

Health System Decision-Making Based on ePCT Evidence: The Collaboratory's Experience

Devon K. Check, PhD

Assistant Professor

Duke Department of Population Health Sciences

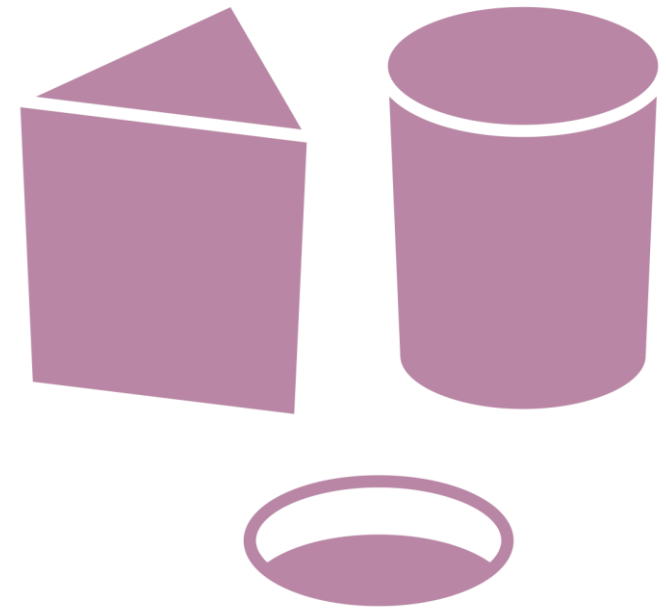


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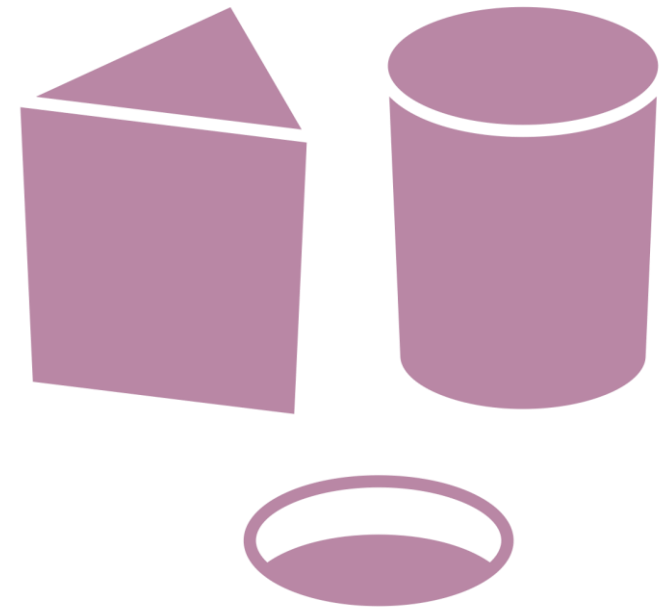
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- **Goal:** Ease implementation during trial and increase likelihood that effective interventions will be translated into practice



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- *Collaboratory experience*
 - *Effective interventions not always adopted into routine practice*
 - *Ineffective* interventions sometimes are*



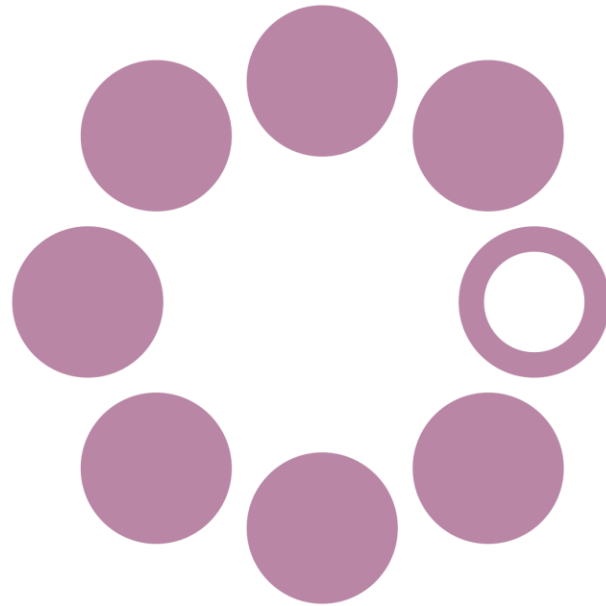
Approach

- Conducted interviews with the PIs of 6 completed Demonstration Projects:
 - How did trial results inform health system decisions to adopt (or not) study interventions?
- Identified common themes illustrated with case examples



Why might health systems decide
to adopt an intervention
that *did not* achieve its
intended effect in an ePCT?

Benefits for a subgroup

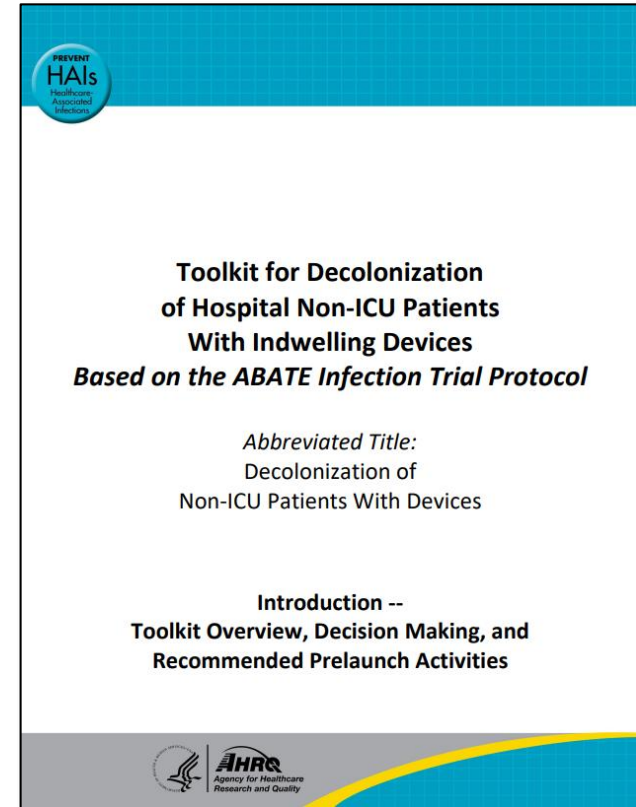


Case Example: Active Bathing to Eliminate (ABATE) Infection

- CHG bathing + nasal decolonization for MRSA carriers vs. regular bathing to prevent multidrug-resistant bacteria or bloodstream infections in non-critical care units*
- Cluster RCT in 53 hospitals affiliated with HCA healthcare
- Intervention did not significantly reduce infection in the overall non-critical care population
- In post-hoc analysis of patients with medical devices, intervention was associated with reductions in all-cause bloodstream infections and multidrug resistant organism cultures

Health system decisions based on ABATE

- HCA...
 - Discontinued protocol as a universal practice for all non-critical care patients
 - Sustained it for patients with a medical device in participating hospitals
 - Adopted it for patients with a medical device in all other HCA hospitals
- Research team partnered with AHRQ to develop and disseminate toolkit specific to patients with medical devices



Improvements in a secondary outcome



Case Example: Lumbar Imaging with Reporting of Epidemiology (LIRE)

- Evaluated the impact of including benchmark information about the prevalence of common findings in spine imaging reports on subsequent spine-related healthcare utilization
- Stepped wedge trial in 98 primary care clinics within 4 large health systems
- Intervention did not result in decreased spine-related healthcare utilization after imaging
- In pre-specified secondary analysis, intervention was associated with slightly reduced subsequent opioid prescriptions

Health system decisions based on LIRE

- Health system leaders perceived decreased opioid prescriptions to be an important benefit of the intervention and 2/4 systems chose to sustain it based in part of its potential to reduce opioid use
- Other important considerations:
 - No additional resources required to sustain intervention
 - Feedback from clinicians indicated intervention may support more effective communication with patients

Benefits for staff



Case Example: Pragmatic Trial of Video Education in Nursing Homes (PROVEN)

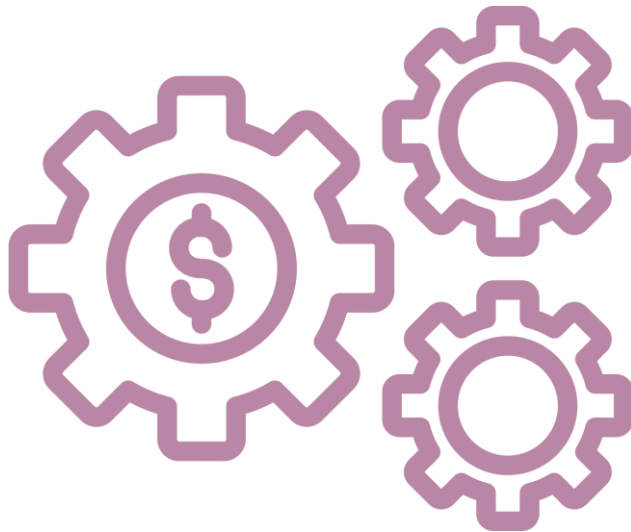
- Tested effect of an advance care planning video program on hospital transfers among long-stay nursing home residents
- Cluster RCT involving 360 nursing homes in 32 states owned by 2 for-profit corporations
- Intervention did not lead to a significant reduction in hospital transfers
- Post-hoc analysis found that among decedents, intervention was associated with a significant reduction in hospital transfers
- During trial, significant variation in intervention implementation across sites – local champions, staff's personal investment made a difference

Health system decisions based on PROVEN

- Facilities did not provide concrete support to sustain the intervention, but about a third chose to keep it, in part because staff liked it
- Other important considerations:
 - Low cost
 - No known negative consequences
 - Potential to reduce unnecessary hospital transfers at end of life (based on post-hoc analysis)

Why might health systems
decide *not to adopt* an
intervention *that did* achieve its
intended effect in an ePCT?

Cost and feasibility considerations



Case Example: Collaborative Care for Chronic Pain in Primary Care (PPACT)

- Tested impact of a CBT intervention that included pain self-management skills and yoga-based adapted movement among primary care patients on long-term opioid therapy
 - **Intervention:** Comprehensive intake evaluation, 12 weekly group sessions, and primary care provider consultation
- Cluster RCT in 3 large health systems
- Positive for primary outcome (pain) and several secondary outcomes (pain-related disability, benzodiazepine use)
- Cost-effective

Health system decisions based on PPACT

- All 3 systems adopted pain measures used in the trial
- None fully sustained intervention – upfront staffing costs, feasibility
- One system discontinued intervention entirely due to management, structural, financial changes
- Two systems have attempted to sustain versions of the intervention – less intensive, more psychoeducational vs. skills-based

What factors promote health systems' adoption of effective interventions tested in ePCTs?

Alignment with policy incentives or requirements



Case Example: Trauma Survivors Outcomes and Support (TSOS)

- Tested the effect of PTSD screening and implementation of screening procedures on PTSD symptoms
- Stepped wedge trial in 25 trauma centers
- Intervention led to significant reductions in PTSD symptoms at 6 months
- Treatment effects were greatest for patients with higher baseline PTSD risk and those treated at trauma centers with higher levels of protocol implementation

Policy changes related to TSOS

- American College of Surgeons Committee on Trauma Regulation (ACS/COT) held a policy summit at the trial's end
- Summit was proactively requested by the TSOS team – primary goal of project was to bring evidence-based recommendations to ACS/COT to facilitate guidance and policy change
- TSOS results were one element among multiple factors that catalyzed ACS/COT national requirement to identify and refer patients at high risk for psychological sequelae after injury

Factors other than the primary trial result may drive subsequent adoption or non-adoption of the intervention



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