

How Do We Generate the Right Evidence to Support Decision-Makers?

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**NIH PRAGMATIC TRIALS
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Case Example:

Active Bathing to Eliminate (ABATE) Infection Trial

- **Trial Question:** Can CHG bathing for all patients + nasal decolonization for methicillin-resistant *S. aureus* (MRSA) carriers prevent MRSA and/or bloodstream infections (BSIs) in *non-ICUs* compared to routine care?
- **Context:** MRSA and BSI matter for hospital metrics. Universal decolonization with CHG and mupirocin markedly decreased MRSA (37%) and BSI (44%) *in ICUs* in a prior trial. Widely adopted as standard-of-care in ICUs. Some hospitals began this regimen *in non-ICU patients with devices* ahead of any evidence.
- **Design:** Cluster RCT in 53 hospitals (194 non-ICUs) affiliated with HCA Healthcare
- **Results:** No effect in the overall non-ICU population, but *post-hoc analysis* in patients with devices showed large reductions in all-cause bloodstream infections (32%) and MRSA and VRE clinical cultures (37%)

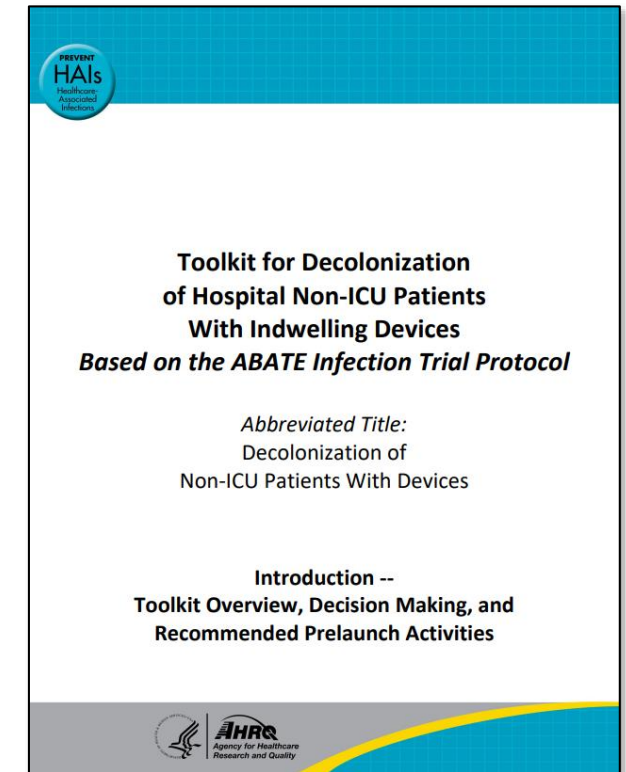
Health System and National Responses to ABATE Trial

- **Rapid HCA Healthcare Response**

- Immediate post-trial, before results, protocol discontinued
- Trial hospitals could opt to continue by local decision-making
- After results known → implemented targeted protocol in non-ICU patients with a medical device in all hospitals

- **National Response from Field**

- Validated sentiment that decolonization works in patients with devices to decrease a key hospital metric
- AHRQ funded toolkit for decolonization of patients with medical devices supported by investigative team
- Toolkit highlighted in AHRQ-funded healthcare MRSA reduction programs



Healthcare System Drivers of Decision to Implement ABATE Based on Post-hoc Analysis

- Trial results originated from HCA Hospitals
 - Makes findings more powerful, relevant
 - Clinician leaders/thought leaders personally invested in findings.
- Prior experience with implementation following HCA-based cluster randomized studies (REDUCE-MRSA trial)
- ABATE results have face validity and consistency with REDUCE-MRSA findings
- Success or failure would be measurable
- Domain of Opportunity (HAI reduction) a strategic priority; downside risk perceived as limited to resource utilization
- Investigative team partnered with AHRQ to develop and disseminate pragmatic toolkit specific to patients with medical devices