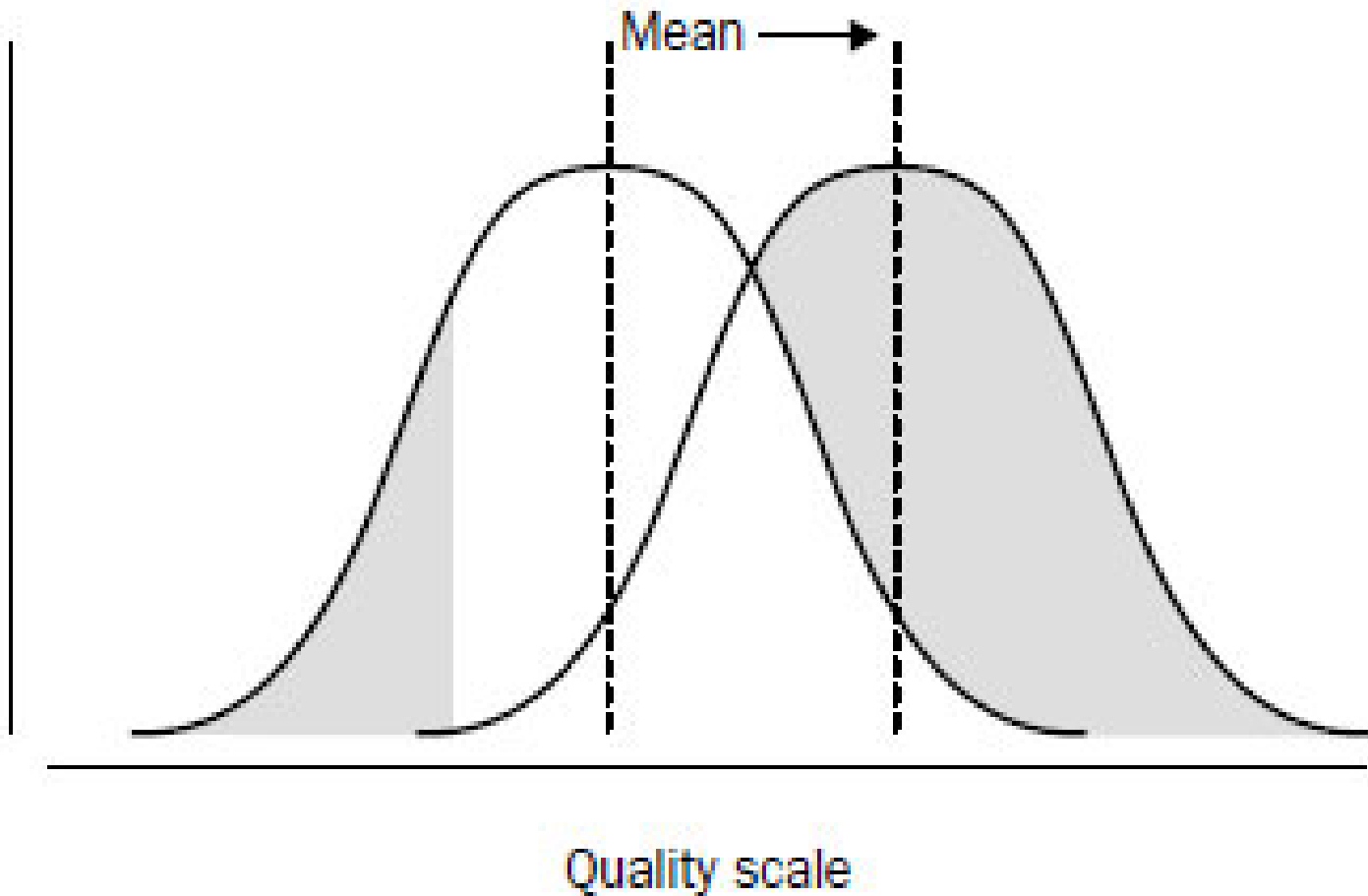
Natural selection?



“[outcome data] allows patients, referring doctors and purchasers preferentially to select units or surgeons with good results, and... motivate hospitals and surgeons to compete on quality and thereby improve overall outcomes”

Bridgewater (2007)

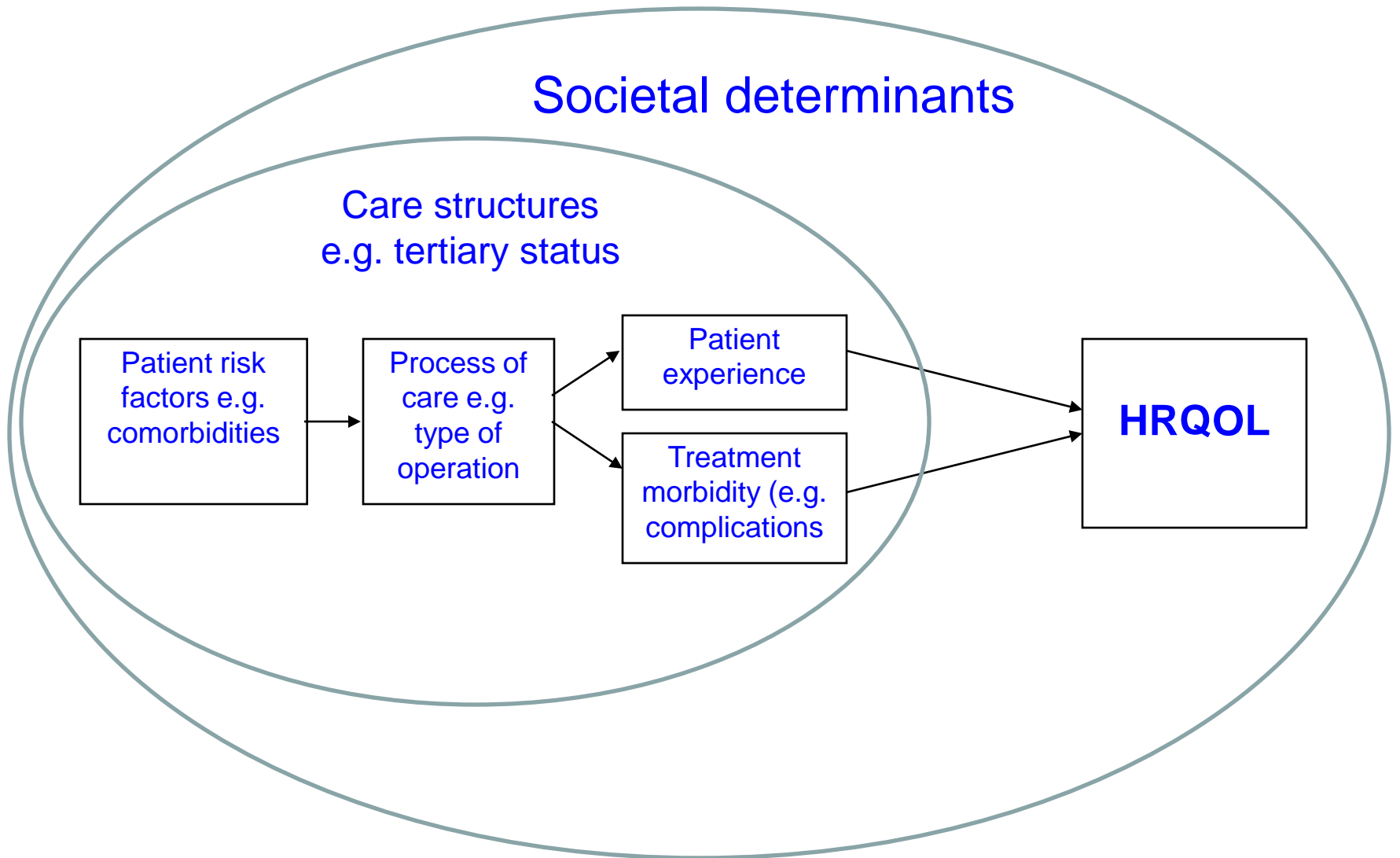
Shifting the whole distribution as we learn
(from what)?



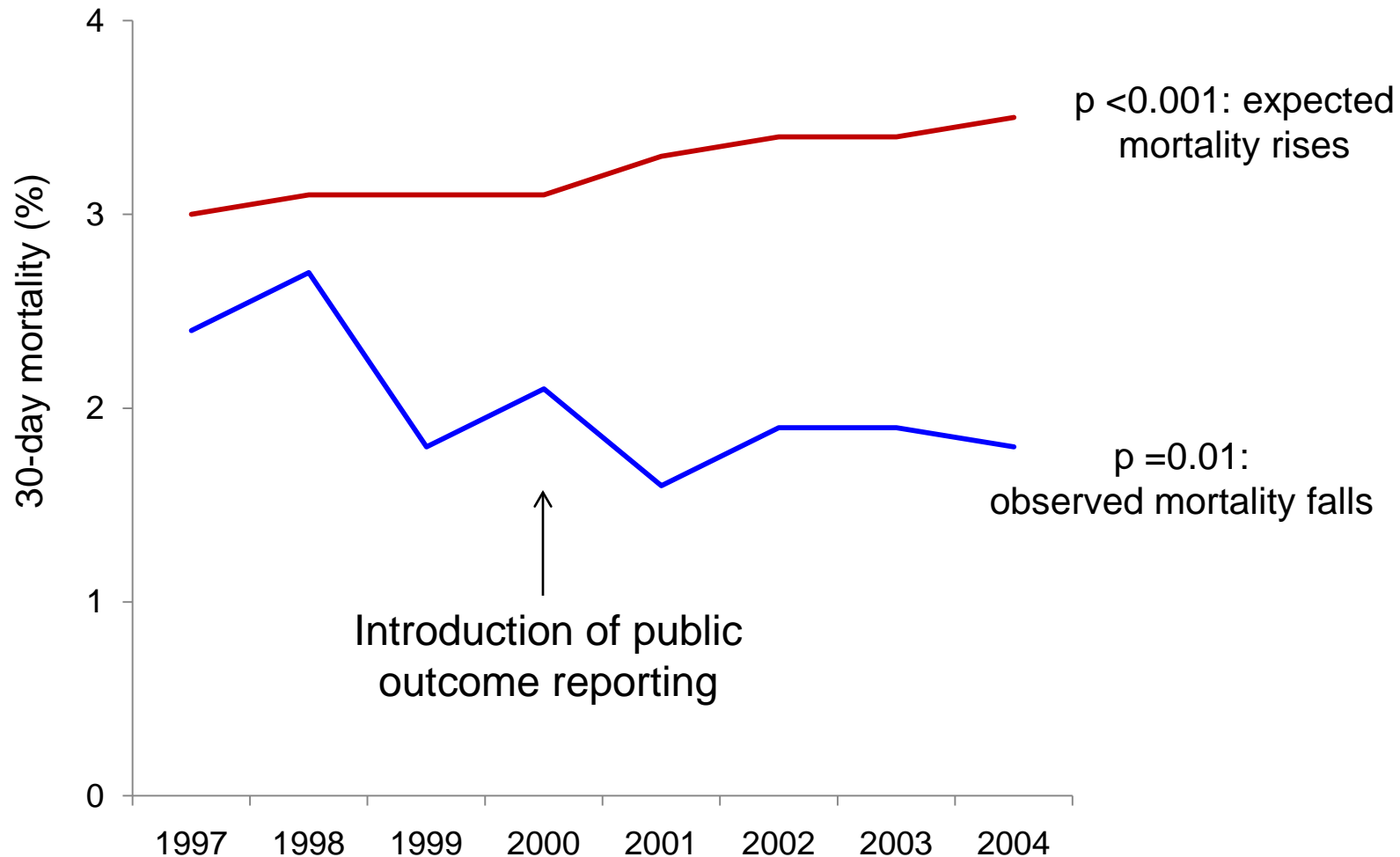
Outcome 'audit' is controversial

- “It is wrong to compare organisations (for performance management purposes) on the basis of differences in patients’ satisfaction or quality of life”
- “The use of outcome data should be diligently avoided”
- “Outcome is neither a sensitive nor a specific marker for quality of care”
- “Concentrate on direct measurement of adherence to clinical standards”

Why? The complex web of causality.



2. Does outcome reporting actually work? Coronary surgery in UK



But evidence is generally weak

“Evidence is scant... Rigorous evaluation is lacking.”

“Publicly releasing performance data stimulates quality improvement activity at hospital level.”

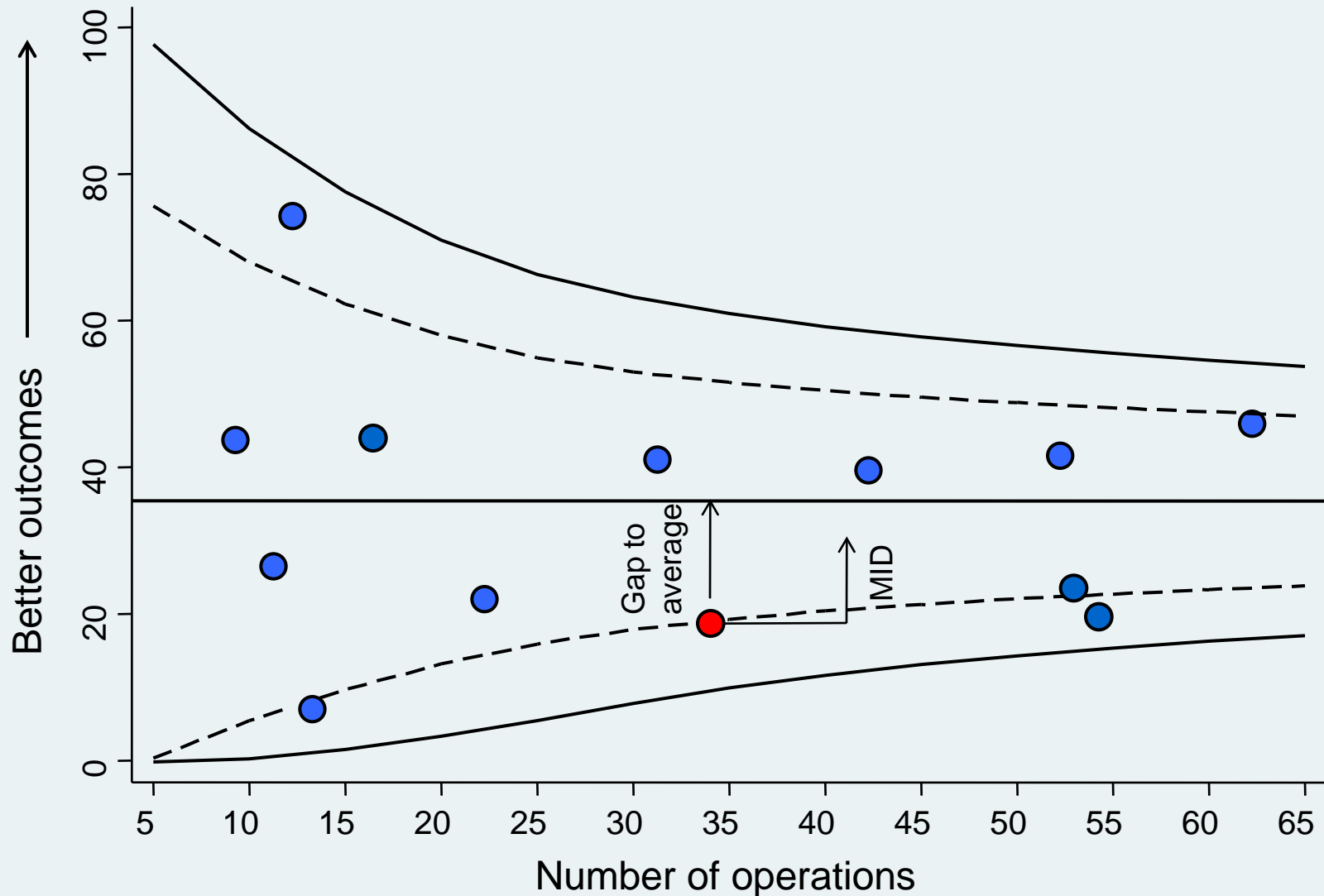
“Effect on effectiveness safety, patient-centredness remains uncertain”

Fung et al, Arch Intern Med (2008).

“Methodological concerns limit the strength of inference [about the value of] providing PRO information to clinicians”

Valderas et al, QOLR. (2008)

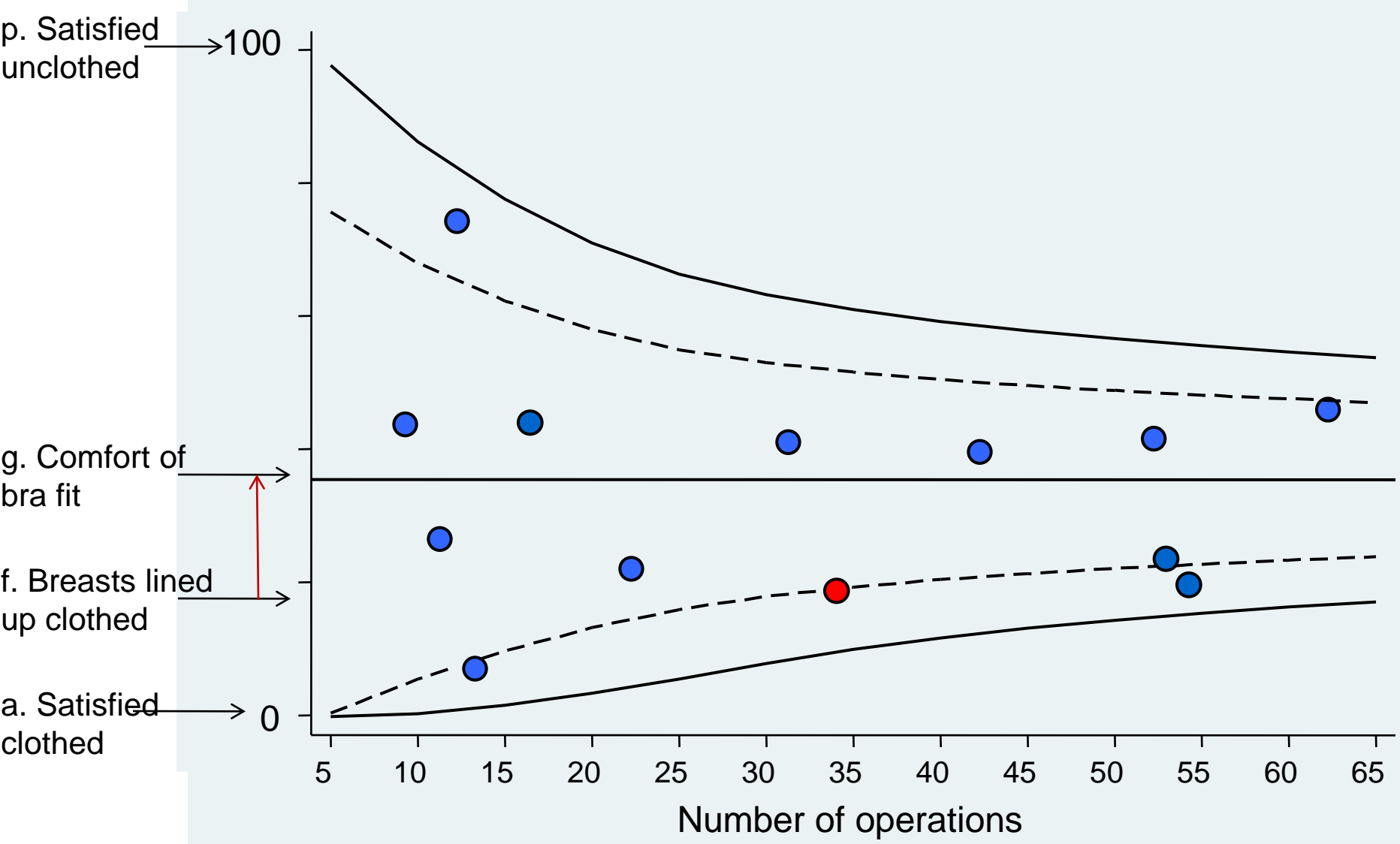
3. How do we turn PROMs into QI plans? A plastic surgeon's condundrum...



Numbers without meaning are dangerous!



An interpretable PROM? The Breast-Q.



A plastic surgeon's thoughts on how to get from 'f' to 'g'

“In this example I would look at the width of the reconstructions I perform. I can look at whether the reconstructions are too full in the upper pole, the medial pole, laterally or whether there is a discrepancy in the height of the inframammary folds.”



Does it guarantee quality improvement?

“The Breast-Q does not provide me with a cast-iron plan of action guaranteed to improve my outcomes. But it does let me generate numerous hypotheses about what is going right and wrong in my practice. Every step up the ruler poses a meaningful real-world challenge that numbers alone cannot duplicate.”



A new research agenda

1. What is the influence of care structure on PROMs (e.g. do hospitals with plastic units achieve better outcomes)?
2. Can we (should we!) focus 'upstream' on short-term outcomes to improve provider-level results?
 - Treatment morbidity
 - Patient experience
3. How can we improve the interpretability of PROMs for quality improvement purposes?
4. Does this lead to quality improvement? RCTs needed.

Conclusions

- Yes we can! But should we?
- Great news that data collection infrastructure is in place and PROMs are now accepted in principle.
- Many challenges must still be addressed.
- We must use the right measures and be very careful with inferences about causality