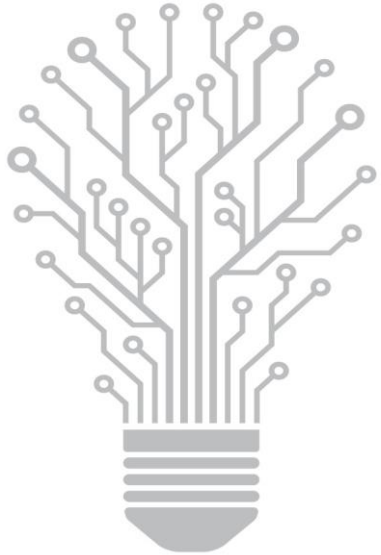
Optimizing the use of data

Understanding how and why clinical performance feedback works (or doesn't)



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Agenda

- State of the science
- Feedback design and metrics
- Mechanisms of action
- Meaningful engagement
- Moving forward with co-interventions

WHAT IS AUDIT AND FEEDBACK?

Trusted evidence.
Informed decisions.
Better health.

Cochrane Database of Systematic Reviews

[Intervention Review]

Audit and feedback: effects on professional practice and healthcare outcomes

Noah Ivers[1], Gro Jamtvedt[2], Signe Flottorp[2], Jane M Young[3], Jan Odgaard-Jensen[2], Simon D French[4], Mary Ann O'Brien[5], Marit Johansen[6], Jeremy Grimshaw[7,8], Andrew D Oxman[6]

Definition: Individual performance is measured and compared to professional standards or targets.

Median effect: **Dichotomous outcomes → 4.3% improvement (IQR 0.5% to 16%)**

Continuous outcomes → 1.3% improvement (IQR 1.3% to 28.9%)

ARE WE ASKING THE RIGHT QUESTIONS?

REVIEWS

Growing Literature, Stagnant Science? Systematic Review, Meta-Regression and Cumulative Analysis of Audit and Feedback Interventions in Health Care

Noah M. Ivers, MD, PhD[1], Jeremy M. Grimshaw, PhD[2], Gro Jamtvedt, PT[3], Signe Flottorp, MD[3], Mary Ann O'Brien, PhD[1], Simon D. French, PhD[4], Jane Young, MD[5], and Jan Odgaard-Jensen, PhD[3]

Move beyond whether it works to understand how it can work best.

HOW DO WE DO THIS IN PRACTICE?

Annals of Internal Medicine

ACADEMIA AND THE PROFESSION

Practice Feedback Interventions: 15 Suggestions for Optimizing Effectiveness

Jamie C. Brehaut, PhD; Heather L. Colquhoun, PhD; Kevin W. Eva, PhD; Kelly Carroll, MA; Anne Sales, PhD; Susan Michie, PhD; Noah Ivers, MD, PhD; and Jeremy M. Grimshaw, MD, PhD

AUDIT AND FEEDBACK METALAB

Research and reporting methodology

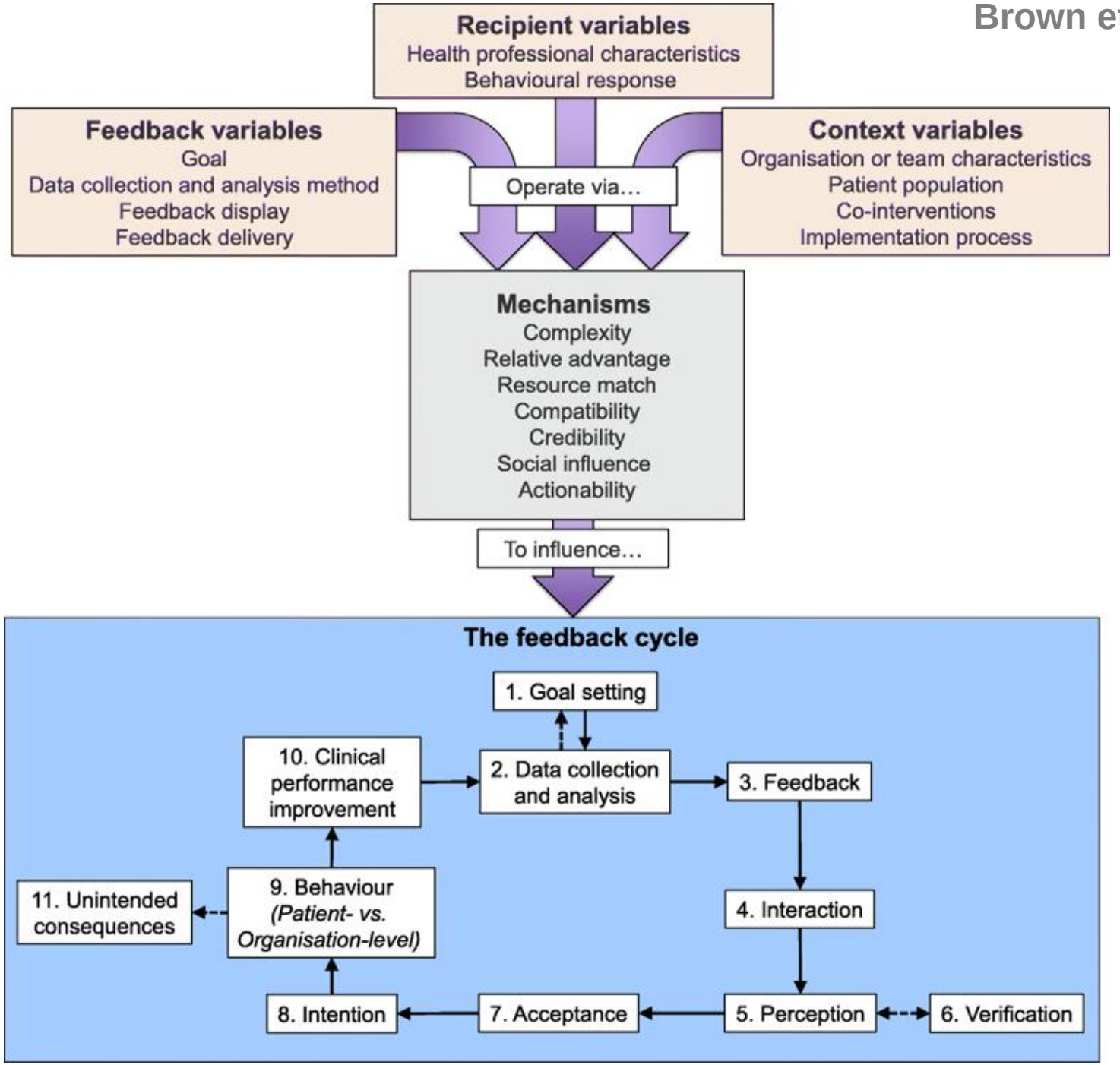
Reinvigorating stagnant science: implementation laboratories and a meta-laboratory to efficiently advance the science of audit and feedback

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

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

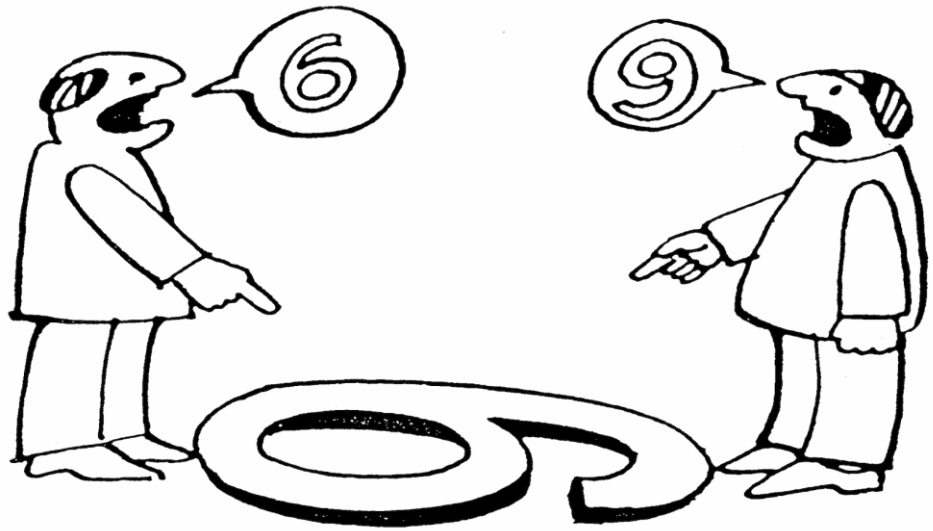
Brown et al, Imp Sci 2019; 14:40.



DESIGN MATTERS

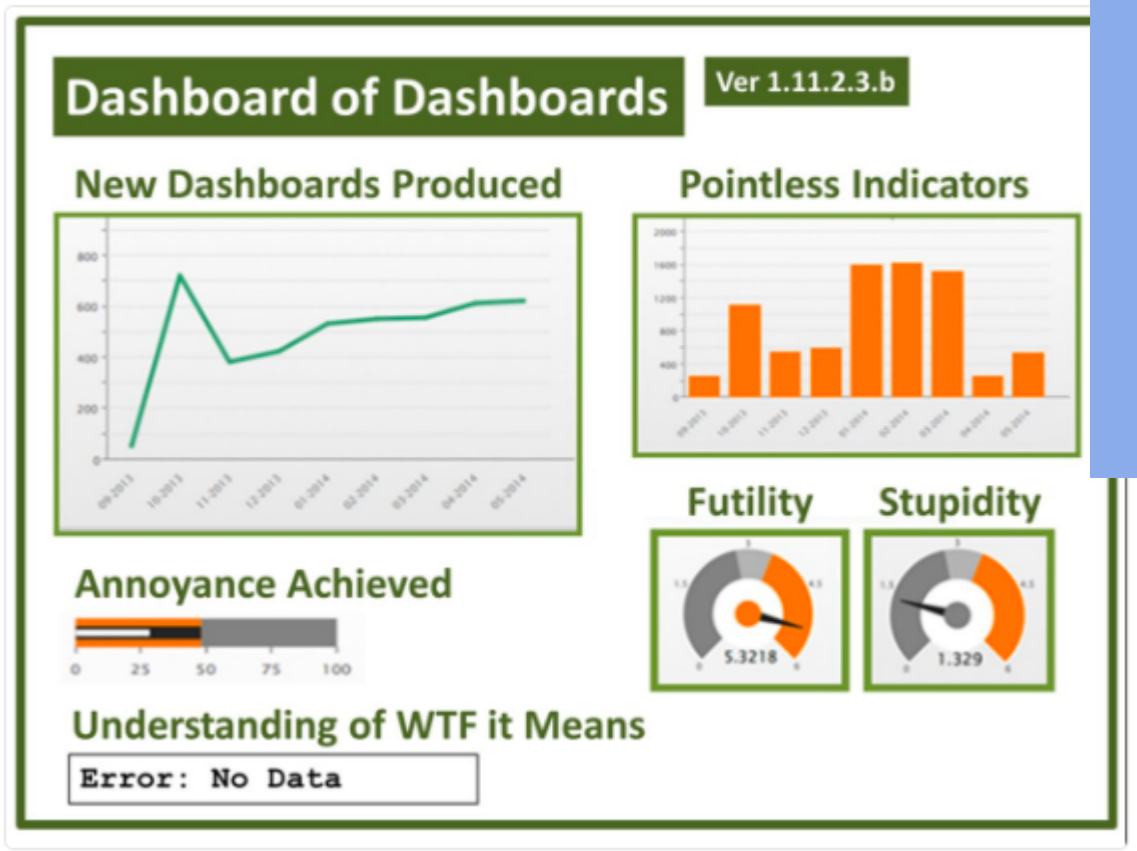
How do you want the information to make the recipient(s) **feel?**

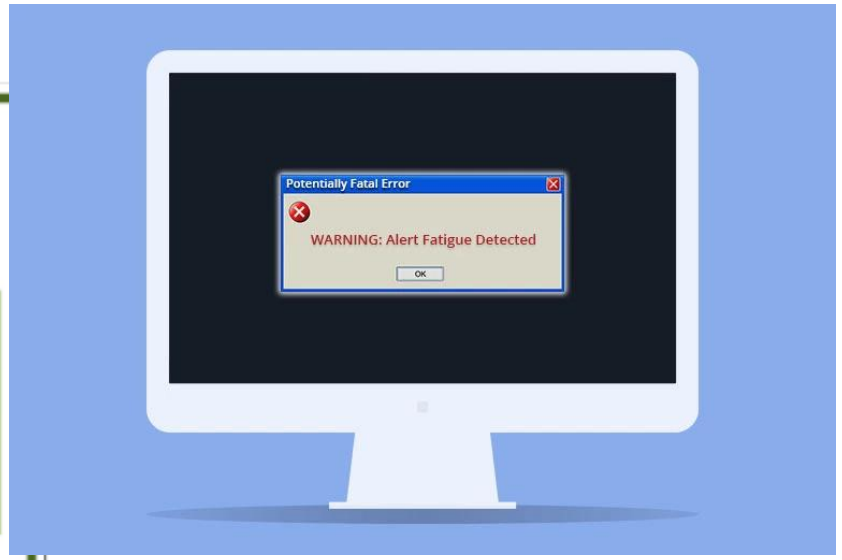
How will the content result in desirable behavioral **actions?**



DESIGN MATTERS

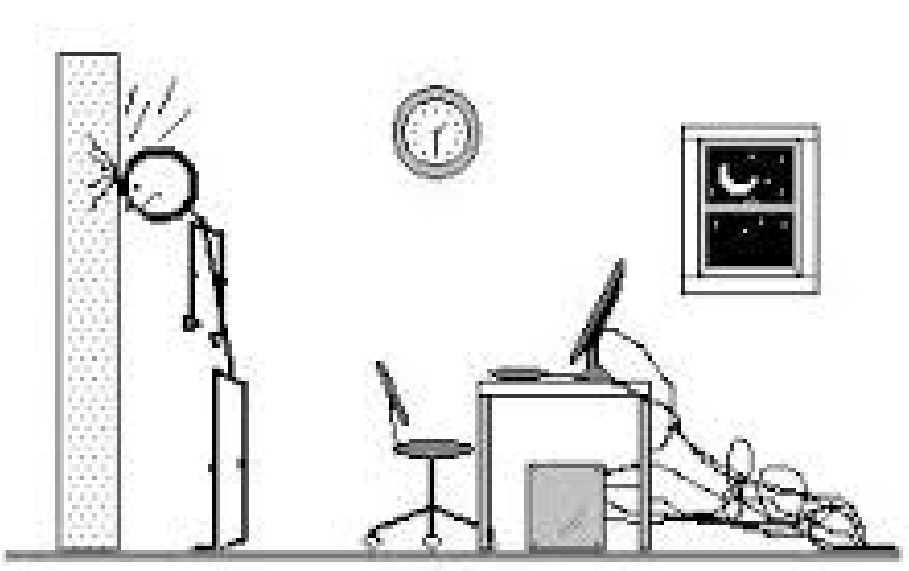
The 'Meta-Dashboard'...





This page provides an at-a-glance list of reports currently available for clinicians and teams practicing in primary care.

- Business Intelligence Reporting Tool
- Community Initiative Reporting Tools
- Community Health Centre, Aboriginal Health Access Centres, Nurse Practitioner-Led Clinic Profiles
- Community Health Centre Financial Reporting
- Canadian Primary Care Sentinel Surveillance Network
- Data to Decisions
- Electronic Medical Record Administrative data Linked Database
- *MyPractice*: Long-term Care
- *MyPractice*: Primary Care
- OntarioMD Physician Dashboard
- Screening Activity Report
- Target Population Service Report



PRIMARY CARE: RE-DESIGN

User-centered design approach:

- Conducted 16 think-aloud interviews and refined the design iteratively in cycles

- Content and design changes required balancing of:
  1. User input and preferences
  2. Desire to minimize cognitive load and focus attention on actionable items
  3. External evidence on behaviour change

USER TESTING: METHODS SUMMARY

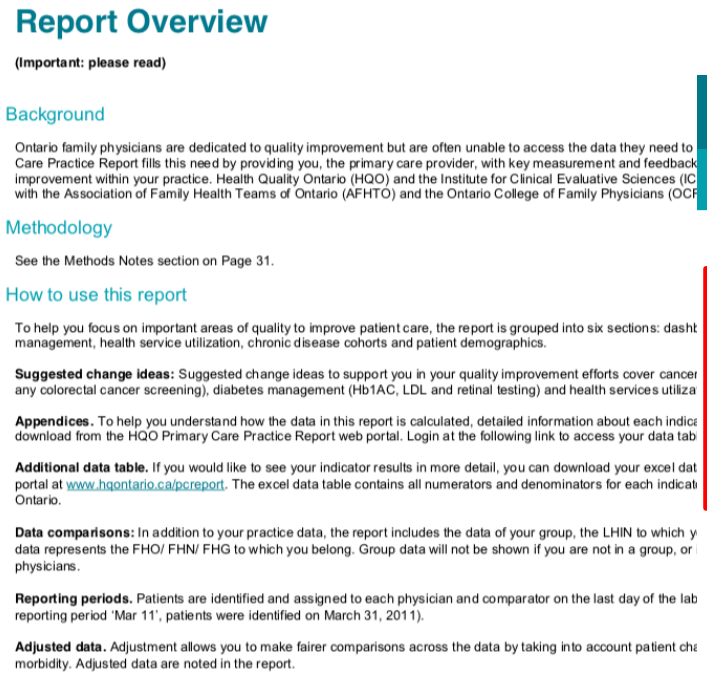
- Total of 16 usability sessions (approx. 60 minutes in length)
- One-on-one telephone interviews
- Presented most recent version of the report
- Engage in ‘think-aloud’ session
- Questions included:

  Is there anything that you were unsure about or had trouble understanding?

  Is there anything missing from this page?

  – If so, what information would you like to see included?
  – Why would this information be helpful?

OVERVIEW OF PAGE CHANGES



Report Overview

(Important: please read)

Background

Ontario family physicians are dedicated to quality improvement but are often unable to access the data they need to
Care Practice Report fills this need by providing you, the primary care provider, with key measurement and feedback
improvement within your practice. Health Quality Ontario (HQO) and the Institute for Clinical Evaluative Sciences (IC
with the Association of Family Health Teams of Ontario (AFHTO) and the Ontario College of Family Physicians (OCF

Methodology

See the Methods Notes section on Page 31.

How to use this report

To help you focus on important areas of quality to improve patient care, the report is grouped into six sections: dasht
management, health service utilization, chronic disease cohorts and patient demographics.

Suggested change ideas: Suggested change ideas to support you in your quality improvement efforts cover cancer
any colorectal cancer screening), diabetes management (Hb1AC, LDL and retinal testing) and health services utiliza

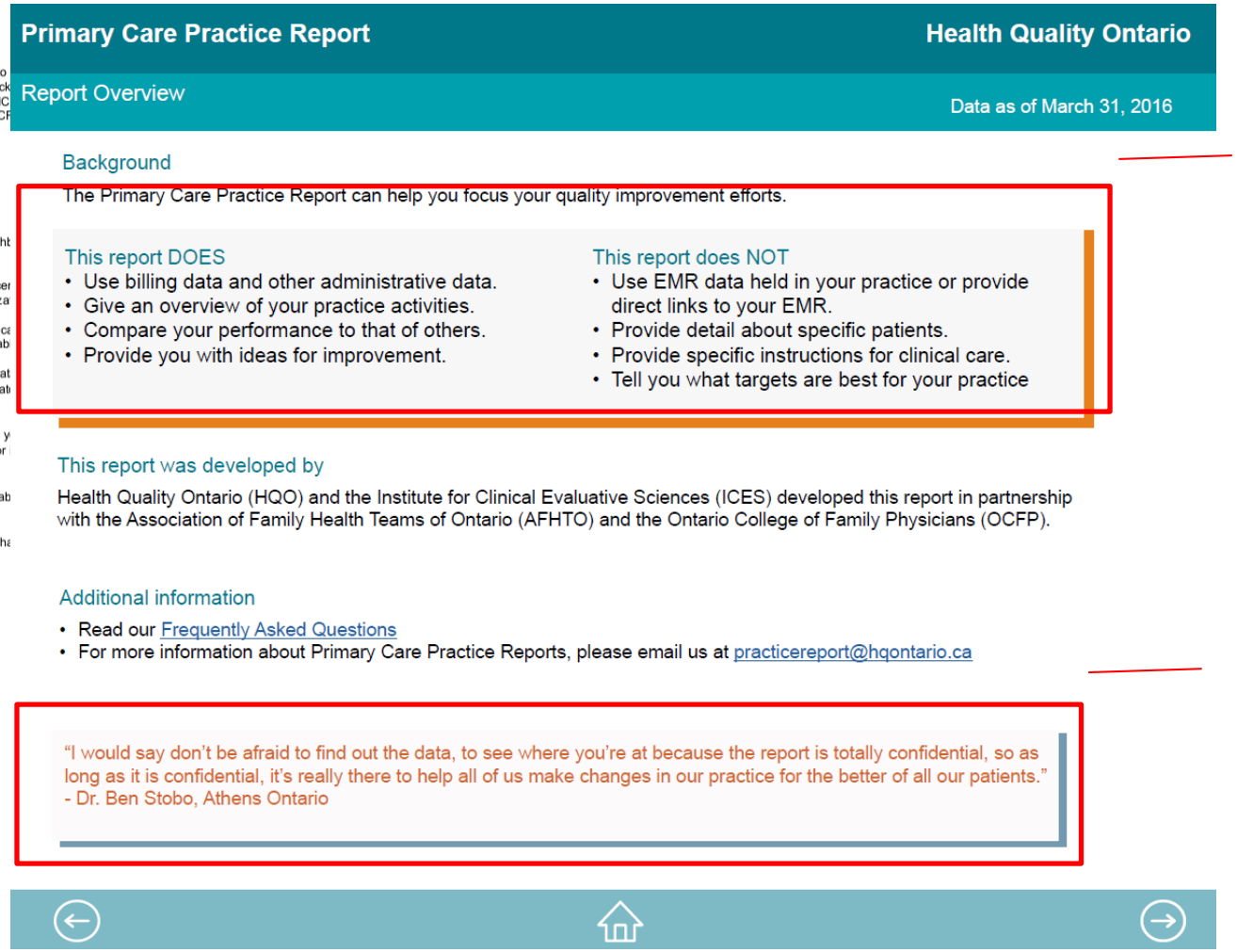
Appendices. To help you understand how the data in this report is calculated, detailed information about each indica
download from the HQO Primary Care Practice Report web portal. Login at the following link to access your data tab

Additional data table. If you would like to see your indicator results in more detail, you can download your excel dat
portal at www.hqontario.ca/pcreport. The excel data table contains all numerators and denominators for each indicat
Ontario.

Data comparisons: In addition to your practice data, the report includes the data of your group, the LHIN to which y
data represents the FHO/ FHN/ FHG to which you belong. Group data will not be shown if you are not in a group, or
physicians.

Reporting periods. Patients are identified and assigned to each physician and comparator on the last day of the lab
reporting period 'Mar 11', patients were identified on March 31, 2011).

Adjusted data. Adjustment allows you to make fairer comparisons across the data by taking into account patient cha
morbidity. Adjusted data are noted in the report.



Primary Care Practice Report — **Health Quality Ontario**

Report Overview — Data as of March 31, 2016

Background

The Primary Care Practice Report can help you focus your quality improvement efforts.

This report DOES	This report does NOT
• Use billing data and other administrative data. • Give an overview of your practice activities. • Compare your performance to that of others. • Provide you with ideas for improvement.	• Use EMR data held in your practice or provide direct links to your EMR. • Provide detail about specific patients. • Provide specific instructions for clinical care. • Tell you what targets are best for your practice

This report was developed by

Health Quality Ontario (HQO) and the Institute for Clinical Evaluative Sciences (ICES) developed this report in partnership with the Association of Family Health Teams of Ontario (AFHTO) and the Ontario College of Family Physicians (OCFP).

Additional information

- Read our Frequently Asked Questions
- For more information about Primary Care Practice Reports, please email us at practicereport@hqontario.ca

"I would say don't be afraid to find out the data, to see where you're at because the report is totally confidential, so as long as it is confidential, it's really there to help all of us make changes in our practice for the better of all our patients."
- Dr. Ben Stobo, Athens Ontario

Help clarify what the report does and does not do

Testimonials featured more heavily within the document

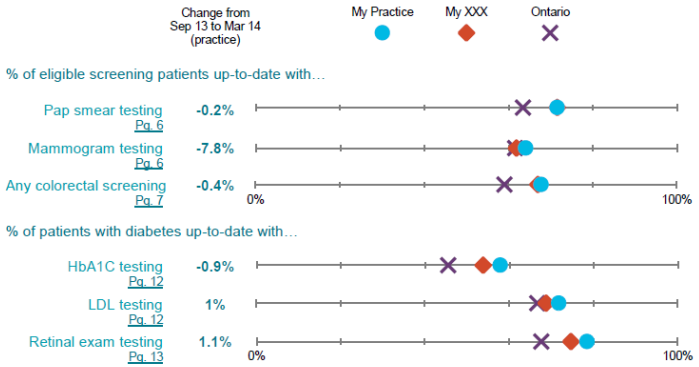
DASHBOARD: OLD & NEW

Dashboard

Data reporting period ending: **March 31, 2014**

My Primary Care Enrollment Model (group type): **XXX**
My Group Number: **Group Ag.**
My LHIN: **LHIN Ag.**
My Rurality Index of Ontario Score: **0 - Major Urban (0 to 9)**

How well are we doing?



What resources are our patients using?

	Change from Sep 13 to Mar 14 (practice)	My Practice	My XXX	Ontario
Less/ Non-Urgent ED Visits (rate per 1,000)* Pg. 19	-6.3	160.0	172.4	148.4

Who am I caring for?

Pg. 28

1587	41.4
# patients Pg 29	Age (mean) Pg 29
47.3 %	8.7 %
% male	% rurality

To find out more information about any particular indicator, please click on the page number links located under each indicator

*Adjusted for age, sex and morbidity.

Primary Care Practice Report — Health Quality Ontario

Overall Performance in Quality Indicators

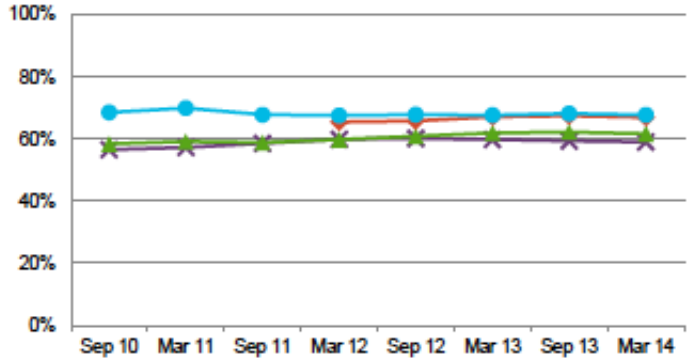
Data as of March 31, 2016

	Where can I improve?	Average performance	What am I doing well?
Cancer Screening	• CRC screening	• Pap smear	• Mammogram
Diabetes Management	• HbA1C • LDL	• Retinal test • ACE inhibitors/ARB	• Statin
Health Services Utilization	• Total ED visits • Urgent ED visits • ACSC COPD	• Less urgent ED visits • ACSC adm. total • ACSC adm. asthma • ACSC CHF • ACSC diabetes	• Hospital readmissions within 30 days • Hospital readmissions within 1 year • Visits to own physician

View your patient information and demographics

INDICATOR DETAIL PAGE

All colorectal screening: Percentage of your patients aged 52 to 74 who had a FOBT within the past two years, other investigations (i.e., barium enema, sigmoidoscopy) within the past five years or a colonoscopy within the past 10 years



	Sep 10	Mar 11	Sep 11	Mar 12	Sep 12	Mar 13	Sep 13	Mar 14
My Practice	68.7%	70.1%	67.9%	67.7%	68.0%	67.8%	68.3%	67.9%
My XXX	§	§	§	65.6%	65.9%	67.3%	67.6%	67.1%

My Practice · My XXX · LHIN · Ontario

§ data suppressed; physician group size <6

Data interpretation considerations

A small proportion of FOBTs performed as diagnostic tests could not be excluded from the analysis. FOBTs analyzed in hospital labs could not be captured.

What are the data showing me?

As of March 2014, 297 of your patients were up-to-date with colorectal screening. Your percentage is 67.9%, higher than the provincial percentage of 59.1%.

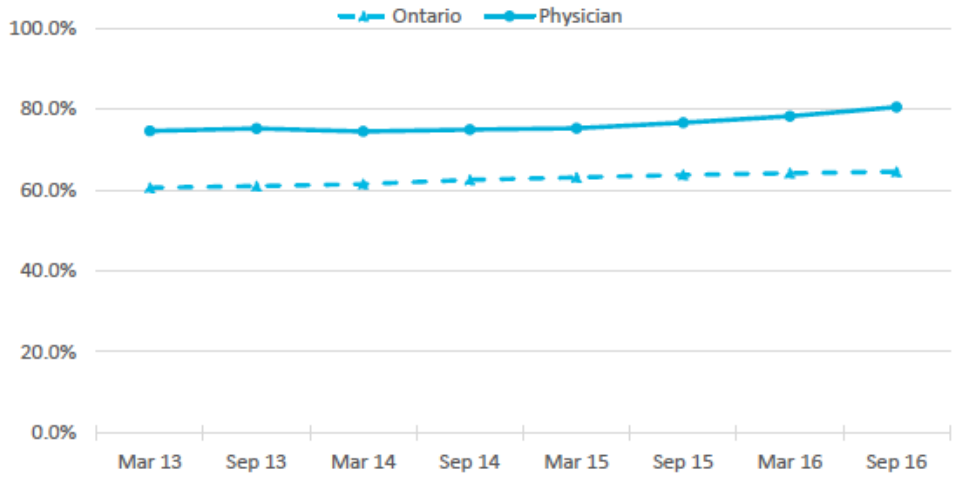
To help improve your colorectal screening rate, review the change ideas on page 8.

Primary Care Practice Report — **Health Quality Ontario**

CRC Screening

Data as of September 30, 2016

What percent of my eligible patients aged 52 to 74 are up-to-date with any colorectal screening?



Number of my eligible patients not screened

170

How can I improve my CRC screening? (page 9)

To identify patients requiring follow up for CRC screening, please access your screening activity report (SAR) through the Cancer Care Ontario Portal

SAR Report Portal

What are the data showing me?

- As of September 30, 2016, 81.3% of my patients were up-to-date with colorectal screening. My group and LHIN percentages are 64.6% and 69.9%, respectively.
- My practice is **higher than** the provincial percentage of 64.5%.

Evidence for CRC screening continues to evolve. Health Quality Ontario will continue to monitor screening guidelines and modify the indicator, as appropriate. A small proportion of FOBTs performed as diagnostic tests could not be excluded from the analysis. This indicator does not capture tests done in hospital laboratories or paid through alternative payment plans.

Indicator definition: Percentage of my patients (aged 52 to 74) who had a FOBT within the past two years, other investigations (i.e. sigmoidoscopy) within the past five years or a colonoscopy within the past 10 years.

CHANGE IDEAS: OLD & NEW

Identify areas for improvement

First, identify areas of focus to improve your cancer screening indicators by asking yourself these questions:

1. Are you able to identify the patients due/overdue for cancer screening in your practice?
2. Do you have a reminder system and a process to recall your patients?
3. Do you have a tool to keep track of your patients who are eligible for screening and follow-up on tests and referrals?
4. Have you and your team mapped your clinic's current cancer screening process to identify potential gaps and test improvements?

Once you identify the areas you would like to improve, review the change ideas that accompany each question:

1 Change ideas to identify your patients

a) Download the report and compare the information with your clinic's patient records. Modify to make your report more consistent with your own patient records. Register for and view your Cancer Care Ontario Screening Activity Report (SAR) to find the screening status of your enrolled patients. https://www.cancercare.on.ca/pcs/primcare/sar/

b) Use the query/reporting function in your EMR to search for screening-eligible patients and check documented screening status.

2 Change ideas to develop a recall system

Identify number of screening-eligible patients not up-to-date and issue patient reminder/ follow-up.

Consult templates provided by Cancer Care Ontario. https://www.cancercare.on.ca/cms/one.aspx?portalId=1377&pageId=307048

Update EMR with reminder notices completed.

Update EMR if screening status is up-to-date.

Primary Care Practice Report — **Health Quality Ontario**

CRC Screening — Data as of March 31, 2016

How can I improve my cancer screening indicator?

Review your HQO practice report	-Go through the report examine how you are doing in comparison with the Ontario average
Identify the patients due/overdue for cancer screening.	- Register for and view your Cancer Care Ontario Screening Activity Report (SAR) to find the screening status of your enrolled patients - Use the query or reporting function in your EMR to search for screening-eligible patients.
Establish a process or system to help you keep track of patients who are eligible for screening.	- Set-up reminders to help track those patients who are due for screening.
Follow-up on tests and referrals.	- Regularly review screening status reports and current baseline, reminder notice completion and identify patients requiring additional follow-up contact.
Identify potential gaps in your clinic's current cancer screening process.	- Map the steps involved in your clinic's cancer screening and follow-up processes. - Consider who checks screening status, who updates the patient record, who communicates recalls or follow-ups, how frequent are screening status reports reviewed, etc.

Additional ways to help improve cancer screening in your practice

- For additional ideas, consult Cancer Care Ontario's Cancer Screening Toolkit. https://www.cancercare.on.ca/pcs/primcare/

- Learn from your peers!
- Reach out to local family physician leaders working as part of the Provincial Primary Care and Cancer Network. Go to: https://www.cancercare.on.ca/cms/One.aspx?-portalId=1377&pageId=87139
- If you use an EMR and want to maximize its use for cancer screening, contact your OntarioMD peer leader: https://www.ontariomd.ca/portal/server.pt/community/peer_leader_program/contact/

PHYSICIAN PERSPECTIVE: NEW DESIGN

I think it's a very clear report. It's pretty simple to read, it's pretty simple to see where you are, where you compare with the rest of the province. I think all of that is pretty clear. **PCP06**

- Implication(s):

1. Physicians approve of the new design and view it as a strength.
2. The current design features (e.g. colour, layout, graphics) enhance the usability of the report.

CONTINUING ENHANCEMENTS

- Opioid content launched late November
- Clinically relevant indicators, alignment to guidelines
- Ongoing exploration of:
  - Peer group, risk adjustment opportunities
  - Outcome *and* process, balancing indicators
  - Access to patient level data
  - Easier access report access
  - Streamlined reporting in Ontario

- Growing the numbers of registrants and the number who engage with their data…

PHYSICIAN PERSPECTIVE: INDICATORS

I think, rather than focusing on the percentage of patients that have had recent hemoglobin A1C testing, to me, a better thing to look at would be what are the hemoglobin A1Cs of my patients, like, what are the numbers and how do the overall outcomes, let's say, compare with other doctors? **PCP01**

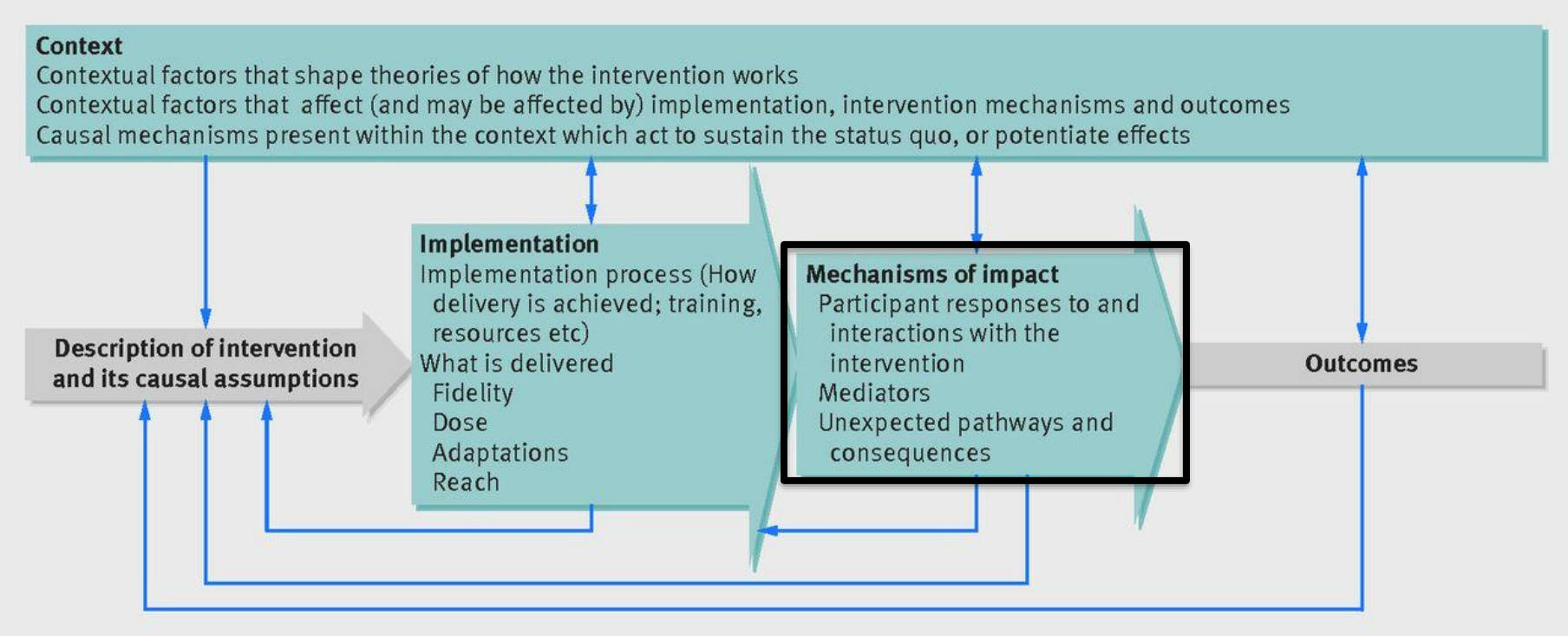
I think the question I have, for Health Quality Ontario, is what you would like physicians in general to do with the report? Because it's all nice to give people information but if there is no clear direction about what they should do with it… **PCP09**

- Implication(s): Unless the indicators align with physician goals and priorities, and must be perceived as actionable, the design doesn't really matter

BEFORE WE BUILD IT, WE NEED TO KNOW HOW IT MIGHT WORK

UNDERSTANDING HOW A&F WORKS TO PRODUCE CHANGE

UK-MRC guidance on process evaluation



Moore et al, BMJ 2015; 350:h1258.

A&F TO ADDRESS PRESCRIBING OF HIGH-RISK MEDICATIONS IN LONG-TERM CARE

Ivers *et al. Implementation Science* (2017) 12:86
DOI 10.1186/s13012-017-0615-7

Implementation Science

STUDY PROTOCOL Open Access

Testing feedback message framing and comparators to address prescribing of high-risk medications in nursing homes: protocol for a pragmatic, factorial, cluster-randomized trial

Noah M. Ivers[1,2,3,4*], Laura Desveaux[1], Justin Presseau[5,6,7], Catherine Reis[1], Holly O. Witteman[5,8,9,10,11], Monica K. Taljaard[5,6], Nicola McCleary[5], Kednapa Thavorn[6] and Jeremy M. Grimshaw[5,12]

Ontario
Health Quality Ontario

MyPractice
Long-Term Care
A tailored report for quality care

2×2 factorial design to assess variations in

- Comparator (Ontario median/top quartile)
- Information framing (risk framing/benefit framing)

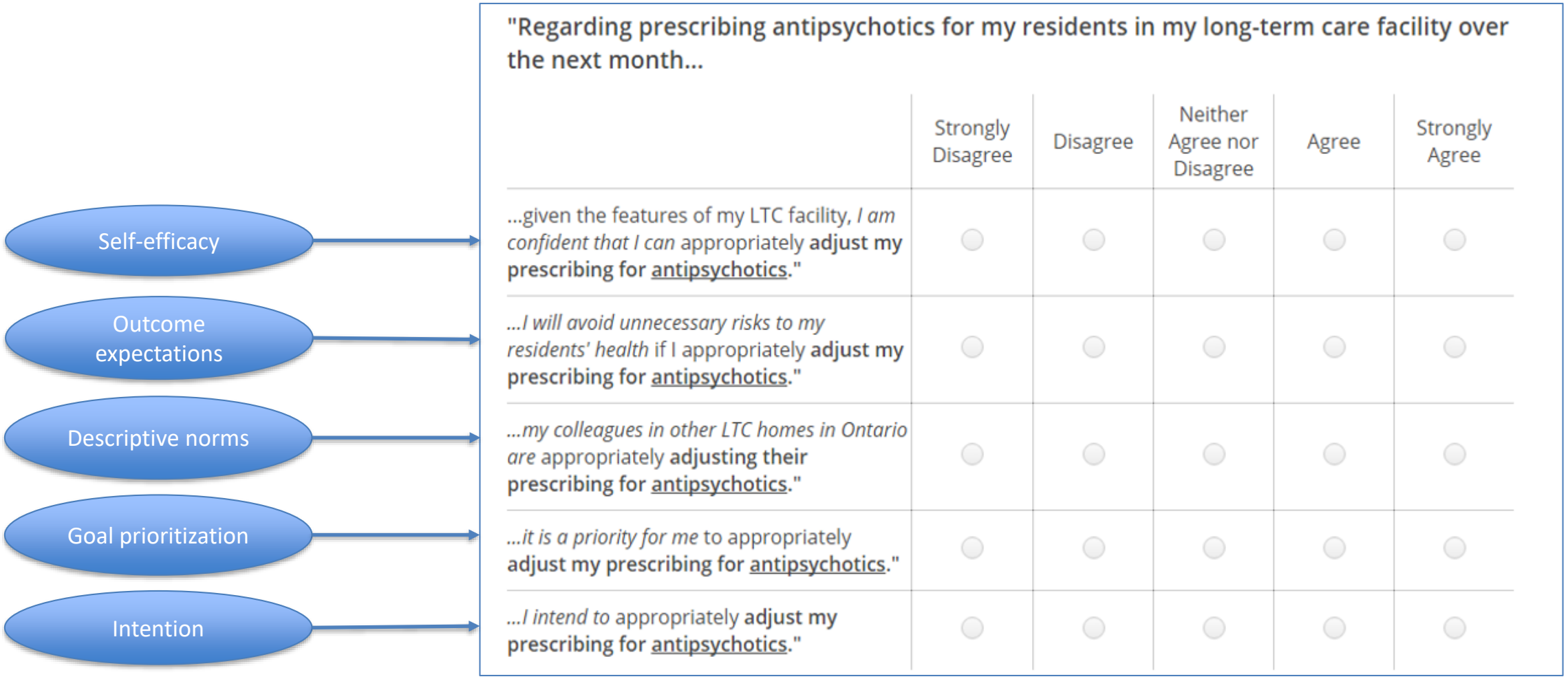
THE PROCESS EVALUATION

- Trial hypothesis: risk framing & top quartile comparator (higher target) would be more effective
- Based on Goal Setting Theory[1] and Social Cognitive Theory[2]

- Process evaluation: measuring proposed mechanisms and assessing differences between the trial groups

[1]Locke & Latham, Am Psychol 2002; 57(9)705-717
[2]Bandura, Organ Behav Hum Decis Process 1999; 50(2)248-287

QUESTIONNAIRE

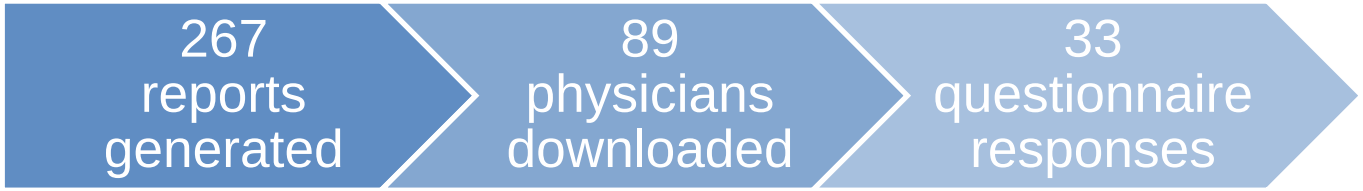


SEMI-STRUCTURED INTERVIEWS

- Qualitative understanding of responses to the report, specifically to the different design factors

- Questions focused on:
  - Responses to the report and if/how it was used in practice change efforts
  - Further understanding how the report might achieve change

A&F DID NOT IMPACT MECHANISMS AS HYPOTHESISED



Expected the risk framing and top quartile comparator to have more impact, but no effect of these factors on…

Intention → "I intend to appropriately adjust my prescribing for antipsychotics"

Strong intention (1 to 5 scale, means 4.3 to 4.4)

Self-efficacy → "I am confident that I can appropriately adjust my prescribing"

High confidence (means 4.0 to 4.4)

Outcome expectations → "I will avoid unnecessary risks to my residents' health…"

Strong agreement that adjusting prescribing avoids risks (means 4.4 to 4.5)

Goal prioritization → "It is a priority for me to appropriately adjust my prescribing"

High priority (means 4.3 to 4.4)

A&F DID NOT IMPACT MECHANISMS AS HYPOTHESISED

There was an effect on descriptive norms, but not in the way we hypothesised…

Descriptive norms → "My colleagues in other LTC homes in Ontario are appropriately adjusting their prescribing for antipsychotics"

Mean higher for median comparator than top quartile comparator
(Mean(SD) 3.7(0.6) vs 3.0(0.7); p=.003)

Those receiving median comparator: agreeing colleagues are adjusting prescribing (but not strongly)

Those receiving top quartile comparator: neither agreeing nor disagreeing

Top quartile emphasizes a subset of all physicians: less sure of what other physicians are doing?

PHYSICIAN PERSPECTIVES: COMPARATORS

Physicians aimed to achieve similar prescribing rates to the comparator, regardless of which they received

Efforts reduced when comparator close

"When I'm at the 75th percentile or better, I maybe don't put as much emphasis on it." (LTC1, top quartile)

"The useful information for me is that either I am using less or I'm using the same as others in Ontario… that's good enough" (LTC4, median)

PHYSICIAN PERSPECTIVES: RISK FRAMING VS. BENEFIT FRAMING

Physicians receiving benefit-framed report were vocal about the framing: found it difficult and time-consuming to interpret and/or visualise their data

Benefit-framed feedback is not immediately actionable

"You have to think about it a little bit more… if my percentage is lower that's not good… I almost prefer the other way.… because that's the way it's reported in our PAC meetings and it's reported in CIHI that way… it's a little bit easier to visualize."
(LTC5, benefit framing)

FURTHER INSIGHTS INDICATE EXTENT TO WHICH REPORT MIGHT ACHIEVE CHANGE IS LIMITED

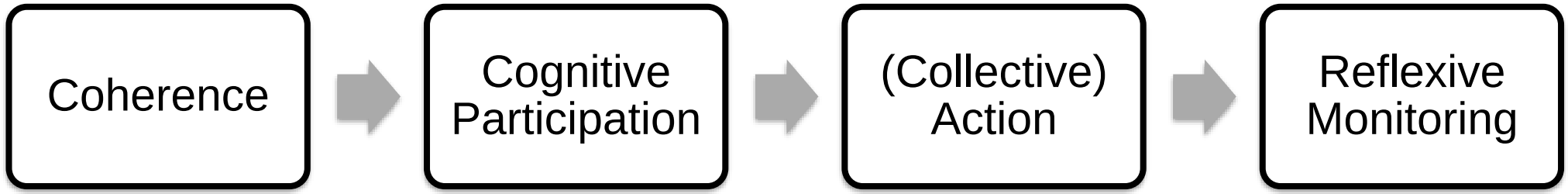
- Residents often already prescribed medications on admission without accompanying clinical history, complicating ability to assess appropriateness
- Long-term care is team-based: team-level initiatives in place to drive quality improvement took precedence over the report
- Data sometimes informs discussions with other team members, but difficult to have these discussions where physicians work across multiple facilities (data reported overall, not split by facility)

TRIANGULATION & KEY LESSONS LEARNED FOR A&F

- No effect of risk framing or top quartile on most of the hypothesized mechanisms, low uptake: expect no difference in prescribing rates in the trial

- However: still learned a lot to help us optimize A&F
  - Benefit-framed data not actionable, physicians aimed to move towards top quartile: risk framing & top quartile comparator have potential to achieve change
  - Changing care for individual patients is tough, and quality improvement is often team-based: enabling discussions may help physicians to act on their data

ENGAGEMENT DOESN'T JUST HAPPEN



Normalization Process Theory

What is meaningful engagement?

Learning from Failure

- Goal must be clearly stated
- Utility must align with recipient goals
- Perceptions of feedback influence engagement
- Approach to practice influences perceptions of feedback

MEANINGFUL CONTENT >> A STRONG VISUAL

HOW DO PCPS ENGAGE WITH A&F?

Threats to meaningful engagement:

1. My patients are different
2. Issues with data credibility
3. Approach to practice (one patient at a time)
4. The data is imperfect (reflects patient choice)
5. I don’t know what the data is telling me
6. I don’t know what I can do to improve my performance

HOW DO PCPS ENGAGE WITH A&F?

Threats to meaningful engagement:

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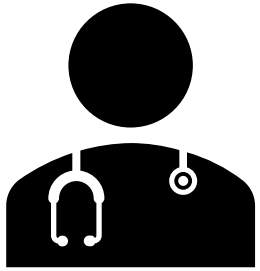
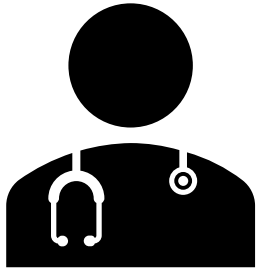
PHYSICIAN PERSPECTIVES



For me to get the most out of this I would actually need to have somebody go through this with me like a peer that I trusted with the same kind of practice as me to sort of say like well this is what I can see as a trend because I'm not sure where to go with this and I have had it sitting there on my desk for two months probably and I've looked at it a few times and I still come up with the same so now what.

PHYSICIAN PERSPECTIVES



[It would be helpful to talk to someone] who could say like look, this is, in a nutshell this is how I interpret this just and it can be, not to be punitive but more educational to say like this is what's happening and this is you know and this is you know you are, your rates are quite low like compared to you know and they could be better and this is how we're going to support you or this is what this means so I think yeah, so maybe like we're left to kind of interpret it ourselves.

PHYSICIAN PERSPECTIVES

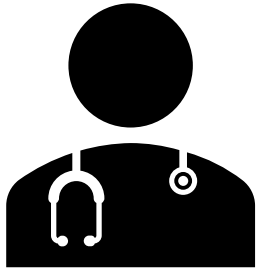


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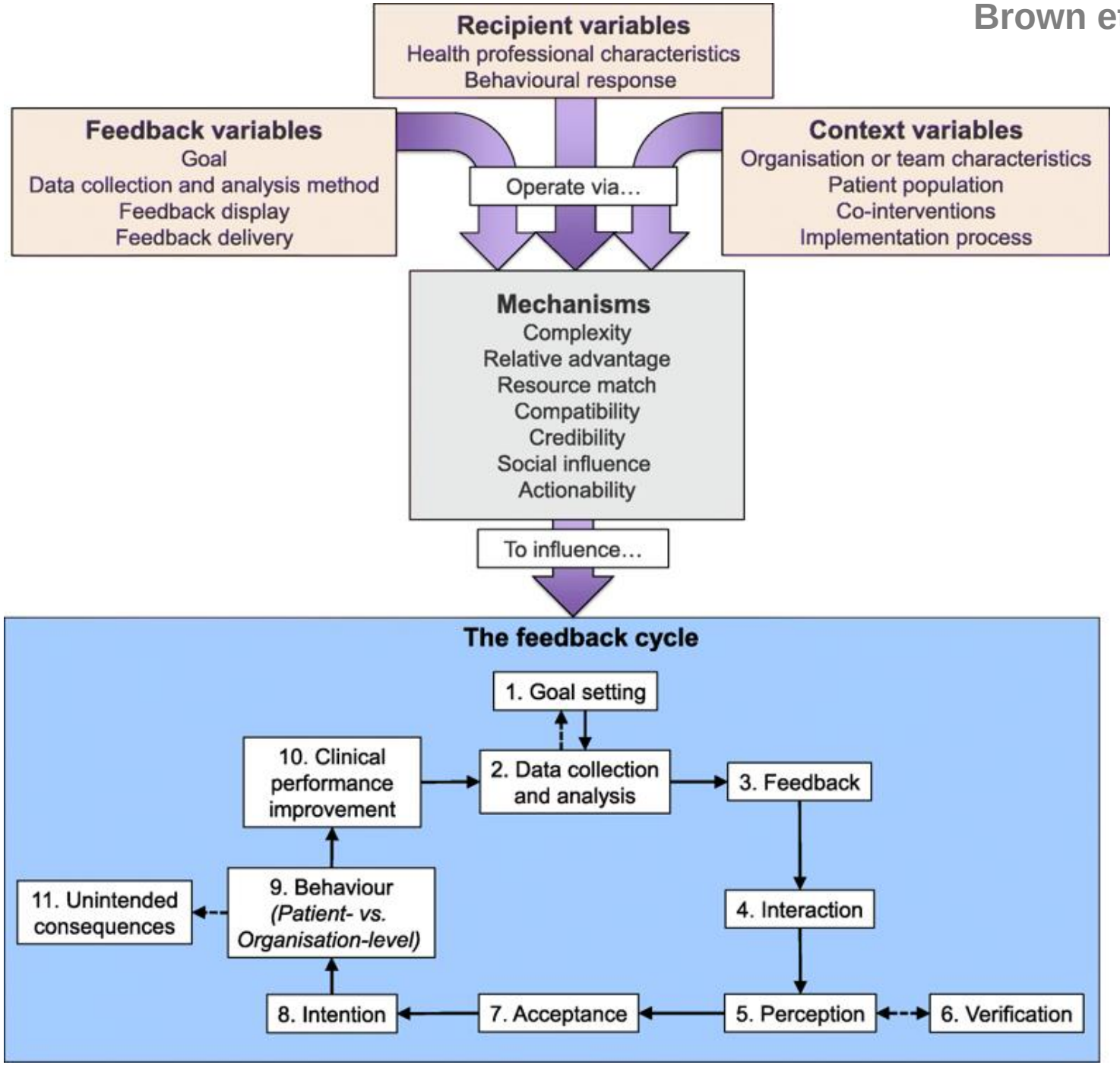
Table. 15 Suggestions for Designers of Practice Feedback and Examples of Implementation Strategies

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

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



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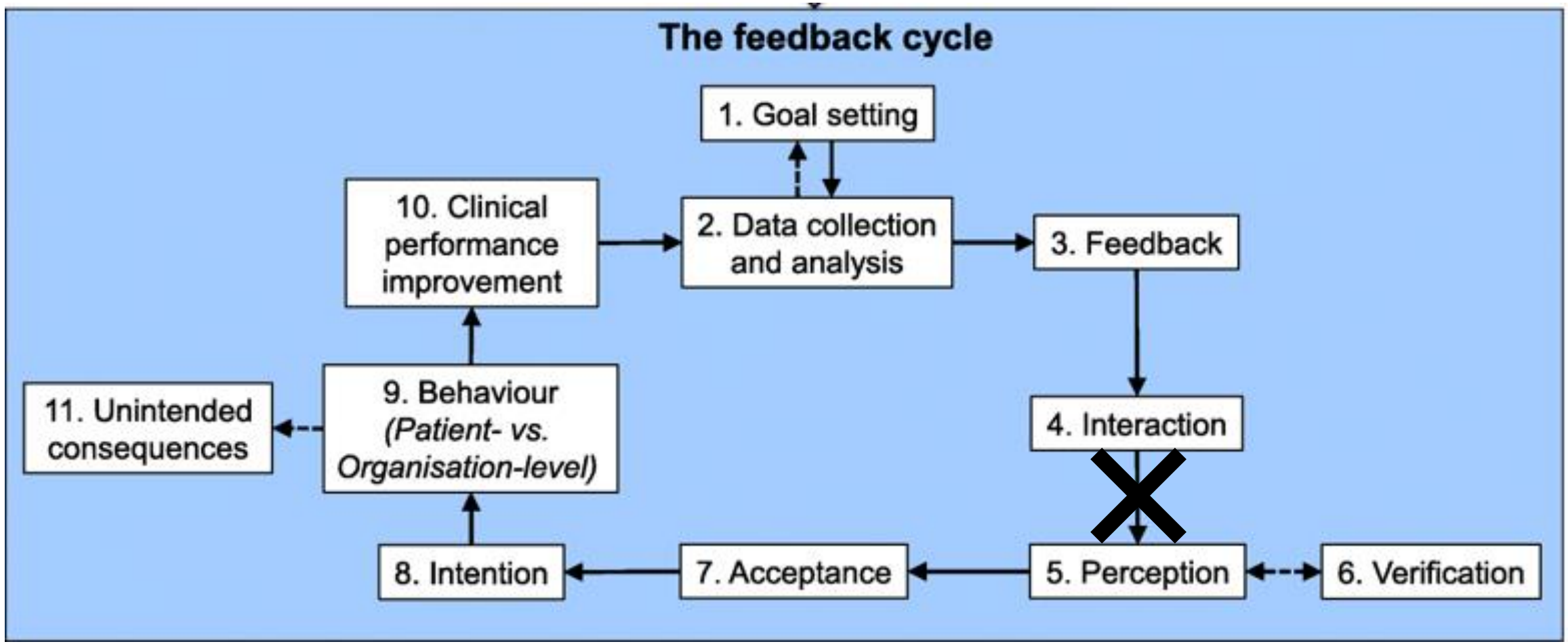
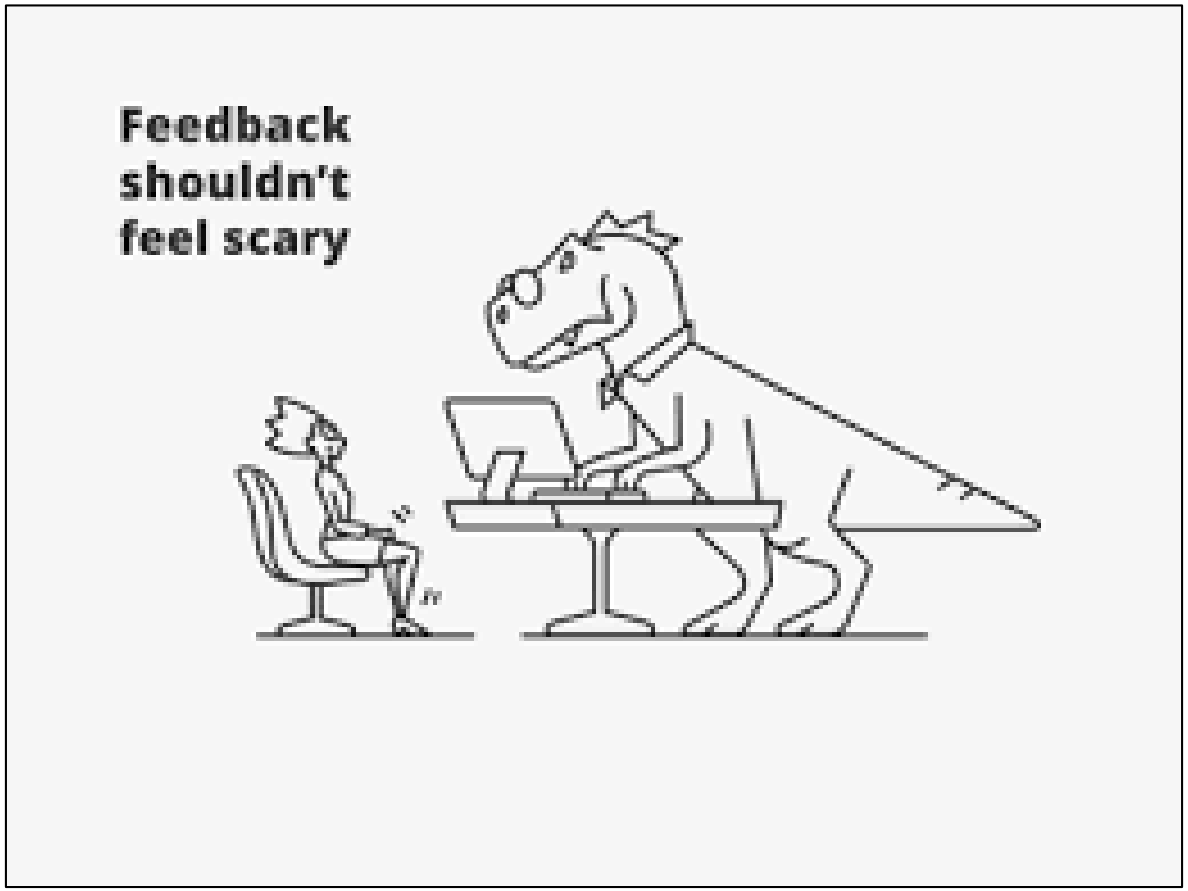
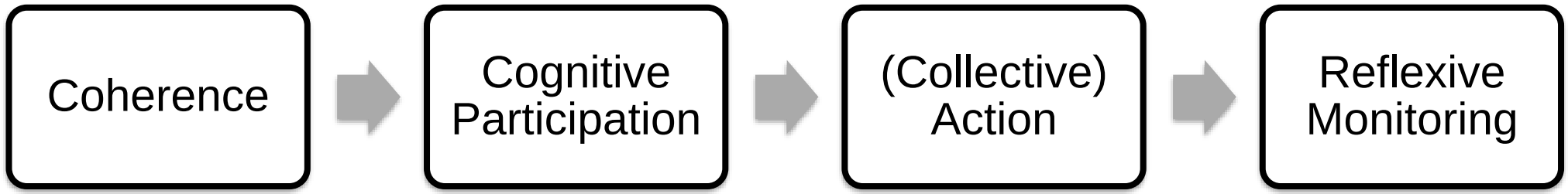


BRIDGING THE GAP: SOCIAL INTERACTION TO FACILITATE FEEDBACK



TESTING APPROACHES TO SOCIAL INTERACTION

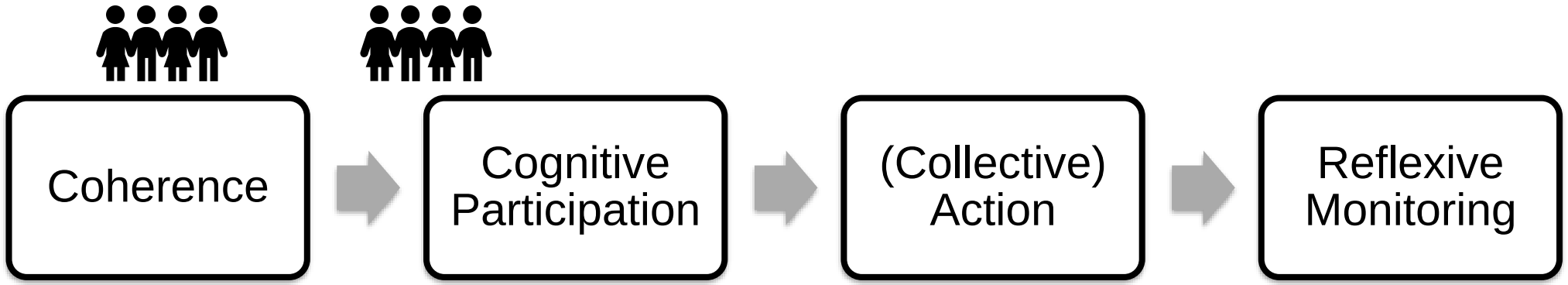
1. Structured self-reflection
2. Peer to peer coaching
3. Facilitated group sessions



Normalization Process Theory

TESTING APPROACHES TO SOCIAL INTERACTION

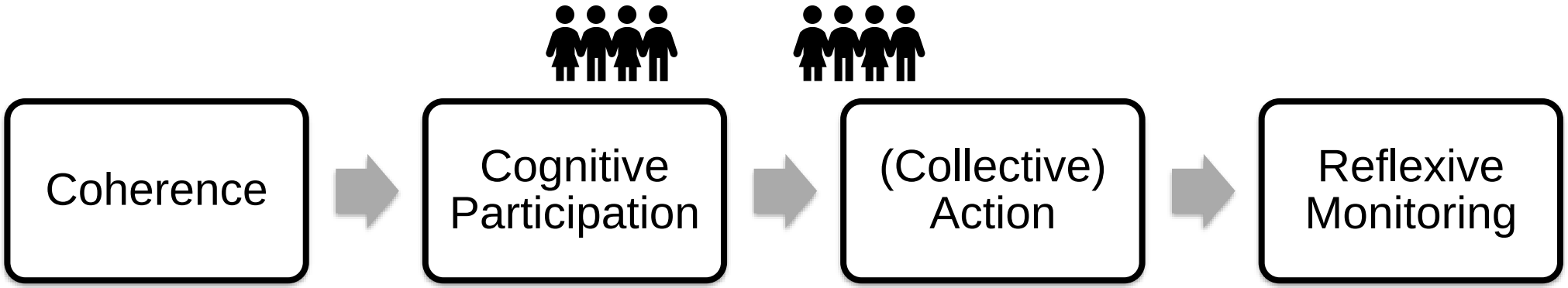
1 Structured self-reflection



Normalization Process Theory

TESTING APPROACHES TO SOCIAL INTERACTION

2 Peer to peer coaching



Normalization Process Theory

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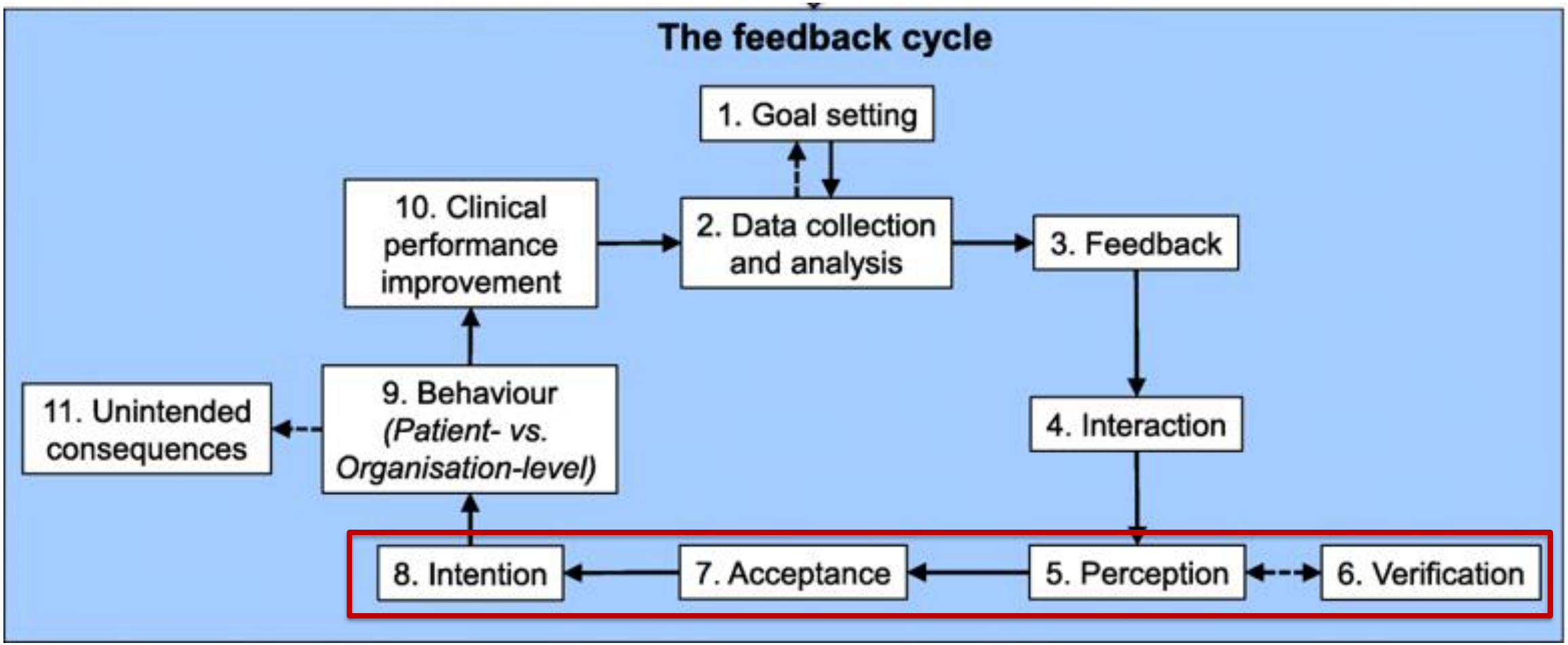
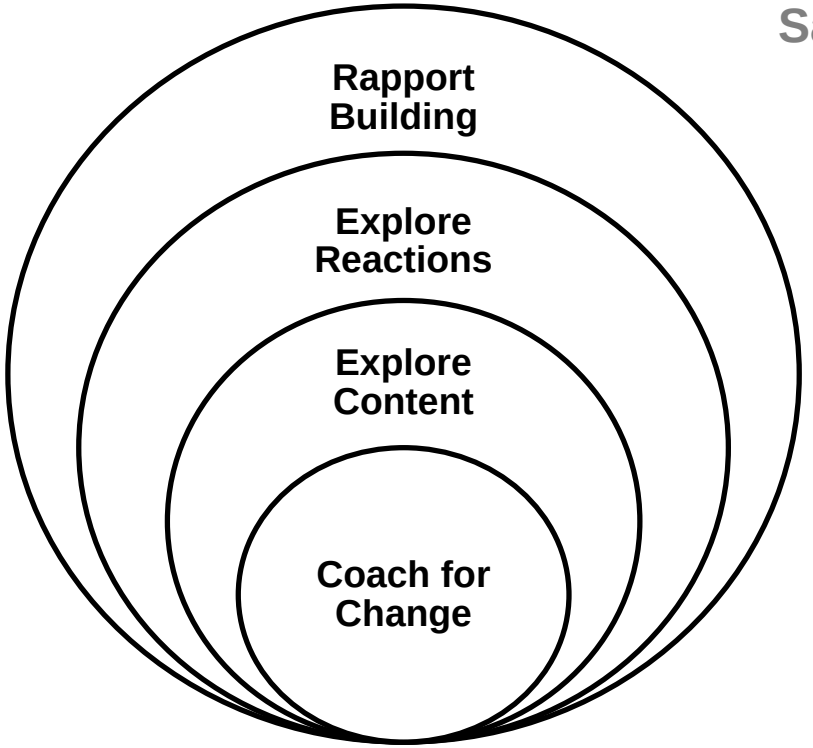


FACILITATED FEEDBACK

Sargeant et al, Acad Med 2015; 90(12).



R2C2 → an evidence-based model on delivering effective feedback to physicians

R2C2: THEORY AND EVIDENCE

Sargeant et al, Acad Med 2015; 90(12).

1. Person-centered approaches - humanism, motivational/ behavioural approaches
2. Informed self-assessment
3. Cognitive domains influencing change

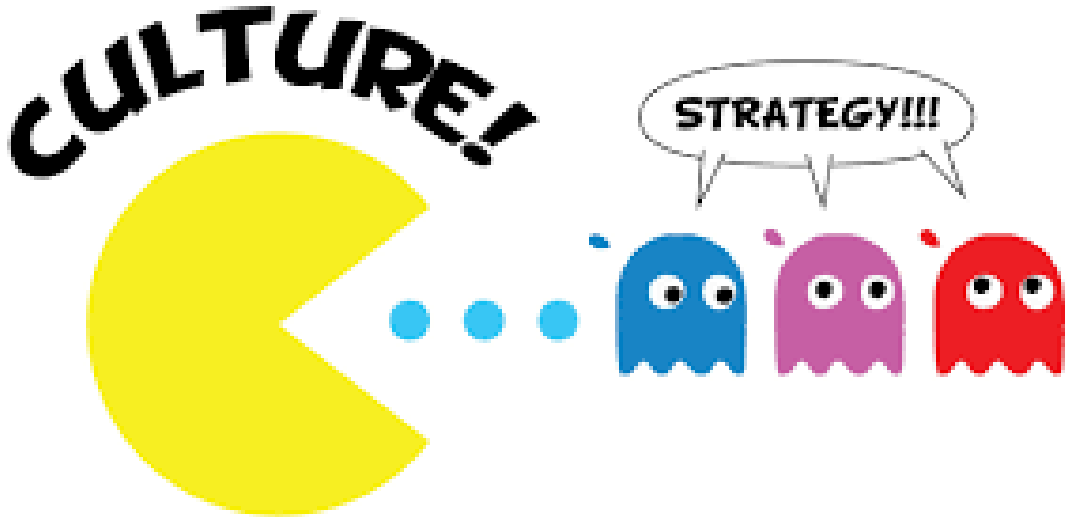
WHAT IS COACHING?

HOW DID WE OPERATIONALIZE IT?

- Physicians engaged in A&F voted for any and all colleagues they felt would be a good coach
- Top rated coaches were approached with the aim to have representation across sites
- Participation in a two-hour training session
- Strategies documented and shared with coaches

Design must be fit for purpose

Be clear about the purpose



PURPOSE FUELS APPETITE

Help people understand their score and make plans to improve