Not All Data is Actionable Information

Obstacles to gaining all the benefits of A&F

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Caveats

Where is Toronto
ARCTIC OCEAN
GREENLAND
N
Beaufort Sea
Baffin Bay
USA
Nunavut
Yukon Territory
Northwest Territories
Labrador Sea
CANADA
NORTH ATLANTIC OCEAN
British Columbia
Alberta
Saskatchewan
Manitoba
Hudson Bay
Newfoundland
Quebec
Prince Edward Island
Ontario
New Brunswick
Nova Scotia
PACIFIC OCEAN
Toronto
U S A
0 500 1000Km
0 250 500Mi
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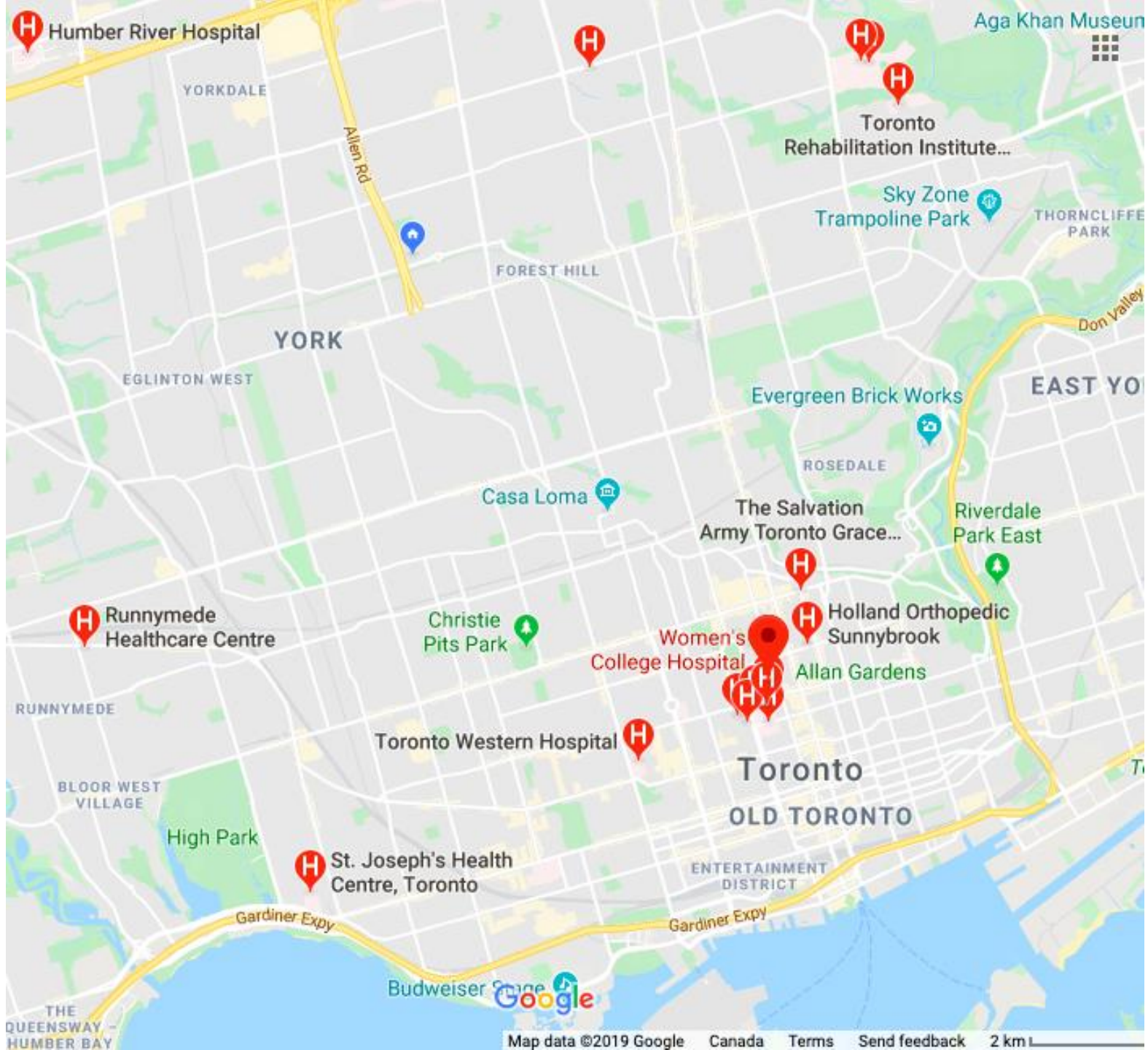
Humber River Hospital
YORKDALE
Allen Rd
Aga Khan Museum
Toronto Rehabilitation Institute...
Sky Zone Trampoline Park
THORNCLIFFE PARK
FOREST HILL
YORK
EGLINTON WEST
Don Valley
Evergreen Brick Works
EAST YO
ROSEDALE
Casa Loma
The Salvation Army Toronto Grace...
Riverdale Park East
Runnymede Healthcare Centre
Christie Pits Park
Holland Orthopedic Sunnybrook
Women's College Hospital
Allan Gardens
RUNNYMEDE
Toronto Western Hospital
Toronto
OLD TORONTO
BLOOR WEST VILLAGE
High Park
St. Joseph's Health Centre, Toronto
ENTERTAINMENT DISTRICT
Gardiner Expy
Gardiner Expy
Budweiser Stage
Google
THE QUEENSWAY – HUMBER BAY
Map data ©2019 Google
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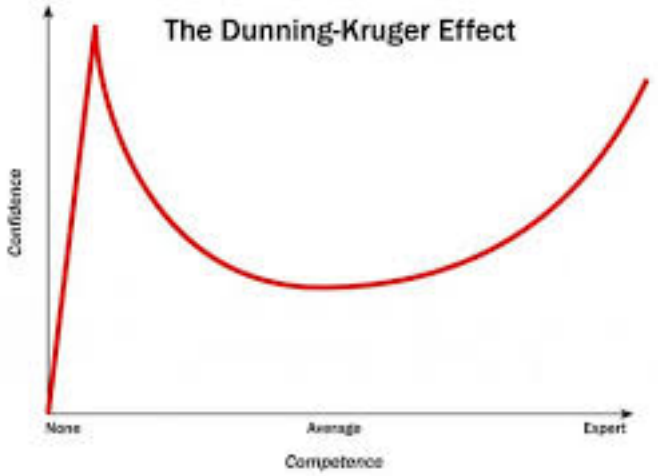
Terms
Send feedback
2 km

Why do we need data → QI

- Guidelines don't self implement

- We are poor self-assessors



Will Data → QI ?

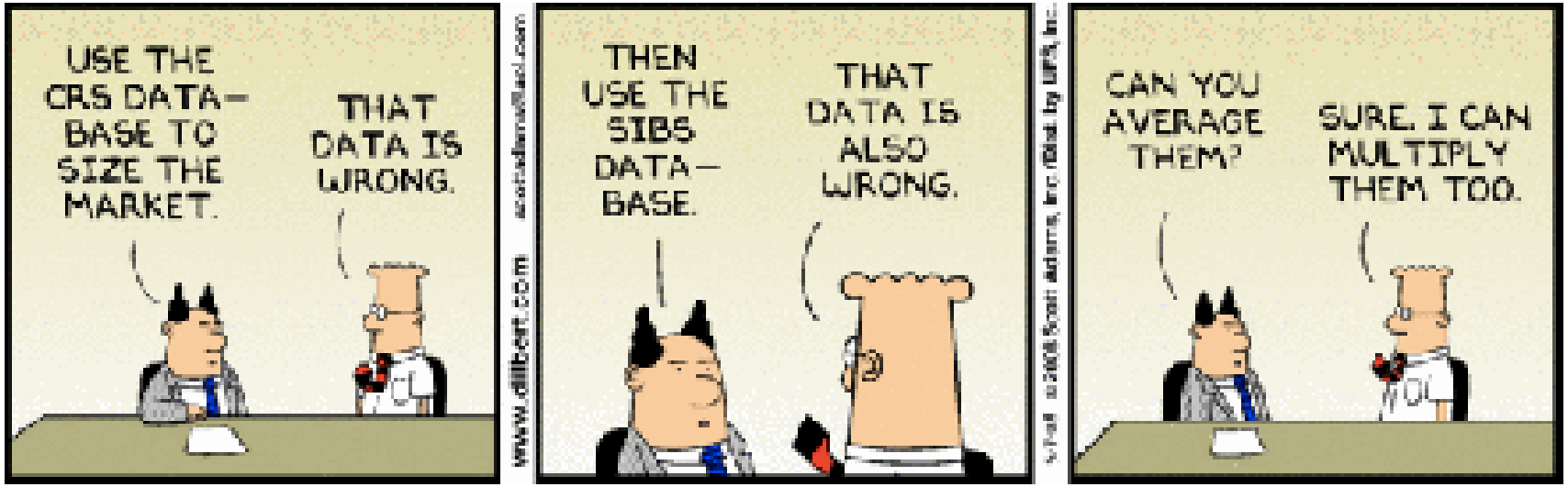
THESE GRADES ARE UNACCEPTABLE. HOW DO WE REMEDY THIS?
THROW MONEY AT IT ?
STAHLER.

Obstacles to A&F

- The Audit:
  - Data, Partnerships
- The Feedback:
  - Perceived validity, importance, actionability
- The Action:
  - Resources, Support, Capacity

Warning: GIGO

- Clinical/chart data
- Billing/administrative data
- Patient-reported data



Imp Sci Labs: a definition (as initially proposed)

Partnership:

Organizations already delivering interventions at scale keen to optimize those interventions

and

Researchers keen to advance generalizable knowledge in implementation

THE LANCET

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Comment

Reducing research waste with implementation laboratories

Noah M Ivers, Jeremy M Grimshaw

Published: 06 August 2016

Altmetric 20

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Article Info

Summary Full Text Tables and Figures References

The *Lancet* REWARD (REduce research Waste And Reward Diligence) campaign has encouraged researchers to examine how they work and make efforts to reduce waste and maximise efficiency. Research waste is undermining efforts to improve the effectiveness of health systems. A consistent finding in health services research is inappropriate variations in care and evidence–practice gaps. Implementation science—the study of methods to promote the systematic uptake of clinical research findings and other evidence-based practices into routine practice[1]—can inform health systems on how to reliably improve care and outcomes.

- **LABORATORY** per Merriam-Webster:

•a place equipped for experimental study in a science or for testing and analysis;

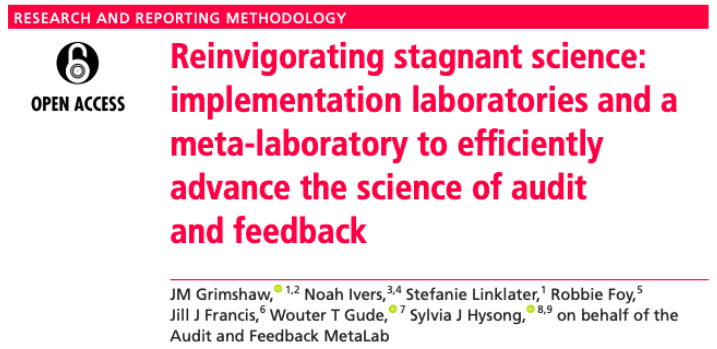
•broadly: a place providing opportunity for experimentation, observation, or practice in a field of study

What (we think) is an IS Lab

IS Labs are both a structure and a process

IS Labs are characterized by

- Alignment with partners' service mission
- Sustained partnership between researchers and healthcare organizations
- Commitment to both local improvement and generalizable science via evaluative rigor
- Population-scale impact via incrementalism


RESEARCH AND REPORTING METHODOLOGY

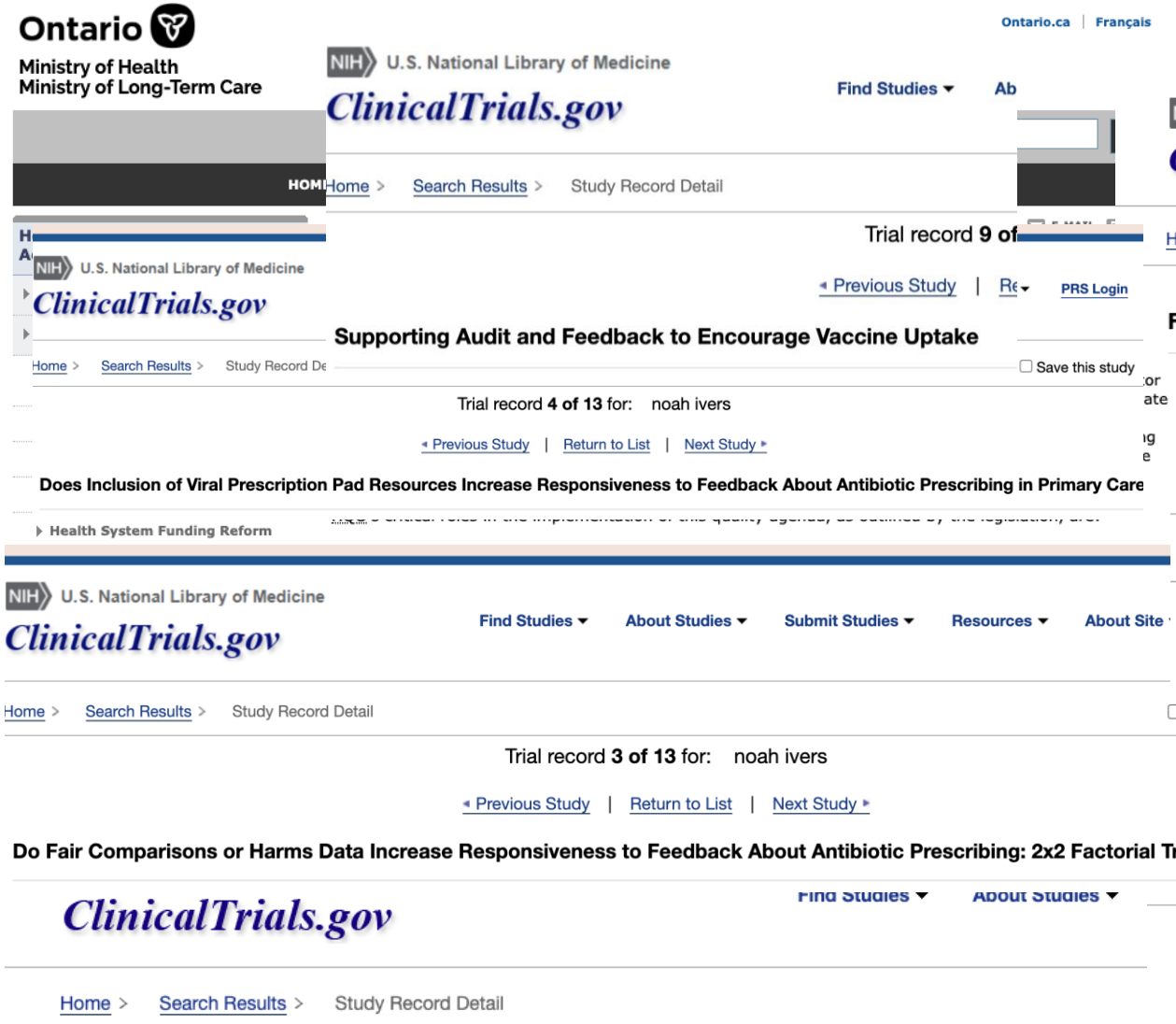
OPEN ACCESS

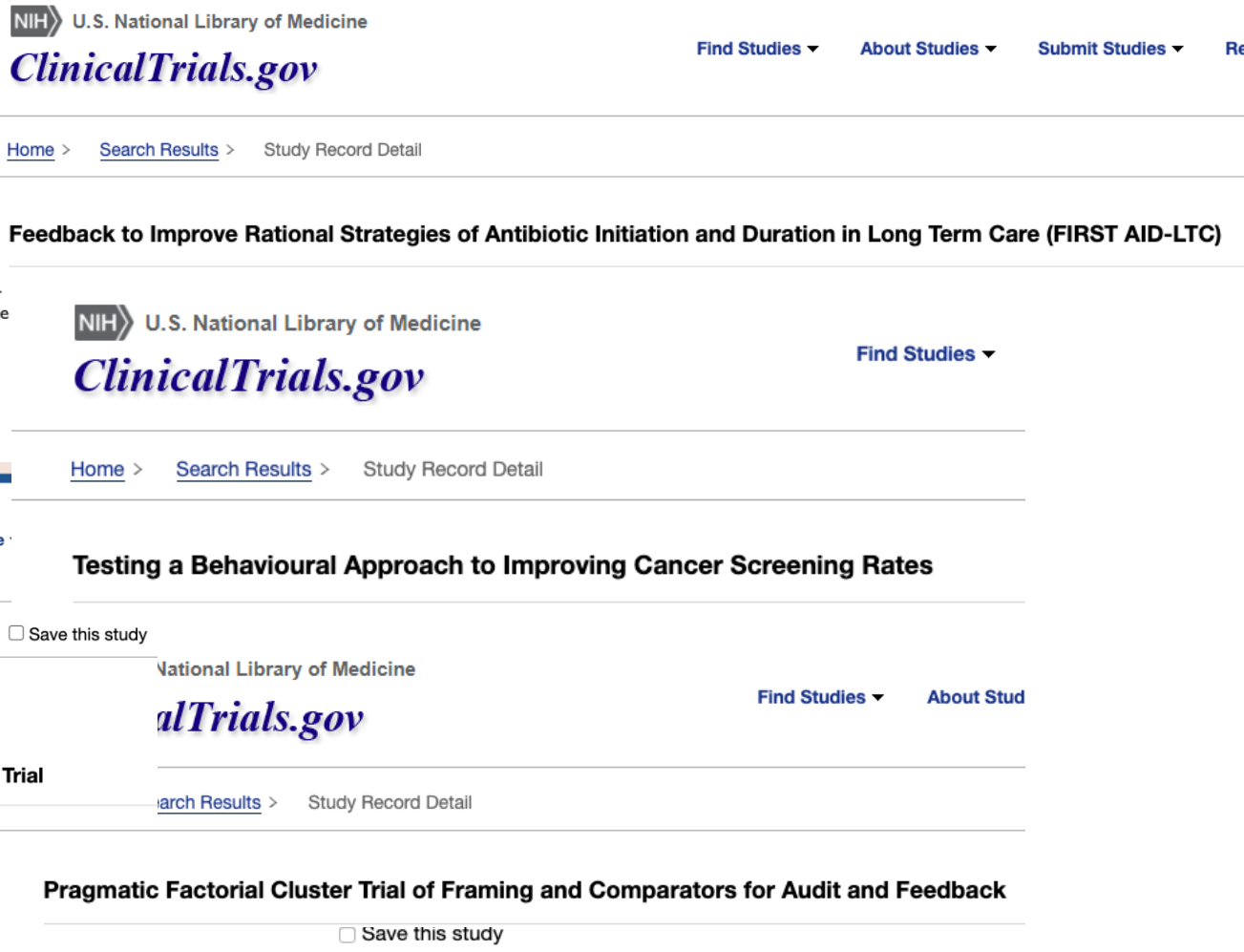
Reinvigorating stagnant science: implementation laboratories and a meta-laboratory to efficiently advance the science of audit and feedback

JM Grimshaw,[1,2] Noah Ivers,[3,4] Stefanie Linklater,[1] Robbie Foy,[5] Jill J Francis,[6] Wouter T Gude,[7] Sylvia J Hysong,[8,9] on behalf of the Audit and Feedback MetaLab

BMJ Qual Saf: first published as 10.1136/bmjqs-2018-00

Personal example: Ontario A&F Implementation Lab





Obstacles to A&F

- The Audit:
  - Data, Partnerships
- **The Feedback**:
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- The Action:
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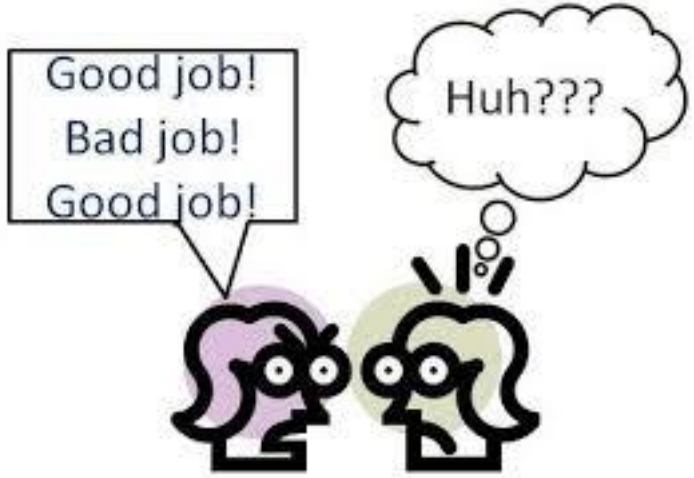
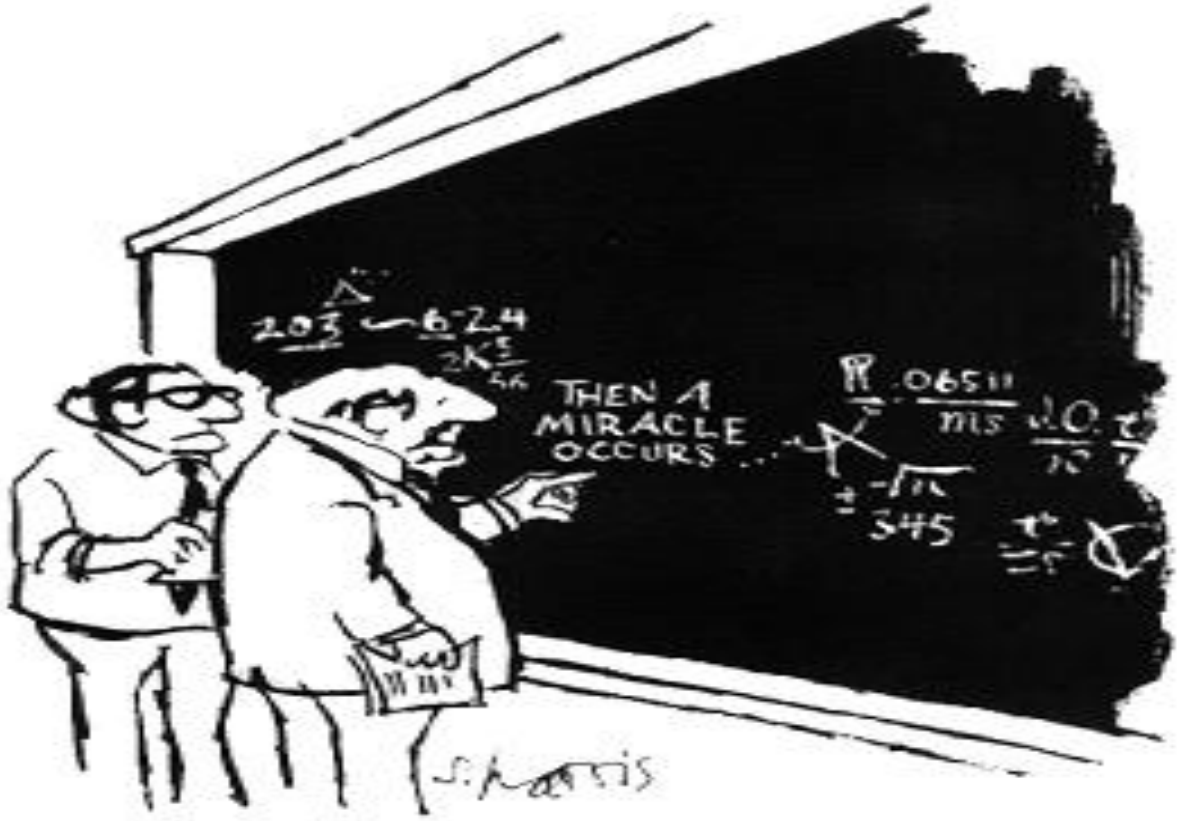
Will Your Data → QI ?



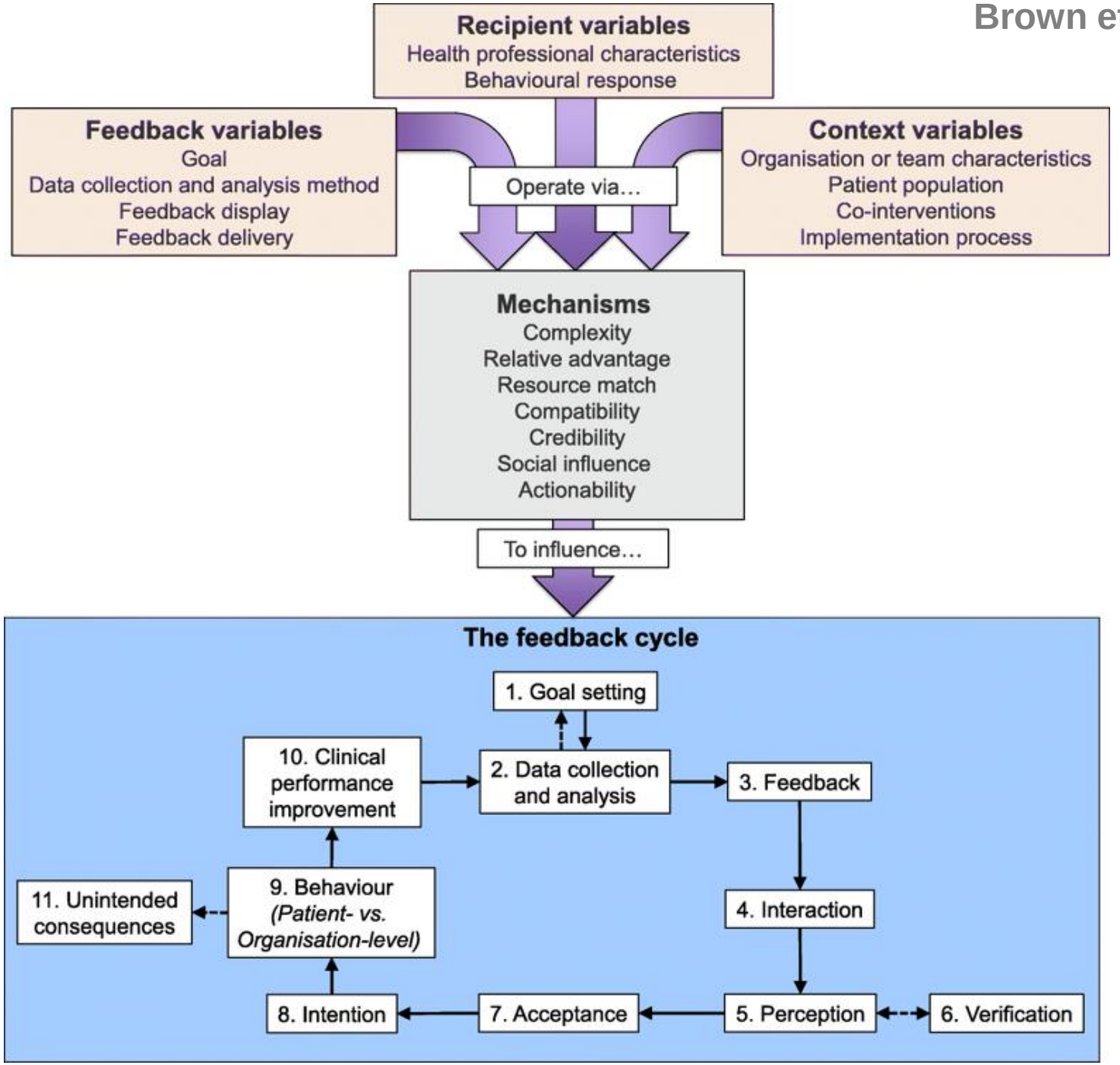
“To improve outcomes, we’ll give them a report card”



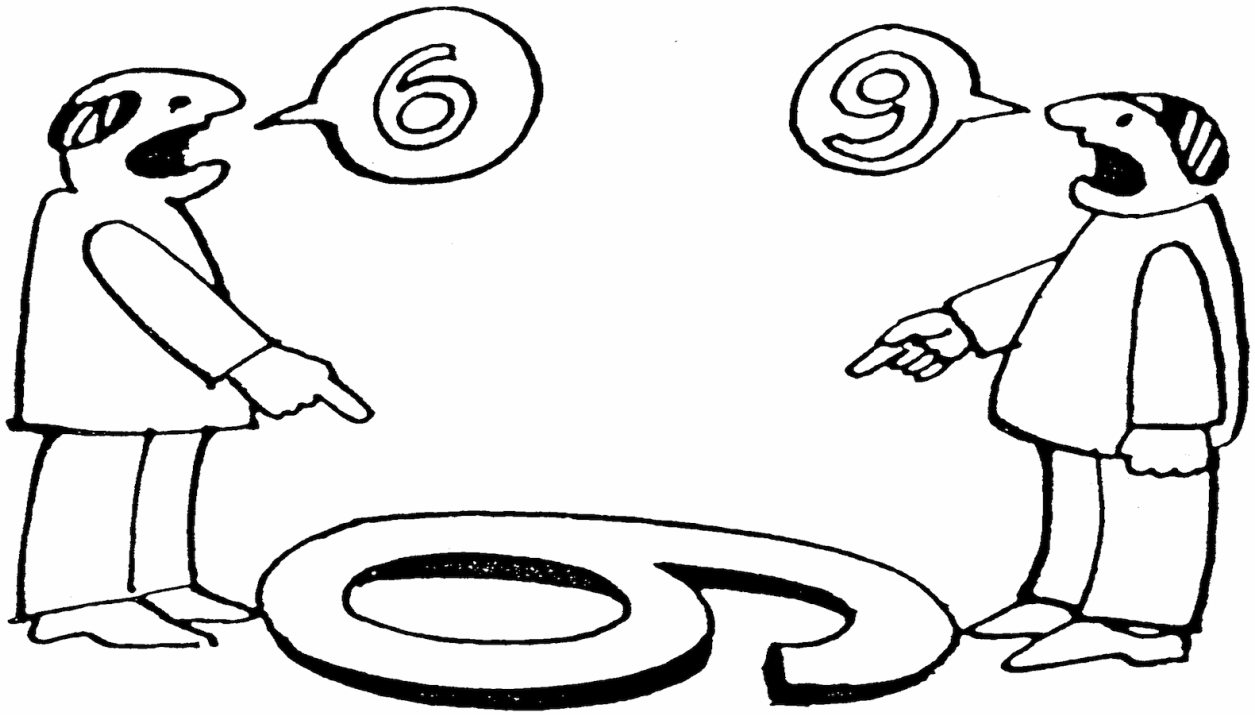
"I think you should be more explicit here in step two."

Reprinted with permission from Sidney Harris

Brown et al, Imp Sci 2019; 14:40.



Designing for change means addressing **predicable** reactions and directing attention on a specific task



Annals of Internal Medicine

Table. 15 Suggestions for Designers of Practice Feedback and Examples of Implementation Strategies

Suggestion for Designers of Practice Feedback	Examples of Implementation Strategy
Nature of the desired action	
1. Recommend actions that are consistent with established goals and priorities	Consider feedback interventions that are consistent with existing priorities, investigate perceived need and salience of actions before providing feedback
2. Recommend actions that can improve and are under the recipient's control	Measure baseline performance before providing feedback, establish that the action is under the recipient's control
3. Recommend specific actions	Include functionality for corrective actions along with feedback, require recipient-generated if–then plans to overcome barriers to target action
Nature of the data available for feedback	
4. Provide multiple instances of feedback	Replace one off feedback with regular feedback
5. Provide feedback as soon as possible and at a frequency informed by the number of new patient cases	Increase frequency/decrease interval of feedback for outcomes with many patient cases
6. Provide individual rather than general data	Provide practitioner-specific rather than hospital-specific data
7. Choose comparators that reinforce desired behavior change	Choose 1 comparator rather than several
Feedback display	
8. Closely link the visual display and summary message	Put summary message in close proximity to the graphical or numerical data supporting it
9. Provide feedback in more than 1 way	Present key messages textually and numerically, provide graphic elements that mirror key recommendations
10. Minimize extraneous cognitive load for feedback recipients	Eliminate unnecessary 3-dimensional graphical elements, increase white space, clarify instructions, target fewer outcomes
Delivering the feedback intervention	
11. Address barriers to feedback use	Assess barriers before feedback provision, incorporate feedback into care pathway rather than providing it outside of care
12. Provide short, actionable messages followed by optional detail	Put key messages/variables on front page, make additional detail available for users to explore
13. Address credibility of the information	Ensure that feedback comes from a trusted local champion or colleague rather than the research team, increase transparency of data sources, disclose conflicts of interest
14. Prevent defensive reactions to feedback	Guide reflection, include positive messaging along with negative, conduct "feedforward" discussions
15. Construct feedback through social interaction	Encourage self-assessment around target behaviors before receiving feedback, allow user to respond to feedback, engage in dialogue with peers as feedback is provided, engage in facilitated conversations/coaching about the feedback

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Ann Intern Med. Published online February 23, 2016. doi:10.7326/M15-2248

Designing Effective Practice Reports

Attention of recipient focused on actionable message regarding area of practice where improvement is feasible

- Behaviour change techniques
  - Action and coping plans
  - Outcome expectations
  - Social norms, influence, supports
  - Professional role
  - Reflection on past successes

Obstacles to A&F

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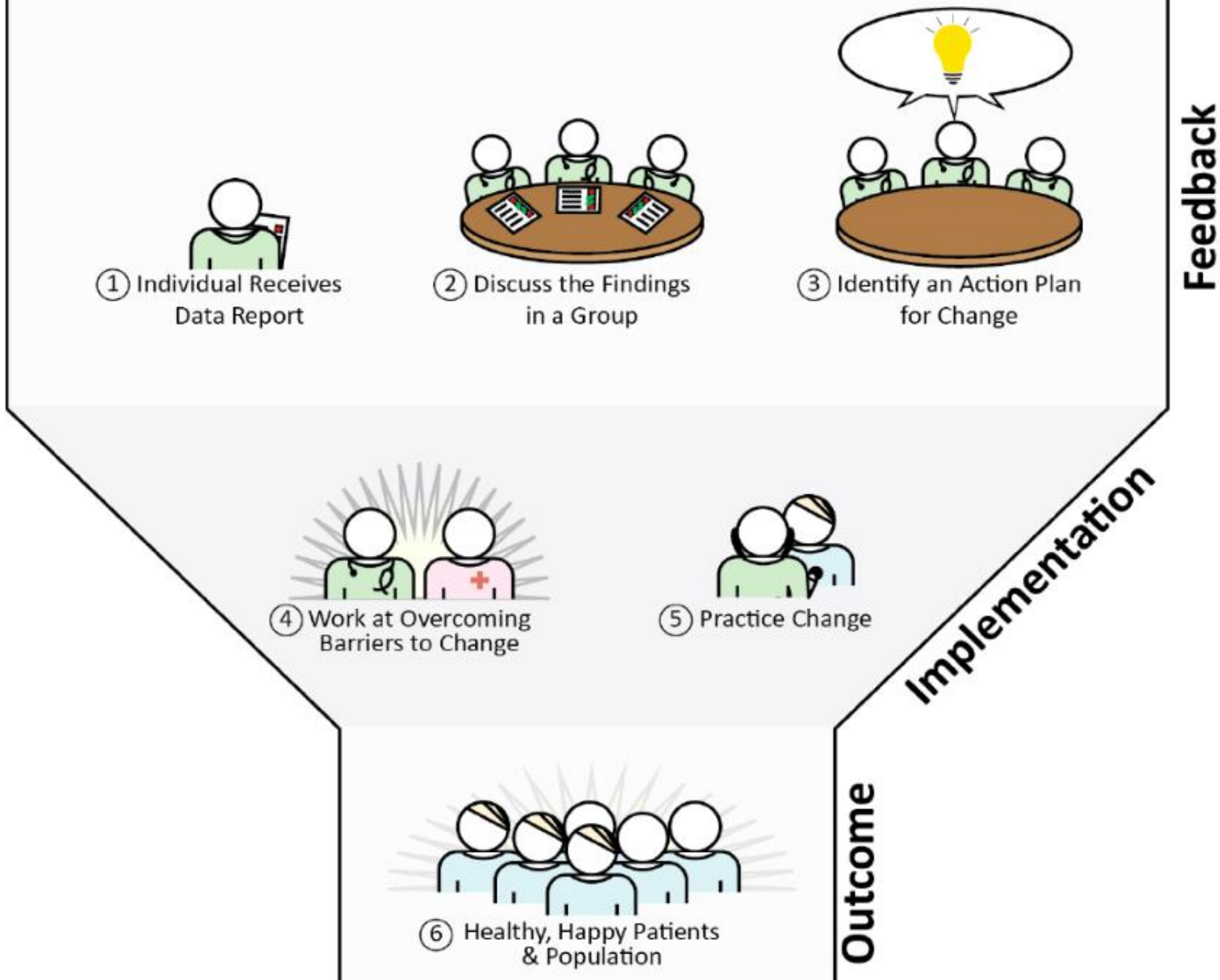
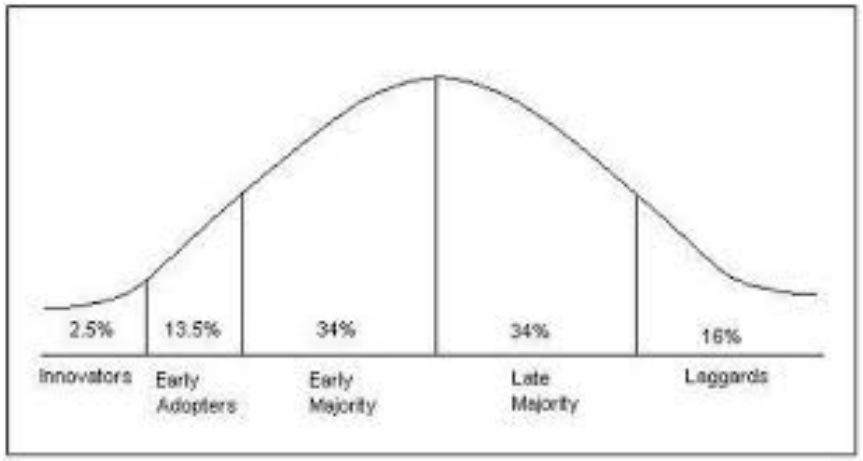

1 Individual Receives Data Report
2 Discuss the Findings in a Group
3 Identify an Action Plan for Change
Feedback
4 Work at Overcoming Barriers to Change
5 Practice Change
Implementation
6 Healthy, Happy Patients & Population
Outcome

But what if people just aren’t ready?

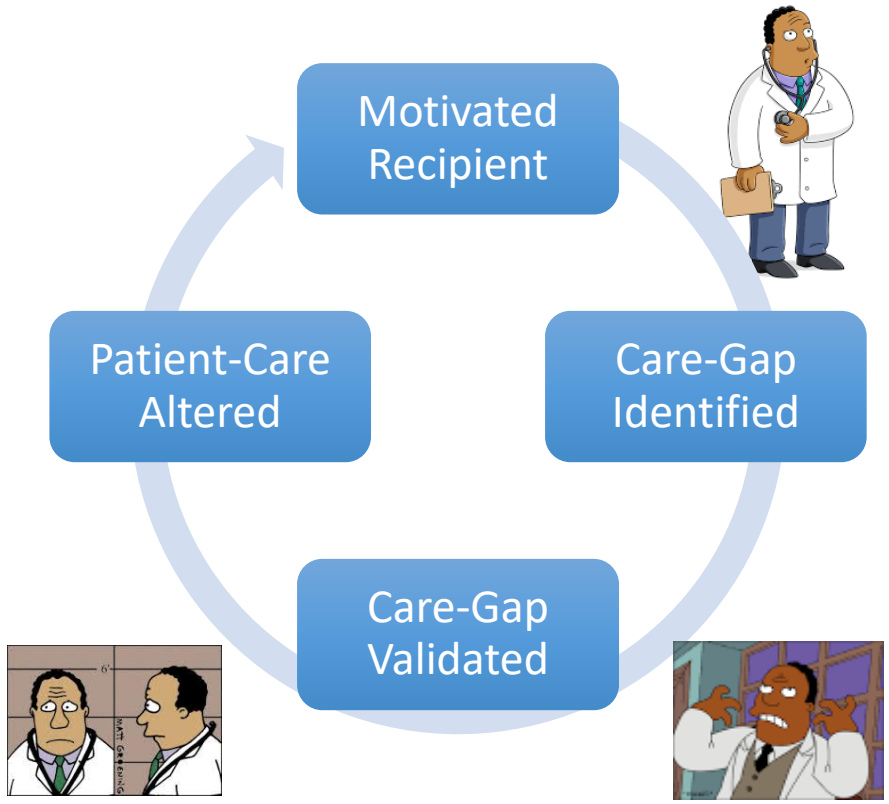
- Culture eats strategy for breakfast…
  - but its appetite comes from Purpose



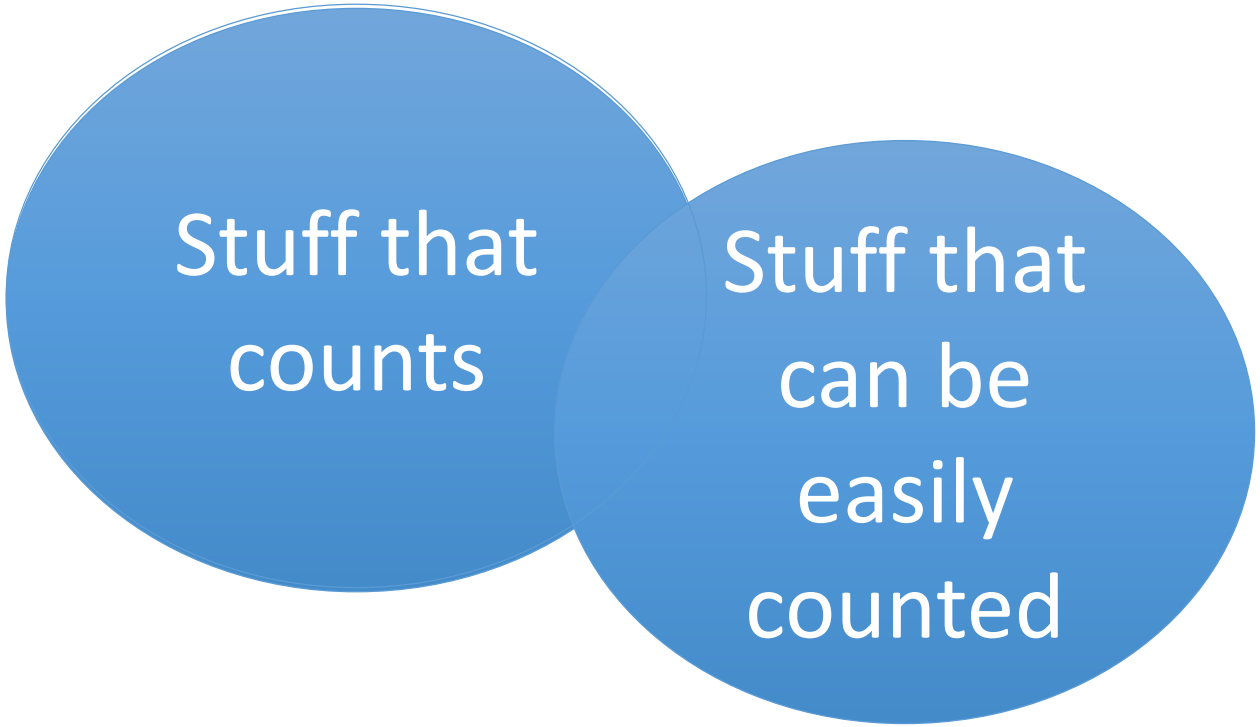
https://www.england.nhs.uk/ourwork/qual-clin-lead/sustainableimprovement/change-model/

Data-driven **change**: QI is a team sport

- Agree on problem areas and priorities
  - Low hanging fruit?
- Measure things that matter
  - Compare to benchmarks, not to averages!
- Discuss variation
  - Name names, but manage emotions; focus on patients
- Act to make things better
  - Fix data? Try harder? Change processes!
- Monitor progress
  - Celebrate success!



Warning: tyranny of the measurable

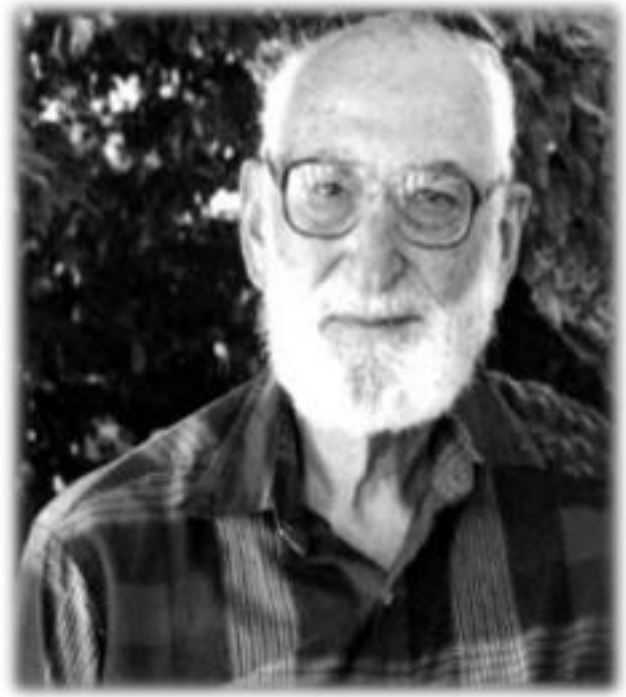


Management vs Leadership

The secret of quality

*'Ultimately, the secret of quality is **love**.*

…… If you have love, you can then work backward to monitor and improve the system.'



Avedis Donabedian