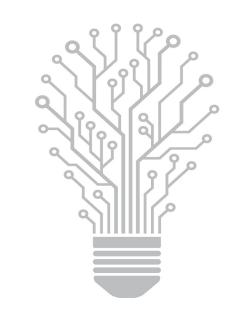
# If you build it, will they come?

What it takes to make audit and feedback work in practice



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**Noahlvers** 





# Agenda

- Introductions
- Review of theory
- Understanding failure and success
- Engagement with A&F
- The role of coaching

## Introductions

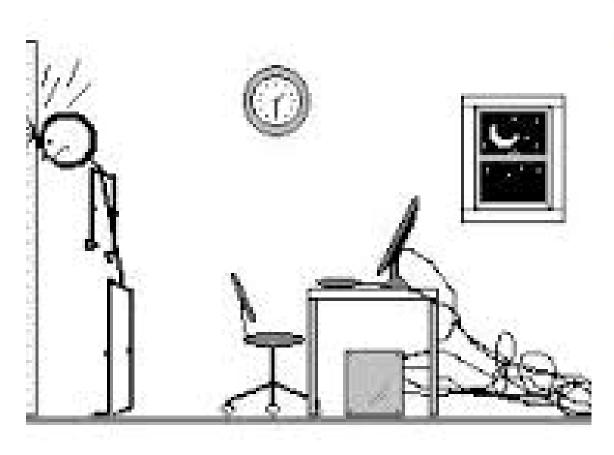


hey.

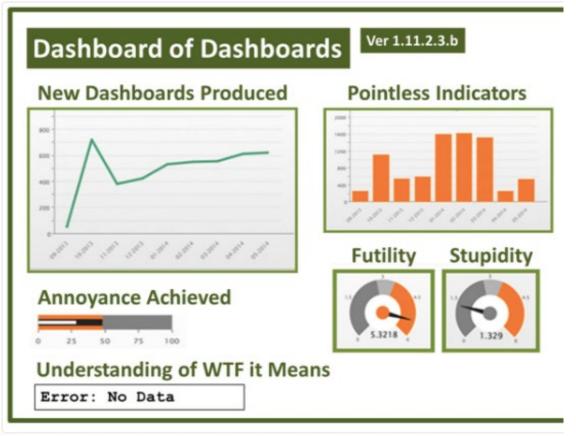




## What is A&F, why might it help, when might it not?



The 'Meta-Dashboard'...



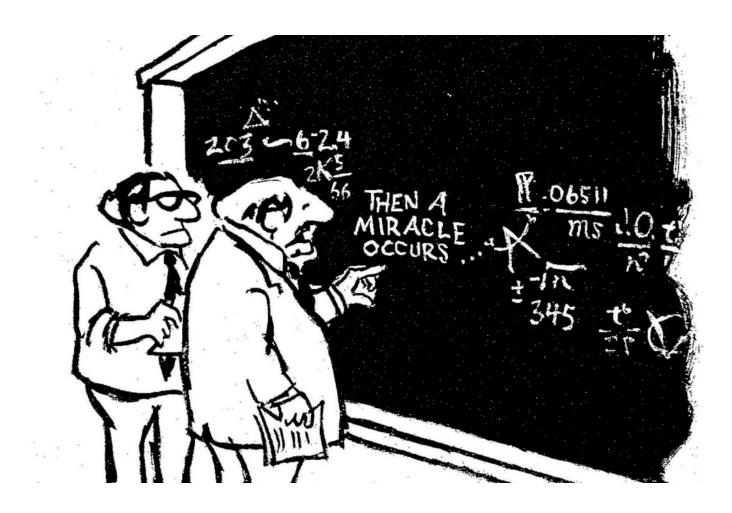








#### **UNPACKING THE BLACK BOX OF A&F**



### **A&F: State of the Science**

- Cochrane 2012 review 140 trials of audit and feedback, median absolute improvement +4%, interquartile range +1% to +16%
- Larger effects were seen if:
  - baseline compliance was low
  - the source was a supervisor or colleague
  - it was provided more than once
  - it was delivered in both verbal and written formats
  - it included both explicit targets and an action plan

Ivers (2012) Cochrane Library





### **A&F: State of the Science**

lvers et al. Implementation Science 2014, **9**:14 http://www.implementationscience.com/content/9/1/14



DEBATE Open Access

# No more 'business as usual' with audit and feedback interventions: towards an agenda for a reinvigorated intervention

Noah M Ivers<sup>1\*</sup>, Anne Sales<sup>2</sup>, Heather Colquhoun<sup>3</sup>, Susan Michie<sup>4</sup>, Robbie Foy<sup>5</sup>, Jill J Francis<sup>6</sup> and Jeremy M Grimshaw<sup>7</sup>

#### Abstract

**Background:** Audit and feedback interventions in healthcare have been found to be effective, but there has been little progress with respect to understanding their mechanisms of action or identifying their key 'active ingredients.'

**Discussion:** Given the increasing use of audit and feedback to improve quality of care, it is imperative to focus further research on understanding how and when it works best. In this paper, we argue that continuing the 'business as usual' approach to evaluating two-arm trials of audit and feedback interventions against usual care for common problems and settings is unlikely to contribute new generalizable findings. Future audit and feedback trials should incorporate evidence- and theory-based best practices, and address known gaps in the literature.

**Summary:** We offer an agenda for high-priority research topics for implementation researchers that focuses on reviewing best practices for designing audit and feedback interventions to optimize effectiveness.

Keywords: Audit and feedback, Synthesis, Best practice, Implementation, Optimization

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

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

<sup>1</sup>Family Practice Health Centre and Institute for Health Systems Solutions and Virtual Care, Women's College Hospital, Toronto, Ontario, Canada; <sup>2</sup>Clinical Epidemiology Program, Ottawa Hospital Research Institute, Department of Medicine, University of Ottawa, Ottawa, Ontario, Canada; <sup>3</sup>Norwegian Knowledge Centre for the Health Services, Oslo, Norway; <sup>4</sup>School of Rehabilitation Therapy, Faculty of Health Sciences, Queen's University, Kingston, Ontario, Canada; <sup>5</sup>Cancer Epidemiology and Services Research, Sydney School of Public Health, University of Sydney, Sydney, New South Wales, Australia.

**BACKGROUND:** This paper extends the findings of the Cochrane systematic review of audit and feedback on professional practice to explore the estimate of effect over time and examine whether new trials have added to knowledge regarding how optimize the effectiveness of audit and feedback.

METHODS: We searched the Cochrane Central Register of Controlled Trials, MEDLINE, and EMBASE for randomized trials of audit and feedback compared to usual care, with objectively measured outcomes assessing compliance with intended professional practice. Two reviewers independently screened articles and abstracted variables related to the intervention, the context, and trial methodology. The median absolute risk difference in compliance with intended professional practice was determined for each study, and adjusted for baseline performance. The effect size across studies was

DISCUSSION: There is substantial evidence that audit and feedback can effectively improve quality of care, but little evidence of progress in the field. There are opportunity costs for patients, providers, and health care systems when investigators test quality improvement interventions that do not build upon, or contribute toward, extant knowledge.

KEY WORDS: audit and feedback; scientific progress; quality improvement; systematic review; cumulative analysis.

J Gen Intern Med

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#### BEFORE WE BUILD IT, WE NEED TO KNOW HOW IT WORKS





@Noahlvers

#### Brown et al, Imp Sci 2019; 14:40. Recipient variables Health professional characteristics Behavioural response Feedback variables Context variables Organisation or team characteristics Goal Data collection and analysis method Patient population Operate via... Co-interventions Feedback display Feedback delivery Implementation process Mechanisms Complexity **Clinical Performance** Relative advantage Resource match **Feedback Intervention** Compatibility Credibility **Theory (CP-FIT)** Social influence Actionability To influence... The feedback cycle 1. Goal setting

10. Clinical

performance

improvement

9. Behaviour

(Patient- vs.

Organisation-level)

8. Intention

11. Unintended

consequences

2. Data collection

and analysis

7. Acceptance

3. Feedback

4. Interaction

5. Perception

6. Verification





#### Does a shift in feedback display improve performance?

#### 2 x 2 FACTORIAL TRIAL

Comparator: Top 25%

Framing: -

**Comparator: Mean** 

Framing: -

Comparator: Top 25%

Framing: +

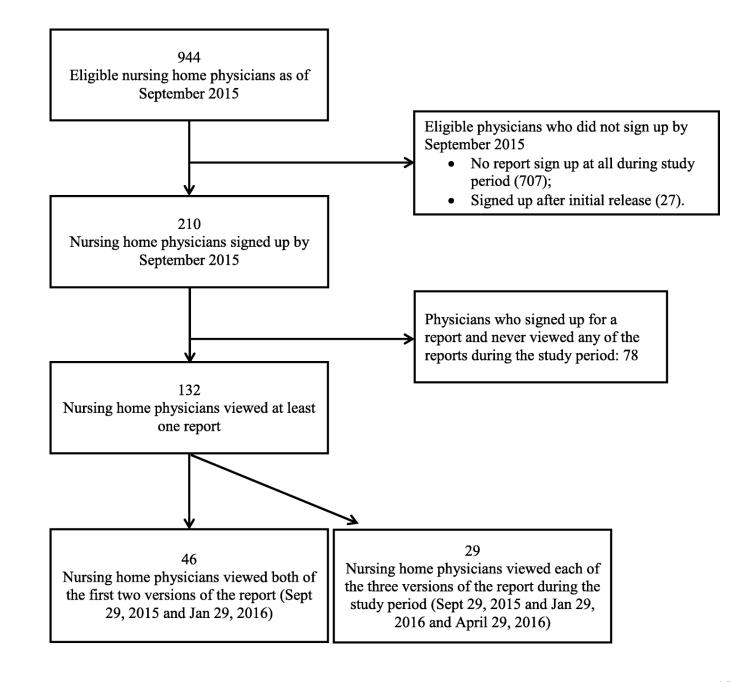
**Comparator: Mean** 

Framing: +





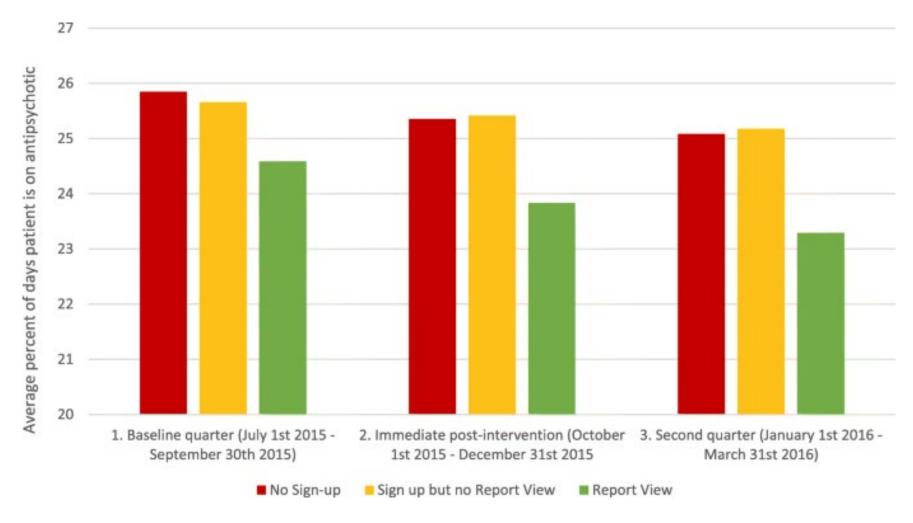
# ... BUT ENGAGEMENT WAS SUBOPTIMAL







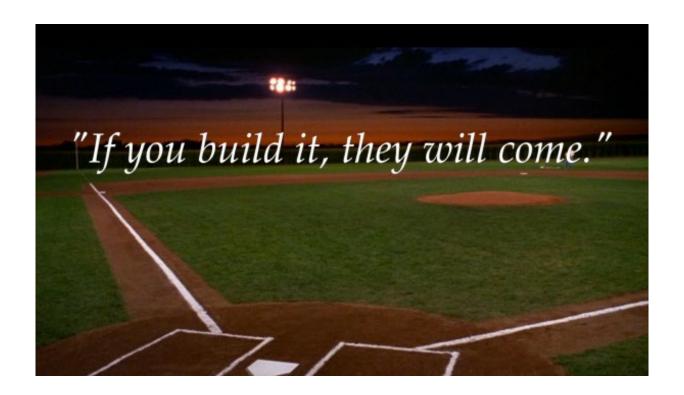
# A&F only works if people engage with it







# 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

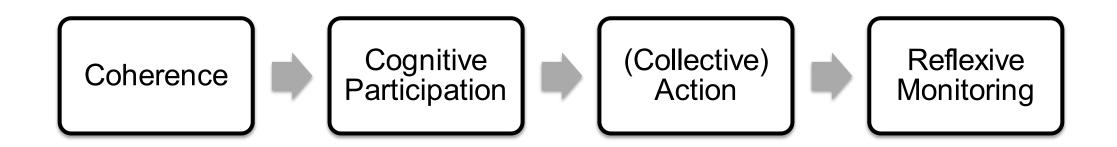
#### **MEANINGFUL CONTENT >> A STRONG VISUAL**





### **A&F Best Practices**

#### **ENGAGEMENT DOESN'T JUST HAPPEN**







# Strategies to Increase Engagement

#### Remember:

User preference ≠ Scientific evidence Consider context and observe interactions





# Think of a frustrating user experience you've had.

What motivated you? What would help you engage?





### Learning from failure

# ESTABLISH MEANINGFUL CONTENT FIRST ...THEN CONSIDER USABILITY AND RELATIVE ADVANTAGE





# How do primary care physicians engage with A&F?

#### **How it started**



#### How it's going







#### RESEARCH

#### **Open Access**

# Unpacking the intention to action gap: a qualitative study understanding how physicians engage with audit and feedback



Laura Desveaux<sup>1,2</sup>, Noah Michael Ivers<sup>1,2,3</sup>, Kim Devotta<sup>4,5</sup>, Noor Ramji<sup>3,6</sup>, Karen Weyman<sup>3,6</sup> and Tara Kiran<sup>2,3,4,6</sup>



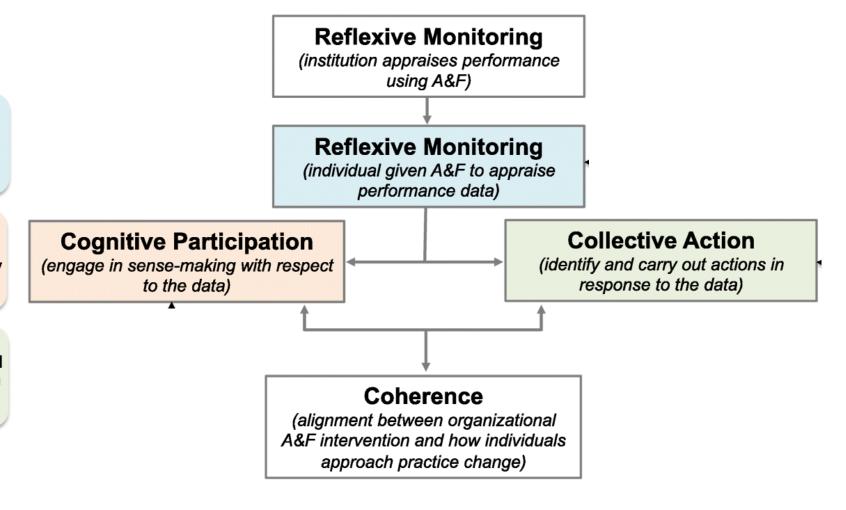
#### **KEY THEMES**

#### INTENDED INTERVENTION PATHWAYS BY NPT DOMAIN

Theme 1: Credibility drives engagement with reflexive monitoring

Theme 2:
A lack of technical skills impeded ability to interact with data

Theme 3: Physicians struggled to identify actions in response to data





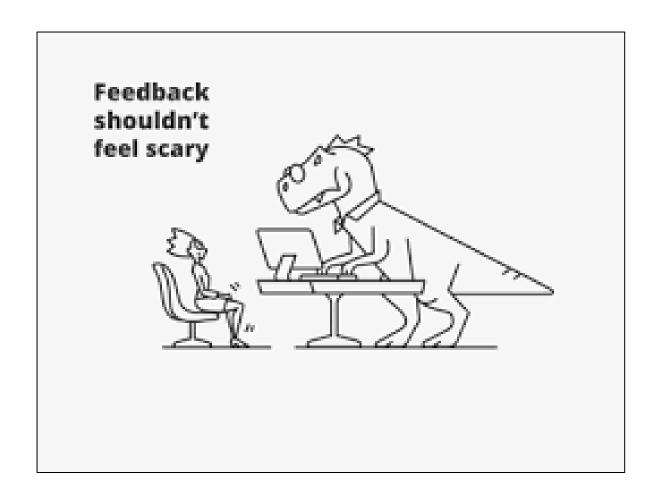


#### **KEY THEMES** INTENDED INTERVENTION PATHWAYS BY NPT DOMAIN STRATEGIES TO SUPPORT A&F **EFFECTIVENESS Reflexive Monitoring** (institution appraises performance using A&F) Theme 1: 1. Ensure data matters to **Credibility drives Reflexive Monitoring** recipients engagement with 2. Model how data can be reflexive monitoring (individual given A&F to appraise used to drive practice performance data) changes Theme 2: **Cognitive Participation Collective Action** 1. Provide opportunity A lack of technical for social interaction (identify and carry out actions in (engage in sense-making with respect skills impeded ability 2. Circulate examples to interact with data response to the data) to the data) of effective actions 1. Provide access to Theme 3: Physicians struggled someone to assist to identify actions in with interpretation Coherence response to data 2. Provide training on interpreting practice (alignment between organizational data A&F intervention and how individuals approach practice change)





# Bridging the gap: Facilitated Feedback & Coaching





### **R2C2** Model of Feedback

Stage 1: Build rapport and relationship

Stage 2: Exploring reactions & perceptions

Stage 3: Exploring understanding and opportunities

Stage 4: Coaching for performance change





# Facilitated Group Feedback

Cooke et al, Imp Sci 2018; 13:136.

#### **Precursors**

Relationship building

Question choice

Usability

Physician group identifies clinical question

CPLP facilitates/co-facilitates a feedback session with members of the physician group to develop a plan for change

If question is answerable, actionable, important, it becomes a CPLP project

CPLP creates a confidential individual data report with anonymized peer comparators/gold standard for consenting MDs

CPLP collaborates with data custodians to extract, clean, match administrative data





# **Facilitated Group Feedback**

Cooke et al, Imp Sci 2018; 13:136.



- Navigate through reactions to data
- Understand their data
- Create a plan for change

Note - A "coaching-oriented approach" with prompts is essential





# Adopting Facilitated Group Feedback – Early Insights

### 1. Engaging physicians up front is key

→ Co-design both the purpose and the content to

ensure alignment and buy-in





# Adopting Facilitated Group Feedback – Early Insights

#### 2. Characteristics of the facilitator matter

- Internal to the organization
- Has an intrinsic interest and commitment to A&F and practice improvement
- Works diligently to drive implementation forward
- Enthusiastic and persistent



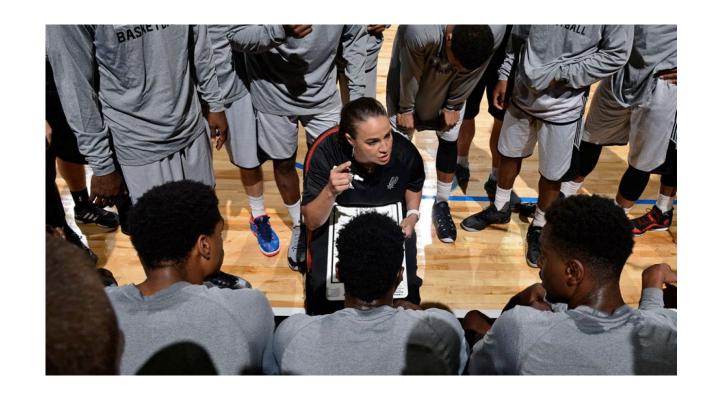
# Adopting Facilitated Group Feedback – Early Insights

### 3. Bridge the gap to point-of-care decisions

- Practice-level data highlights underlying patterns
- Use data to reflect on underlying habits and heuristics
- Help link insights to action



## What is coaching & how do you do it?



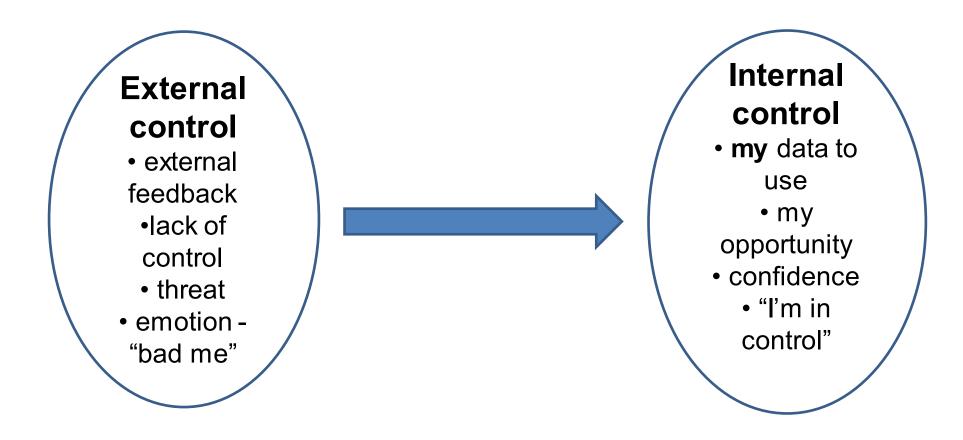


# **Operationalizing Coaching**

- Physicians engaged in A&F voted for <u>any and all colleagues</u> 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



# **Operationalizing Coaching**



Facilitator: listen, accept, motivate, coach





# SOWHAT?





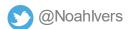
Be clear about the purpose & design for it











Help people improve by changing processes, not trying harder





