CONTEXT REALLY DOES MATTER
- IMPROVEMENT SCIENCE AT THE FRONTLINES

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Outline of our session

• Welcome, Overview of Session, Brief Introduction of Speakers (10 minutes)

• Presentations
  • ~15 minutes per speaker

• Q&A and Discussion (30 minutes)
What is Improvement Science?

Discipline designed to

1. Narrow the gaps between research and practice while providing more generalizable knowledge

2. Undertake systematic study of improvements to make them more effective and widely implemented

Done through multidisciplinary approach with emphasis on understanding context before and during, implementation (process) and on HOW and WHY
Improvement Science Focus

• Balance of development of local wisdom and generalizable knowledge
  • “robust well-established research methods applied in highly pragmatic ways”¹

• Recognition that improvement depends on
  • Intervention choice and delivery
  • Systems
    • existing and those used for implementation
  • Context

Scope and resources

Improvement science

M&E/QI  Research

Resources required

Rigor of information

Probability Assessments

Plausibility Assessments

Adequacy Assessments
Why not just measure the impact?

• Improvement interventions are more than just a pill

• Complex intervention requiring change in
  • Behavior
  • Systems
  • Culture
• Among other things
What do we need to measure and understand?

- **Planned intervention**
  - What was actually done and how

- **What was changed in how care was provided**
  - System
  - Process

- **Did it make a difference/have the effect planned**
  - Outcomes

- **Contextual factors**
  - What impact they had
  - What adaptation was needed
  - How they changed

- **Voice of the implementers and patients**
What do we mean by context

- “The shortest definition of context is everything that is not the intervention itself”*

- Overly simple
  - Often overlap between intervention components and facilitating contextual factors

*Stevens and Shojania, BMJ Q and Safety, 2011
(Some) Different domains of context

- external environmental factors
- structural organizational or community dynamics
- cultural organizational or community factors
- collaboration, resources and leadership
- Individual factors (socio-demographics, individual belief)
Why does context matter?

- Contextual factors can enhance or impede effectiveness of an intervention (dose-response) or even the ability to implement (dose)

- Critical to understand when we aim for spread of a successful intervention
  - Where is intervention adaptation needed
  - What contextual factors need to be addressed before implementation starts
What do we need to measure?

• It depends……..
  • Based on your conceptual model what will influence the impact

• Then you need to
  • Collect and analyze contextual data at multiple time points
  • Report relevant contextual factors and their impact on your targeted processes and outcomes.
Introducing our speakers

- Emmilie Aveling, PhD
  - University of Leicester, UK
  - Research Fellow in the Social Science Applied to Healthcare Improvement Research (SAPPHIRE)

- Andrew F. Beck, MD, MPH
  - Cincinnati Children’s Hospital Medical Center, USA
  - Assistant Professor, Divisions of General and Community Pediatrics and Hospital Medicine

- Sodzi Sodzi-Tettey, BSc, MBChB, MPH
  - Institute for Healthcare Improvement, USA
  - Director of Project Fives Alive! & Senior Technical Director for Africa Region