

IMPLEMENTING MULTICOMPONENT STRATEGIES TO PREVENT MDROs IN HOSPITALS AND COMMUNITY INSTITUTIONS

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INFECTION  PREVENTION IN AGING
RESEARCH GROUP



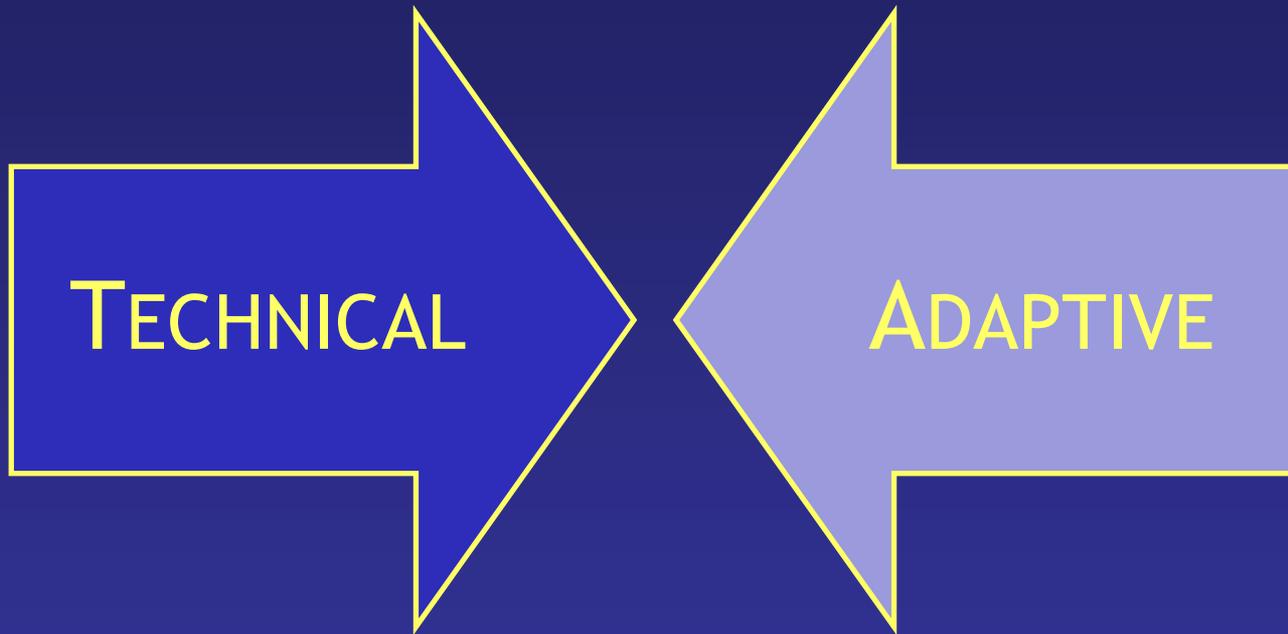


PREVENTION BUNDLE

- A bundle is a structured way of improving the processes of care and patient outcomes: a small, straightforward set of evidence-based practices — generally three to five — that, when performed collectively and reliably, have been proven to improve patient outcomes.



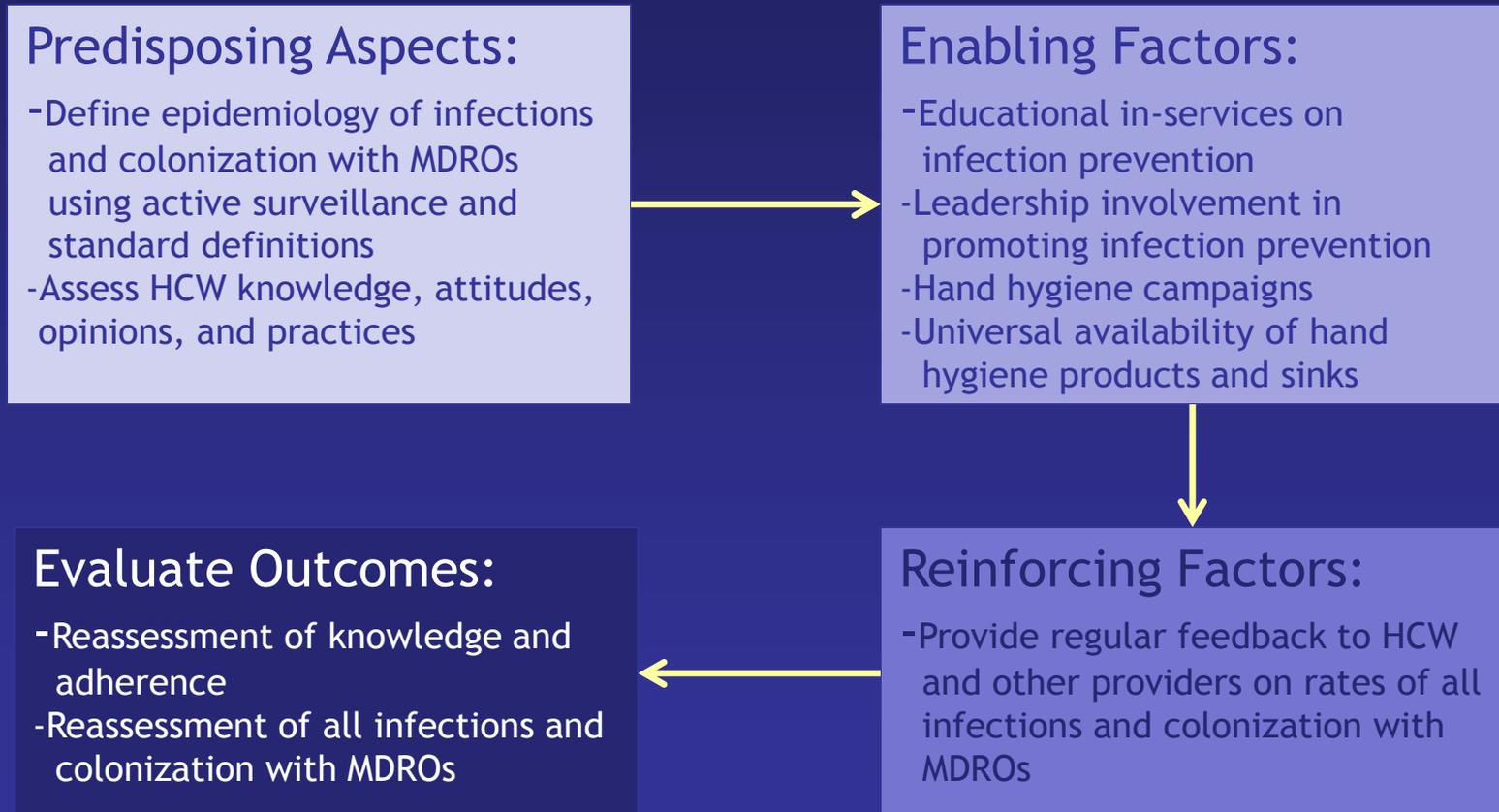
EFFECTIVE BUNDLES



- ✓ Requires consistent but routine management
- ✓ Research/current know-how is applied
- ✓ Authorities do the Work

- ✓ Requires leadership
- ✓ Require new learning/new ways
- ✓ The people w/problem do the work

PRECEDE MODEL TO CONDUCT SURVEILLANCE IN HIGH RISK GROUPS



OBJECTIVES

- TIP BUNDLE (Post-acute, long-term care)
- VA MRSA BUNDLE
 - Acute Care hospitals
 - Spinal Cord Units
 - CLCs (~ Post-acute, long-term care)
- National Collaborative Bundles
 - CLABSI (Acute Care)
 - CAUTI (Acute Care)
 - CAUTI (Long-term Care)

TIP BUNDLE: BACKGROUND

Interventions To Reduce MDROs in NHs

1. Hand hygiene
2. Barrier precautions
3. Decolonization regimens
4. Infection prevention education

Goal to design integrated infection prevention program focused on high-risk residents

Kauffman 1993, Mody 2003, Mody /Bradley 2003, Trick 2004, Wendt 2007, Baldwin 2010, Schweon 2011, Yeung 2011, Chami 2012, Ho 2012, Horner 2012, Schora 2014, Chuang 2015

TIP BUNDLE

Goal: To reduce the burden of MDROs and incident device-related infections using multimodal evidence based strategies

AGING AND INFECTIOUS DISEASES

INVITED ARTICLE

Kevin High, Section Editor

Conceptual Model for Reducing Infections and Antimicrobial Resistance in Skilled Nursing Facilities: Focusing on Residents with Indwelling Devices

Lona Mody,^{1,4} Suzanne F. Bradley,^{1,2,4} Andrzej Galecki,^{1,10} Russell N. Olmsted,^{3,5,8} James T. Fitzgerald,^{4,9} Carol A. Kauffman,^{2,6} Sanjay Saint,^{3,5,7} and Sarah L. Krein^{3,5,7}

¹Divisions of Geriatric Medicine, ²Infectious Diseases, and ³Veterans Affairs/University of Michigan Patient Safety Enhancement Program, ⁴Geriatric Research, Education and Clinical Center, ⁵Veterans Affairs Ann Arbor Health Service Research and Development Center of Excellence, and ⁶Infectious Diseases Section, Veterans Affairs Ann Arbor Healthcare System, and ⁷General Internal Medicine, University of Michigan Medical School, ⁸Infection Prevention & Control Services, Saint Joseph Mercy Health System, Ann Arbor, Michigan, ⁹Department of Medical Education, University of Michigan, and, ¹⁰Department of Biostatistics, School of Public Health, University of Michigan

WHY TARGET RESIDENTS WITH DEVICES?

- Urinary catheter: 10-15%
- Feeding tubes: 5-7%
- MDROs at multiple body sites
- Increased contact and frequency of care
- Significant gaps in healthcare worker knowledge

STUDY DESIGN

Design: Cluster-randomized trial

Facilities: 12 NHs in SE MI

Population: Residents with indwelling urinary catheters and/or feeding tubes

Study Duration: 2010-2013

Inclusion: Device > 72 hrs., Informed consent

Exclusion: Hospice care

BUNDLE

	Intervention (TIP)	Control (Usual Care)
Barrier Precautions	Preemptive gown/gloves	Standard
MDRO Surveillance	Active with feedback reports	Passive with no feedback
Infection Surveillance	Active with feedback reports	Standard, without feedback
Education	<ul style="list-style-type: none">✓ Hand hygiene promotion✓ In-services✓ Pocket cards✓ Train-the-trainer	As needed

RESIDENT PRECAUTIONS

This resident is taking part in a Research Study

Resident	Room

BEFORE ENTERING RESIDENT ROOM

Please wash your hands and wear gloves



WHEN
PROVIDING DIRECT CARE

Please wear protective gowns

AFTER LEAVING RESIDENT ROOM

Please remove gloves and wash your hands



SIGNAGE



INFECTION DEFINITION POCKET CARDS

Criteria for:

- UTIs
- Pneumonia
- Skin & Soft Tissue Infection

Distribution Strategy:

- Nurse
- Nurse Aide
- Physician
- Director of Nursing
- Administrator

Catheter-associated Urinary Tract Infection (CAUTI)

Criteria for defining CAUTI in long-term care residents:

One or more of the following:

- Fever*
- Rigors (shaking chills)
- New onset hypotension
- New onset confusion/functional decline AND increased white blood cell count*
- New costovertebral angle pain or tenderness
- New or increased suprapubic pain or tenderness
- Acute pain, tenderness, or swelling of the testes, epididymis, or prostate
- Pus around the catheter site

AND

Any of the following:

If catheter removed in last 2 calendar days:

- Voided urine culture positive for $\geq 100,000$ colony forming units (CFU)/ml of no more than 2 species of microorganisms
- In/Out catheter urine culture positive for ≥ 100 colony forming units (CFU)/ml of any number of microorganisms

If catheter in place:

- Indwelling catheter urine culture positive for $\geq 100,000$ colony forming units (CFU)/ml of any number of microorganisms

Respiratory Tract Infection Pneumonia

Criteria for defining Pneumonia in long-term care residents:

- Interpretation of chest radiograph as demonstrating pneumonia or new infiltrate

AND

One or more of the following:

- New or increased cough
- New or increased sputum production
- O₂ saturation $< 94\%$ on room air or a reduction in O₂ saturation of 3% from baseline
- New or changed lung examination abnormalities
- Pleuritic chest pain
- Respiratory rate > 25 breaths/min

AND

One or more of the following:

- Fever*
- Increased white blood cell count*
- New onset confusion (acute change in mental status) from baseline
- New onset change in functional status from baseline

Skin and Soft Tissue Infection (SSTI)

Criteria for defining SSTI in long-term care residents:

- Pus present at a wound, skin, or soft tissue site.

OR

Four or more of the following:

- Heat at the affected site
- Redness at the affected site
- Swelling at the affected site
- Tenderness or pain at the affected site
- Serous drainage at the affected site

One or more of the following:

- Fever*
- Increased white blood cell count*
- New onset confusion (acute change in mental status) from baseline
- New onset change in functional status from baseline

***Constitutional Criteria for Long-term Care Residents**

Fever

Must have one of the following:

- Single oral temperature $> 100^{\circ}\text{F}$ (37.8°C)
- Repeated oral temperature $> 99^{\circ}\text{F}$ (37.2°C) OR rectal temperature $> 99.5^{\circ}\text{F}$ (37.5°C)
- Single temperature $> 2^{\circ}\text{F}$ (1.1°C) over baseline from any site (oral, tympanic, axillary)

Increased White Blood Cell Count (Leukocytosis)

Must have one of the following:

- $> 14,000$ white blood cells (leukocytes)/mm³
- Increase in immature white blood cells (Left Shift) with $> 6\%$ bands or $> 1,500$ bands/mm³

Acute Change in Mental Status

All components must be present:

- Acute onset (a new change)
- Fluctuating course (behavior change coming and going, or changing in severity)
- Inattention (difficulty focusing attention)
- Disorganized thinking (thinking is incoherent or hard to follow)

OR

Altered level of consciousness (change is different from baseline, may be sleepy, lethargic, difficult to arouse)

Acute Functional Decline

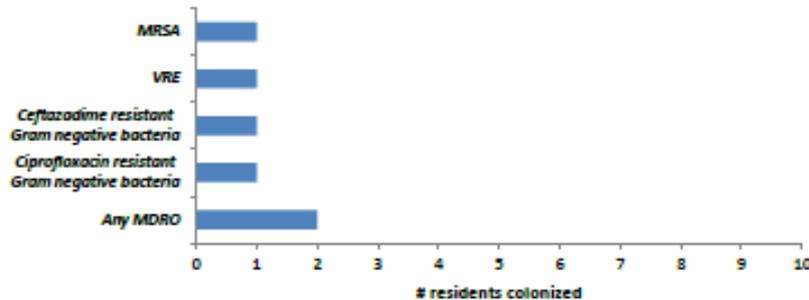
- New 3 point increase in Total activities of daily living (ADL) score from baseline (range: 0-28)
Each ADL scored from 0 (independent) to 4 (totally dependent), including: bed mobility, transfer, locomotion within facility, dressing, toilet use, personal hygiene, and eating

ABC Medical Care Facility

Month 31: January 2013

Total # Residents Cultured: 4

Figure 1. MDRO Colonization



Two of the 4 residents that were cultured this month were positive for an MDRO. One resident had MRSA and VRE, and one resident had CEFT-R GNB and CIP-R GNB.

Table 1. New MDRO Acquisitions

MDRO	#
MRSA	0
VRE	0
CEFT resistant	1
CIP resistant	0

One of the 4 residents had a newly acquired a CEFT-R GNB since the last study visit.

Table 2. New Infections

# Residents w/ infection	Total # of infections
1	1

One study resident was diagnosed with a new infection (by chart review) this month.

Please follow *Enhanced Barrier Precautions* to reduce the # of residents colonized and help prevent further infections.

Please notify the TIP study team of any new eligible residents.

Thank you for your participation in the study 😊

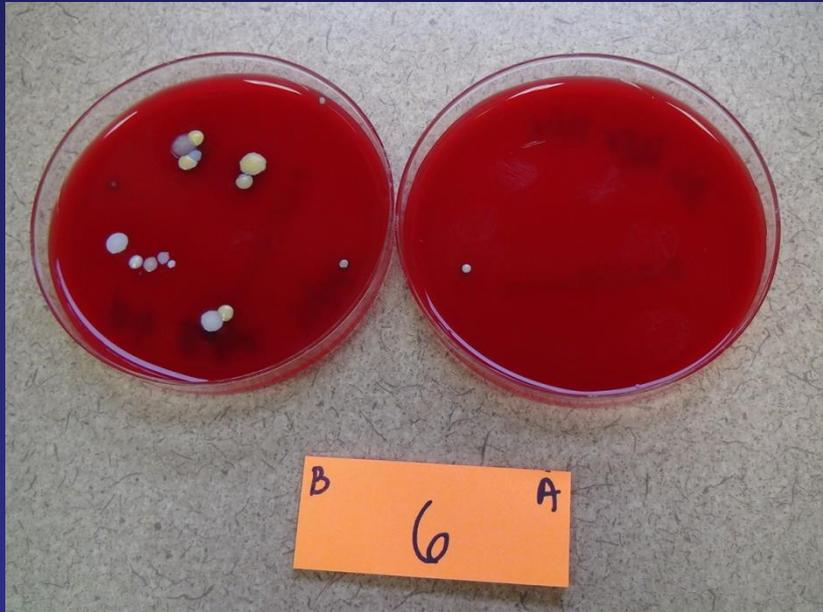
FEEDBACK

Monthly Report

- MDRO rates
- Infection rates
- Strategies

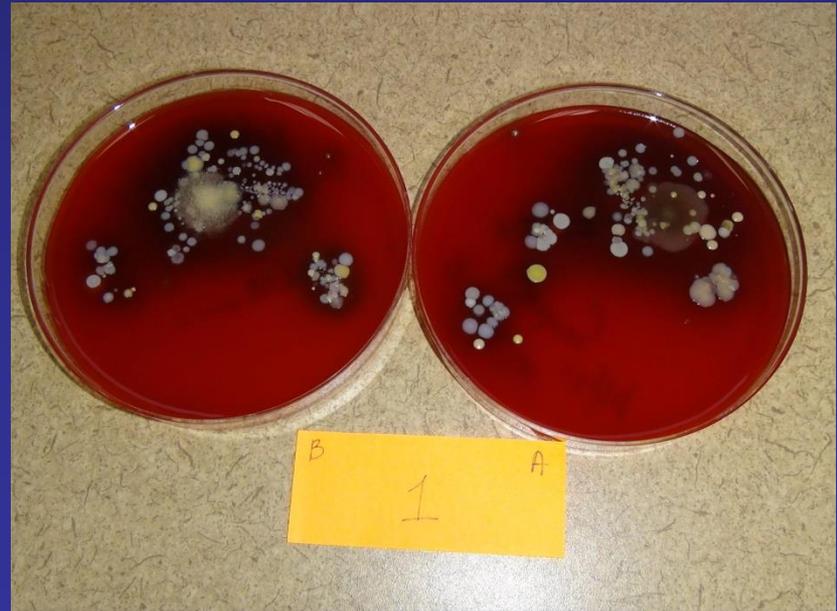
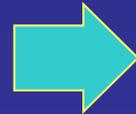
EDUCATIONAL PROGRAM

Module	Topic	Page in TIP Toolkit
1	TIP Program: Introduction to Study	17
2	Chain of Transmission of Infection	25
3	Infection Prevention Programs	36
4	Infection Control Practices: Hand Hygiene	49
5	Infection Control Practices: Standard and Transmission-based Precautions	64
6	Infection Control Practices: Indwelling Urinary Catheter Care	75
7	Infection Control Practices: Medical Asepsis and Enteral Nutrition Care	89
8	Facility-level Surveillance Practices	104
9	Recognition of Infection	110
10	Multidrug-Resistant Organisms (MDROs)	123



← GOOD TECHNIQUE

NOT-SO-GOOD
TECHNIQUE



DIDACTIC



**URINARY
CATHETER CARE**

DEMONSTRATION



INFECTION CONTROL JEOPARDY



MEASURES

- Primary outcome: MDRO
 - Across follow-up visits and anatomic sites
- Secondary outcomes:
 - Device-related urinary tract, upper respiratory tract infections
 - Clinician diagnosis + 3 days of systemic antibiotics

Original Investigation

A Targeted Infection Prevention Intervention in Nursing Home Residents With Indwelling Devices A Randomized Clinical Trial

Lona Mody, MD; Sarah L. Krein, PhD; Sanjay Saint, MD; Lillian C. Min, MD; Ana Montoya, MD;
Bonnie Lansing, LPN; Sara E. McNamara, MPH; Kathleen Symons, BA; Jay Fisch, BS; Evonne Koo, MPH;
Ruth Anne Rye, BS; Andrzej Galecki, MD, PhD; Mohammed U. Kabeto, MS; James T. Fitzgerald, PhD;
Russell N. Olmsted, MPH; Carol A. Kauffman, MD; Suzanne F. Bradley, MD

IMPORTANCE Indwelling devices (eg, urinary catheters and feeding tubes) are often used in nursing homes (NHs). Inadequate care of residents with these devices contributes to high rates of multidrug-resistant organisms (MDROs) and device-related infections in NHs.

OBJECTIVE To test whether a multimodal targeted infection program (TIP) reduces the prevalence of MDROs and incident device-related infections.

DESIGN, SETTING, AND PARTICIPANTS Randomized clinical trial at 12 community-based NHs from May 2010 to April 2013. Participants were high-risk NH residents with urinary catheters, feeding tubes, or both.

INTERVENTIONS Multimodal, including preemptive barrier precautions, active surveillance for MDROs and infections, and NH staff education.

[← Invited Commentary page 723](#)

[+ Supplemental content at
jamainternalmedicine.com](#)

PRIMARY RESULTS: MDRO PREVALENCE

	Intervention		Control		aRR*
	% Positive swabs	MDRO + isolates	% Positive swabs	MDRO + isolates	Cluster, co-variate adjusted
All MDRO	27%	1299	33%	1732	0.77 (0.62-0.94)
CIP-R	20%	738	24%	952	0.75 (0.58-0.97)
MRSA	8%	254	11%	323	0.78 (0.64-0.96)
CTZ-R	5%	185	8%	295	0.94 (0.61-1.44)
VRE	4%	122	5%	162	1.20 (0.82-1.75)

SECONDARY RESULTS: NEW MDRO ACQUISITION

	Incidence per 1000 device-days		HR*	P
	Intervention	Control		
New MRSA acquisitions (n=248, at-risk)	6.2	7.9	0.78 (0.65-0.95)	.01
New VRE acquisitions (n=258, at-risk)	1.7	2.3	0.85 (0.45-1.60)	.61
First new R-GNB acquisitions (n=211, at-risk)	5.6	6.2	0.9 (0.6-1.33)	.59

SECONDARY RESULTS: INFECTIONS

	Incidence per 1000 device-days		HR*	P	aHR**	P
	Intervention	Control				
All New CAUTI	5.9	9.2	0.49 (0.27-0.90)	0.02	0.69 (0.49-0.99)	0.045
First new CAUTI	5.2	10	0.62 (0.43-0.88)	0.008	0.54 (0.30-0.97)	0.039

PRACTICE EVALUATION

- *472 in-room observation periods (30 mins. each)*
- *112 periods without any entry; 366 periods with 658 opportunities*
- Gown use increased: 41% vs. 2%; $P < 0.001$
- In-room hand hygiene increased: 37% vs. 18%; $P = 0.03$
- Glove use, Not different: 74% vs. 78%

KNOWLEDGE EVALUATION

- HCW knowledge
 - ~ 200 in-services: 10 topics over 3 years
 - Attendance: 211-375 /topic.
 - 5-10 questions/test/topic
 - Post-test scores: higher (90% vs. 79%; $P < 0.001$)

DISCUSSION/LIMITATIONS

- Few clusters, focused in one geographic area
- Only residents with indwelling devices
- Not evaluated: MRDO transmission to roommates, environment, referring hospitals
- Clinical definition (reflects antimicrobial use)
- Impact of individual components is unknown

DISCUSSION/STRENGTHS

- Bundle components designed to integrate individual practices into routine clinical care
 - Predominantly adaptive/organizational intervention
 - Pathogen-based to risk factor-based
- Engaged NH healthcare professionals at all levels

ADAPTIVE ATTRIBUTES OF A WELL RUN INFECTION PREVENTION PROGRAM

- Leadership/ culture supportive of Infection Prevention
 - Infection Preventionist enthusiasm, commitment, training, time spent
 - Director of nursing engagement
 - ICP and DON relationship
- High hand hygiene rates to begin with
- High attendance at in-services

VA ACUTE CARE MRSA PREVENTION INITIATIVE

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Veterans Affairs Initiative to Prevent Methicillin-Resistant *Staphylococcus aureus* Infections

Rajiv Jain, M.D., Stephen M. Kralovic, M.D., M.P.H., Martin E. Evans, M.D.,
Meredith Ambrose, M.H.A., Loretta A. Simbartl, M.S., D. Scott Obrosky, M.S.,
Marta L. Render, M.D., Ron W. Freyberg, M.S., John A. Jernigan, M.D.,
Robert R. Muder, M.D., LaToya J. Miller, M.P.H., and Gary A. Roselle, M.D.

- Oct 2007 - June 2010
- 153 Veterans Affairs hospitals nationwide
- 1.9 million admissions/discharges/transfers
- 8.3 million patient-days

VA ACUTE CARE MRSA BUNDLE

Active Surveillance (Technical)

- Nasal swabs at admission, transfer to another unit, or discharge
- Creation of a MRSA prevention coordinator at each facility

Contact Precautions (Technical)

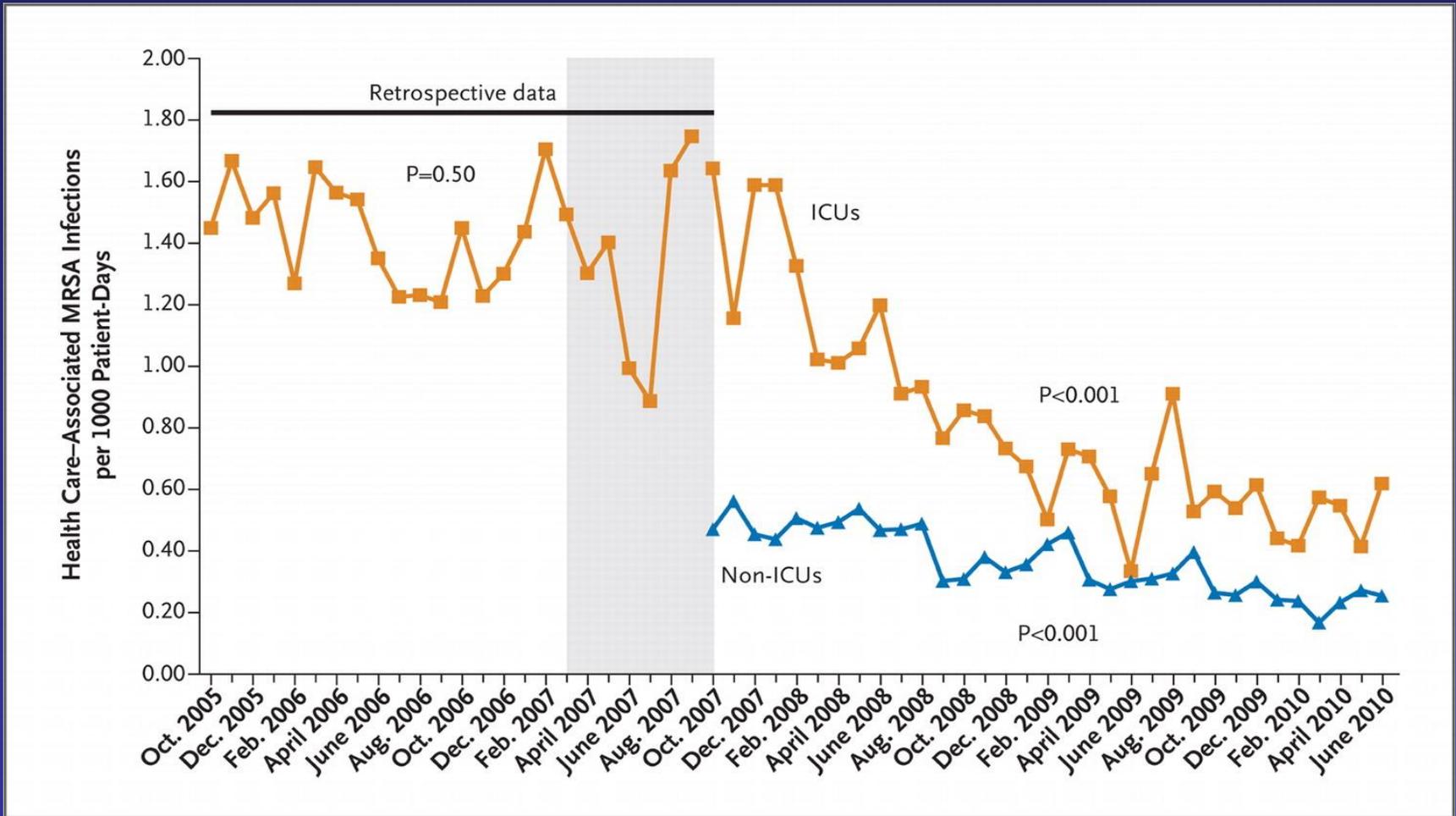
- MRSA carriers or history past 12 months

Hand Hygiene Promotion (Adaptive)

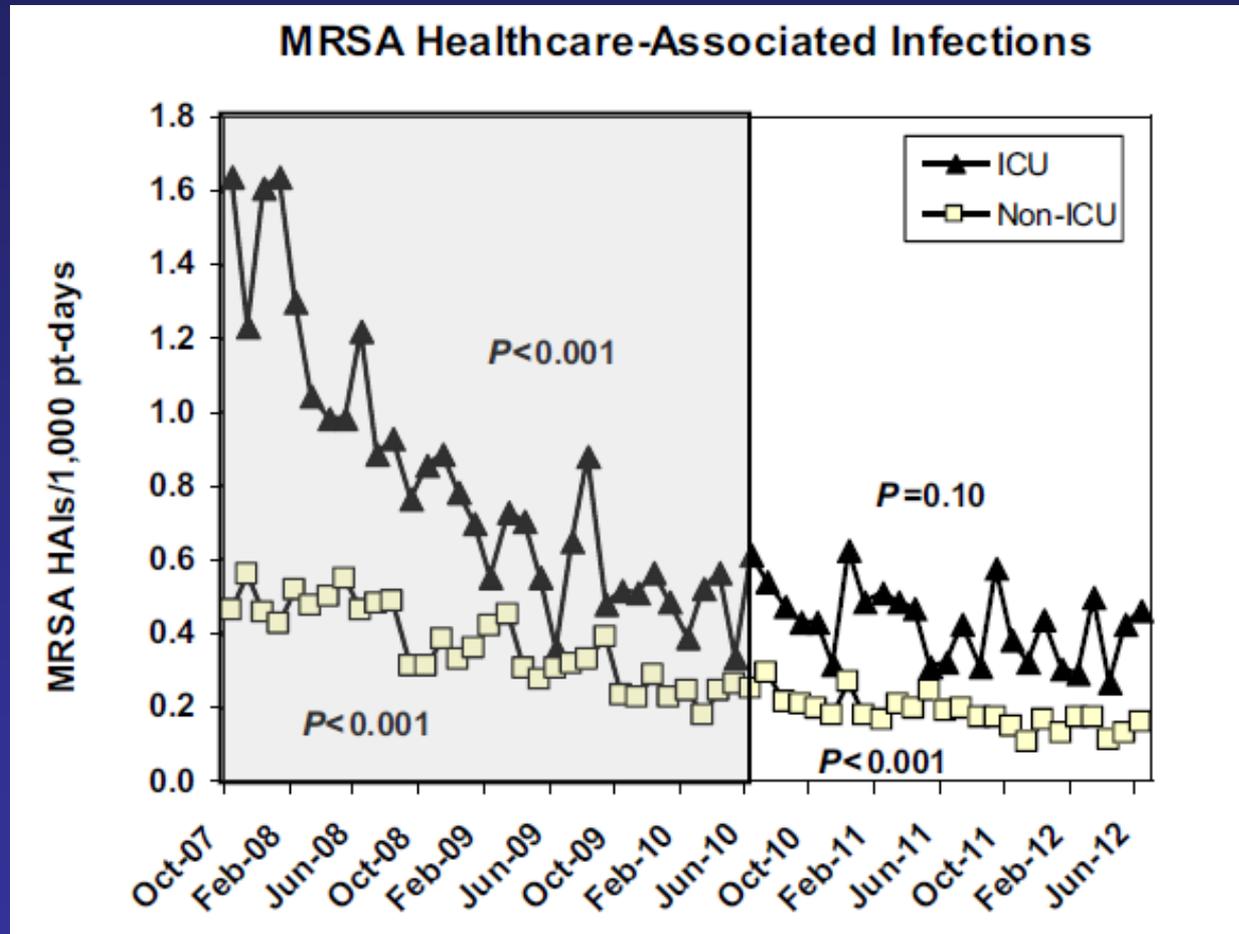
Culture Change (Adaptive)

- Positive deviance
- Goal: infection prevention is responsibility of everyone

NATIONWIDE RATES OF HAI MRSA INFECTIONS AT VA ACUTE CARE FACILITIES



CONTINUED MRSA REDUCTIONS IN VA ACUTE CARE HOSPITALS



DISCUSSION/LIMITATIONS

- QI program: decrease due to the bundle, temporal trends, or other prevention efforts?
 - Protocols on decolonization, CLABSI and VAP prevention also implemented just prior to the initial study period
- Mathematical modeling estimates only a small fraction of the MRSA rate declines could have been attributed to the screening, contact precautions, and hand hygiene (Gurieva et al, CID 2012)

DISCUSSION/STRENGTHS

Original Articles

The Impact of Healthcare-Associated Methicillin-Resistant *Staphylococcus Aureus* Infections on Post-Discharge Healthcare Costs and Utilization

Richard E. Nelson^{a1a2 c1}, Makoto Jones^{a1a2}, Chuan-Fen Liu^{a3a4}, Matthew H. Samore^{a1a2},
Martin E. Evans^{a5a6a7}, Nicholas Graves^{a8}, Bruce Lee^{a9} and Michael A. Rubin^{a1a2}

- Economic benefits beyond initial hospital stay (e.g. readmission and post-discharge pharmacy costs)

Nelson RE et al. ICHE 2015;36:534-42.

Major article

Collateral benefit of screening patients for methicillin-resistant *Staphylococcus aureus* at hospital admission: Isolation of patients with multidrug-resistant gram-negative bacteria



Makoto Jones MD^{a,b}, Christopher Nielson MD^{c,d}, Kalpana Gupta MD, MPH^{e,f},
Karim Khader PhD^b, Martin Evans MD^{g,h,i,*}

- Serendipitous use of contact precautions for MDR GNB colonized patients

Jones M et al. AJIC 2015;43:31-4

SIMILAR VA MRSA BUNDLE: 22 SPINAL CORD UNITS

Active Surveillance (Technical)

- Nasal swabs at admission, transfer to another unit, or discharge
- Creation of a MRSA prevention coordinator at each facility

Contact Precautions (Technical)

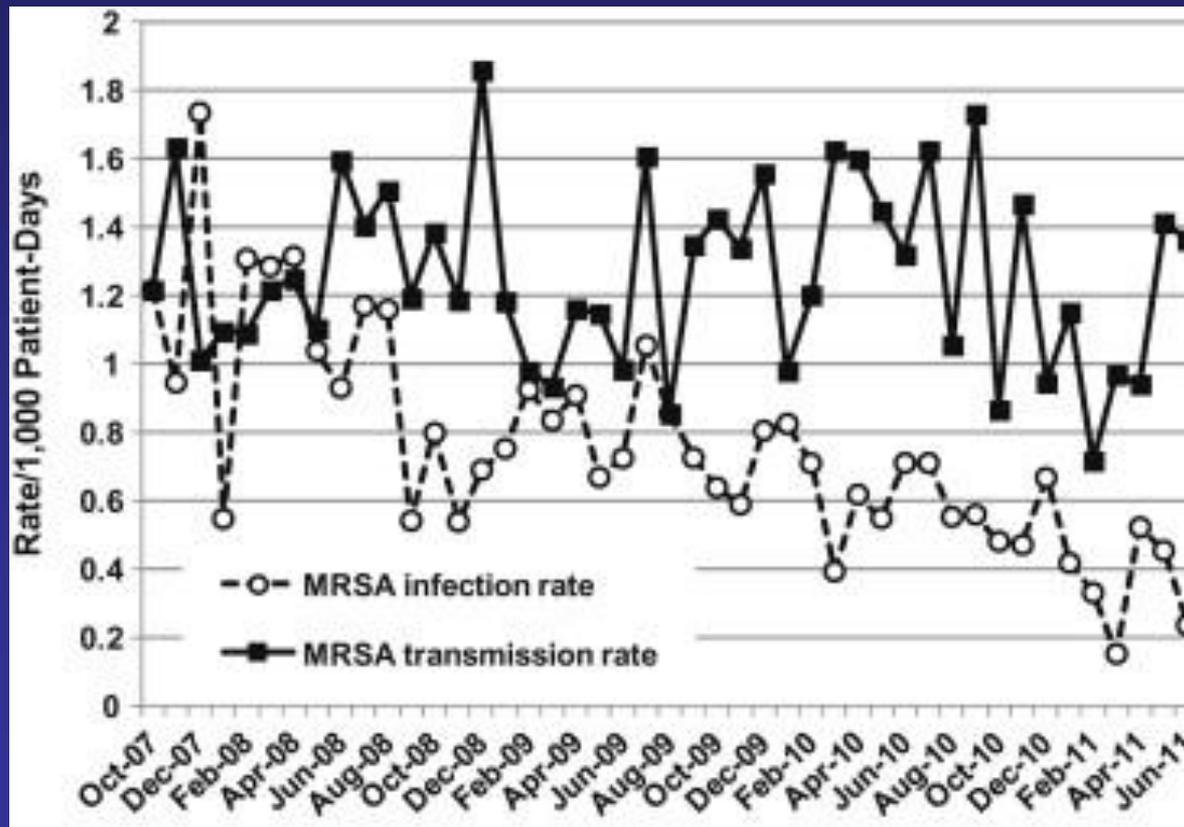
- MRSA carriers or history past 12 months

Hand Hygiene Promotion (Adaptive)

Culture Change (Adaptive)

- Positive deviance
- Goal: infection prevention is responsibility of everyone

MRSA INFECTION & TRANSMISSION RATES IN VA SPINAL CORD UNITS



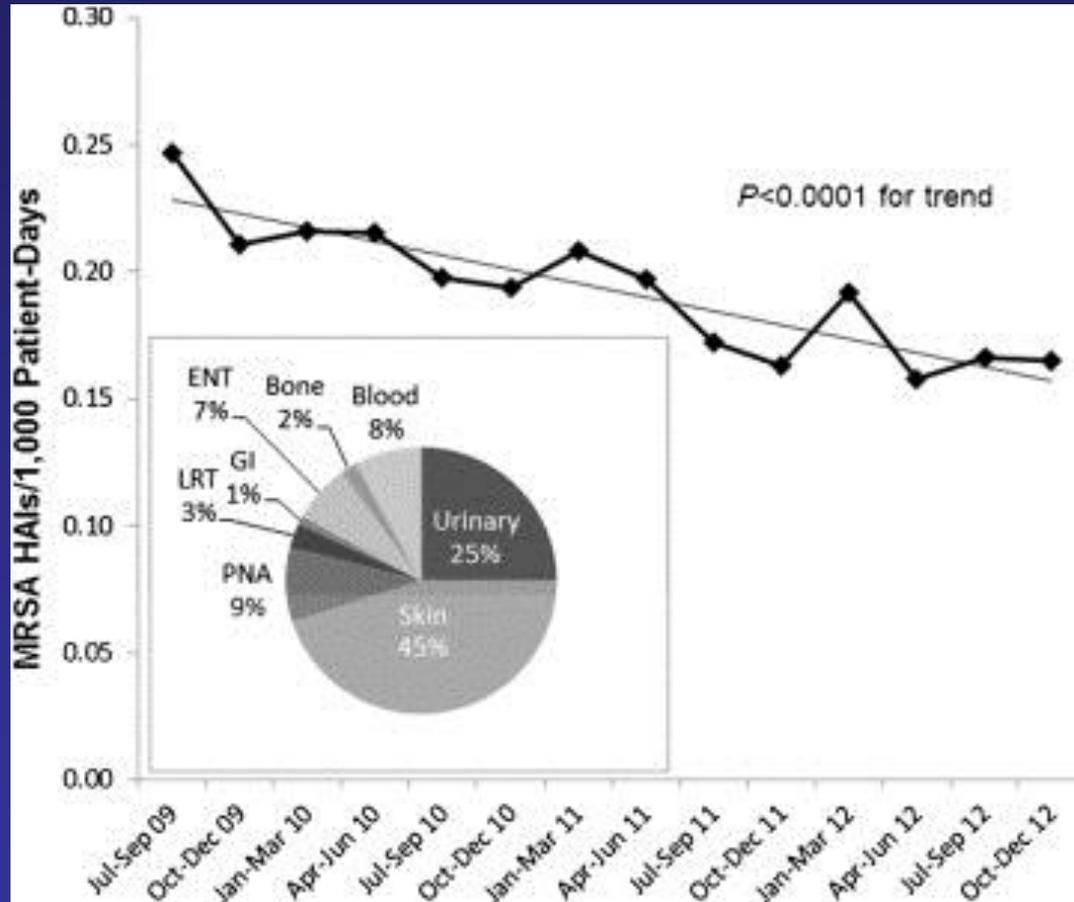
ADAPTIVE LESSONS OF MRSA BUNDLE IN VA SPINAL CORD UNITS

- Facilitators:
 - enhanced leadership support and provider education
 - focused guideline dissemination to reach SCI/D providers
 - strong perceived evidence of the guidelines
- Barriers:
 - lack of awareness of the guidelines (36% of those surveyed)
 - challenges in cohorting/isolating MRSA-positive patients and following contact precautions

MRSA BUNDLE IN VA CLCs (POST-ACUTE & LONG-TERM CARE)

- Implemented Jan 2009
- 133 CLCs
- 12.9 million resident-days (Jan 09-Dec 12)
- Bundle similar to Acute Care except for modified contact precautions used residents considered “low-risk” for MRSA transmission
 - private room or cohort; gown & gloves direct care; could leave room if practiced hand hygiene, clean clothes, wounds/body fluids contained

QUARTERLY MRSA HAIs PER 1000 RESIDENT-DAYS IN VA CLCs



**MULTICOMPONENT MULTISITE
COLLABORATIVES ON DEVICE-RELATED
INFECTIONS**

ON THE CUSP: STOP BSI ACUTE CARE BUNDLE

Critical Care Medicine:

August 2010 - Volume 38 - Issue - pp S292-S298

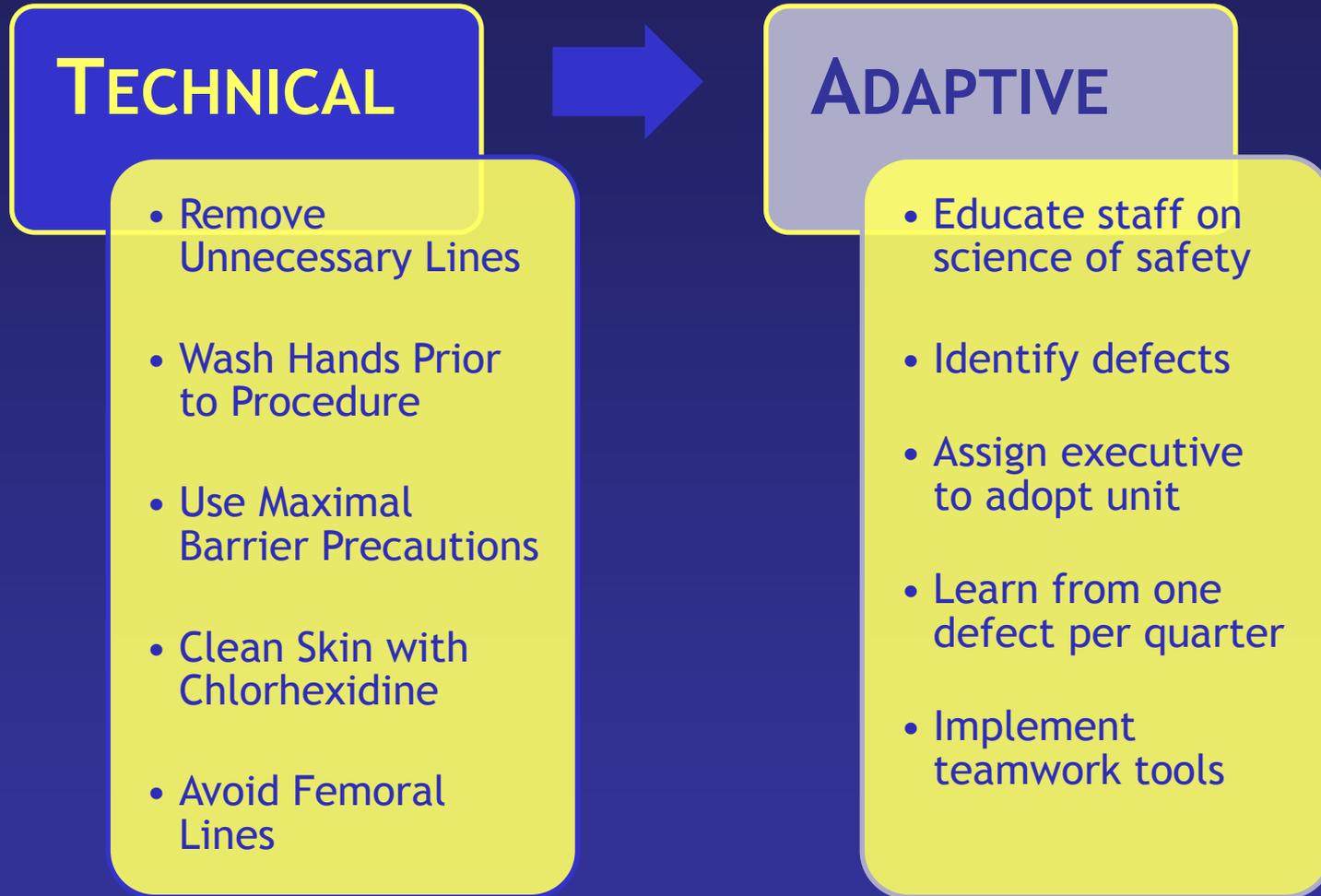
doi: 10.1097/CCM.0b013e3181e6a165

Psychology, Process Engineering, and Modification of Human Behaviors

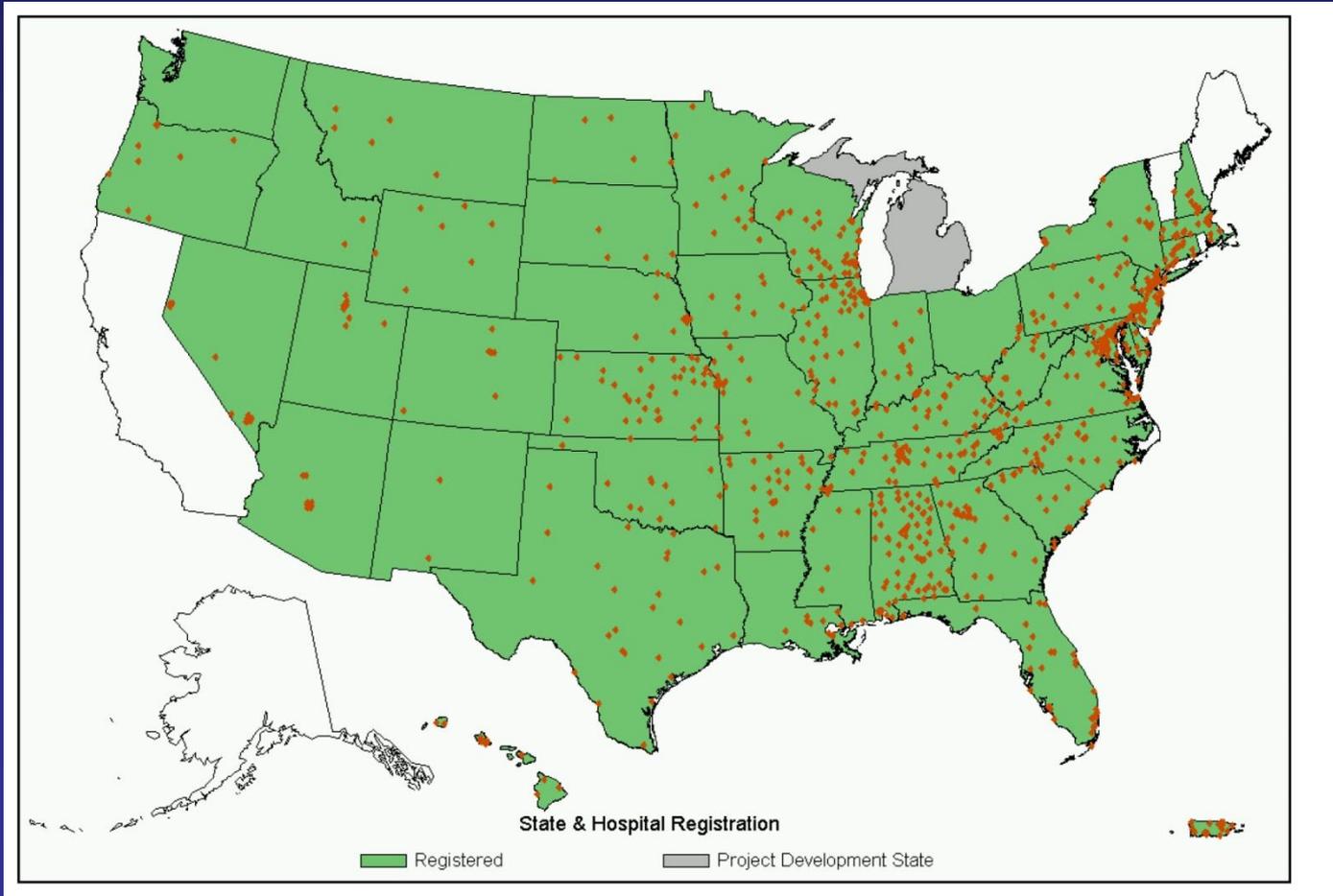
Using evidence, rigorous measurement, and collaboration to eliminate central catheter-associated bloodstream infections

Sawyer, Melinda MSN, RN, PCCN; Weeks, Kristina BA, BS, MHS; Goeschel, Christine A. MPA, MPS, ScD, RN; Thompson, David A. DNSc, MS, RN; Berenholtz, Sean M. MD, MHS; Marsteller, Jill A. PhD, MPP; Lubomski, Lisa H. PhD; Cosgrove, Sara E. MD, MS; Winters, Bradford D. PhD, MD; Murphy, David J. MD; Bauer, Laura C. MPH; Duval-Arnould, Jordan MPH; Pham, Julius C. MD, PhD; Colantuoni, Elizabeth PhD; Pronovost, Peter J. MD, PhD

THE CUSP/CLABSI INTERVENTION



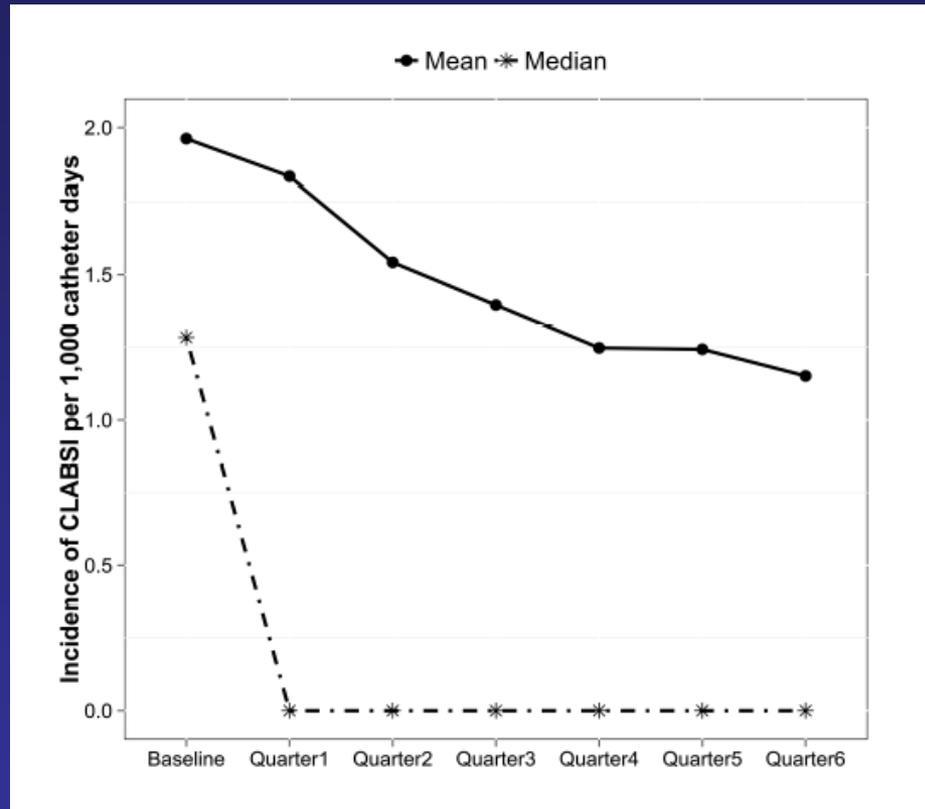
PROJECT SPREAD



N = 986 hospitals, 1564 ICUs

<http://www.ahrq.gov/sites/default/files/publications/files/clabsifinal.pdf>

RESULTS: CLABSI RATES



Baseline = 1.96 CLABSI/1000 catheter days

Post-implementation = 1.15 CLABSI/1000 catheter days

Adjusted IRR (95% CI) = 0.57 (0.50-0.65)

n=1071 ICUs

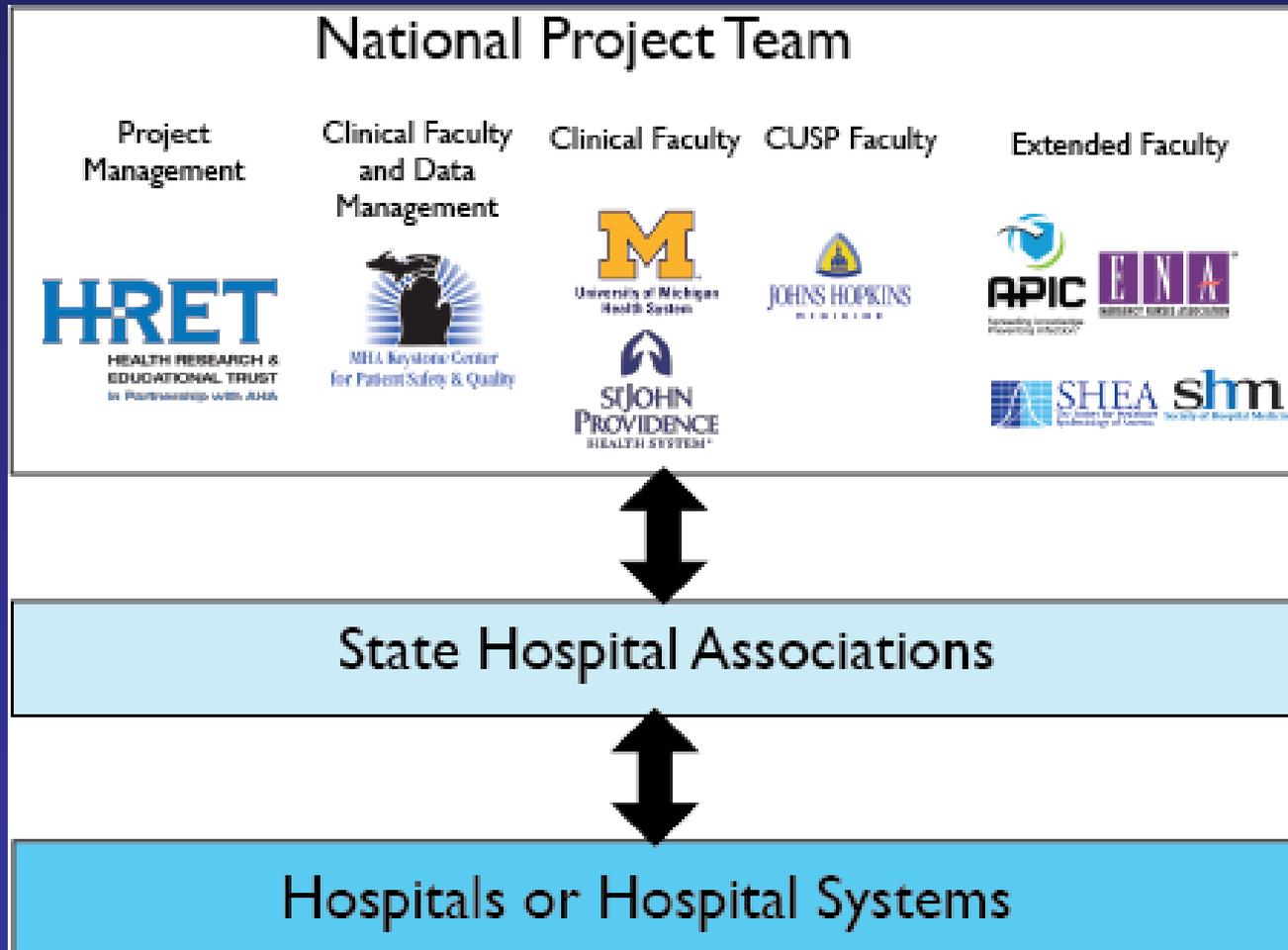
COST-EFFECTIVENESS OF CLABSI PROGRAM

- Comparing program vs. non-program ICUs, the program reduces bloodstream infections and deaths at no additional cost
- Sensitivity analysis demonstrates an 80% probability that the program reduces bloodstream infections and the infections' economic costs to hospitals

LESSONS LEARNED FROM ON THE CUSP: STOP BSI

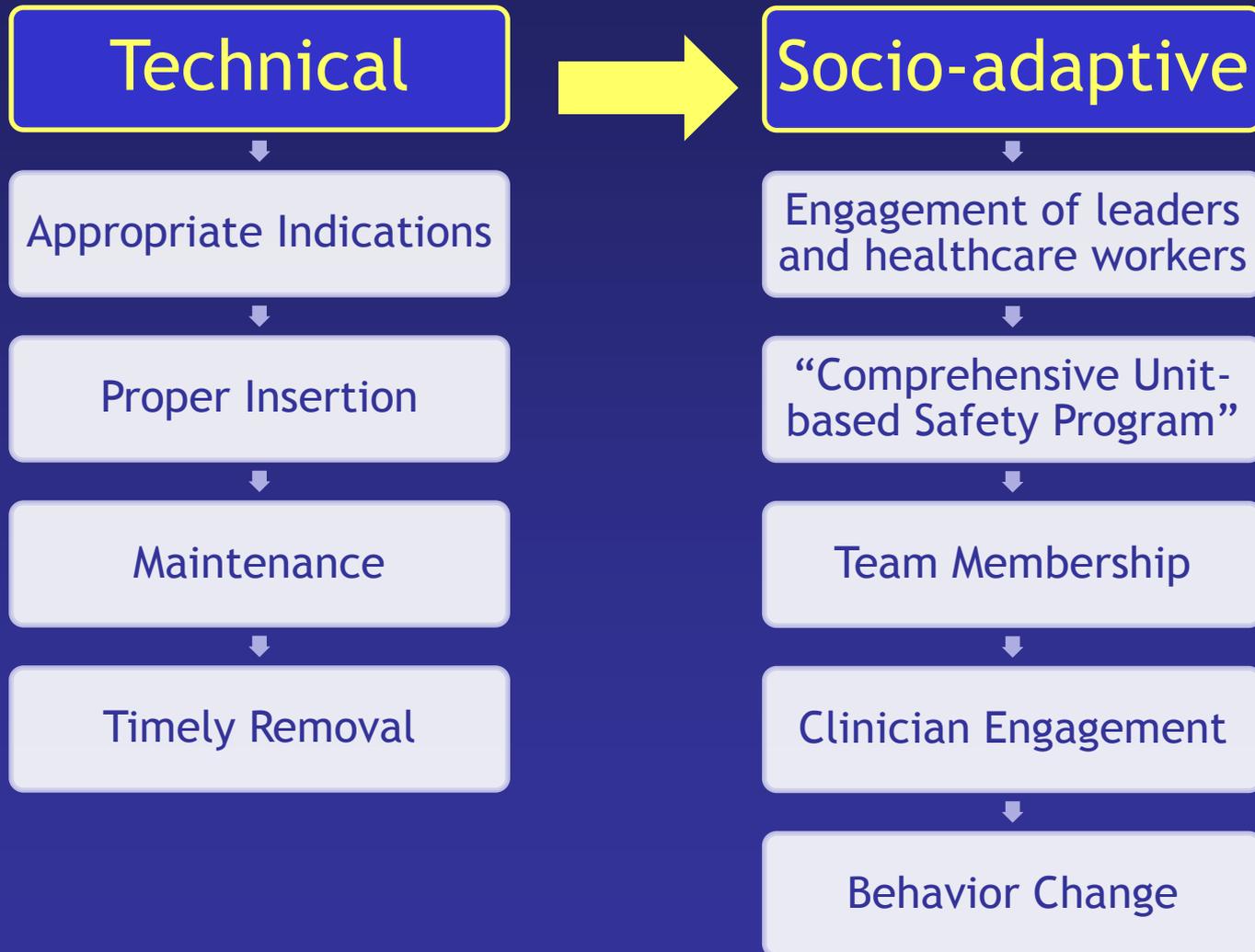
- Need a ripe translational framework
- Need a clear chain of accountability
- Program should align the work of all stakeholders around a common standard measure
- Flexibility to adapt to local culture
- Need an equal focus on technical and adaptive work
- Program should start with the goal and work backwards, pulling as many levers as possible
- Data should facilitate learning rather than blaming

ON THE CUSP: STOP CAUTI ACUTE CARE IMPLEMENTATION STRATEGY, 2011-2015



ON THE CUSP: STOP CAUTI

ACUTE CARE IMPLEMENTATION BUNDLE



AHRQ CAUTI LTC COLLABORATIVE: INFORMED BY...

- Several key leaders and researchers
- Systematic review of CAUTI reduction practices in LTC
- TIP: patient-oriented study
- AHRQ funded: CAUTI-Acute Care National Collaborative



AHRQ Safety Program for Long-term Care: HAIs/CAUTI

QUALITY IMPROVEMENT

INVITED ARTICLE

Trish M. Perl, Section Editor

Enhancing Resident Safety by Preventing Healthcare-Associated Infection: A National Initiative to Reduce Catheter-Associated Urinary Tract Infections in Nursing Homes

Lona Mody,^{1,2} Jennifer Meddings,^{3,4} Barbara S. Edson,⁵ Sara E. McNamara,² Barbara W. Trautner,^{6,7} Nimalie D. Stone,⁸
Sarah L. Krein,^{3,9} and Sanjay Saint^{3,9,10}

Program Goals:

- Reduce CAUTI
- Enhance knowledge
- Improve safety culture

CAUTI-LTC: IMPLEMENTATION BUNDLE

Technical

Catheter removal

Aseptic Insertion,
enhanced barrier
precautions

Use regular
assessments,
feedback

Trainning for
Catheter Care,
maintenance

Incontinence Care
Planning and
Hydration Practices

Socio-adaptive

Team formation to
plan and implement
program

Excellent
communication skills
learned

Assess what's
working and plan to
expand

Meet monthly to
learn together

Sustain efforts and
celebrate success

Infections are a leading cause of illness and death in nursing homes.

These infections include catheter-associated urinary tract infections (CAUTIs).

REMEMBER C.A.U.T.I. TO PREVENT CAUTI

C

Catheter Removal

Think about catheters in any of your residents. Are the catheters really necessary?

Remove the catheter if there is no good indication for it. (See below.)

Every resident deserves a chance to be catheter-free and infection-free.

A

Aseptic Insertion

Only trained personnel should insert catheters.

Use hand hygiene, and insert using aseptic technique.

Use the smallest catheter size that will work for the resident.

Avoid contamination of the catheter.

Use catheter securement devices.

U

Use Regular Assessments

Insert new urinary catheters only when there is a good indication.

Consider alternatives to using a urinary catheter.

Use a bladder ultrasound to guide management.

Implement a process to see whether residents need catheters.

T

Training for Catheter Care

Train staff, resident, AND family.

Maintain a closed drainage system, and maintain unobstructed urine flow.

Use routine hygiene. Do not clean the periurethral area with antiseptics.

Routine catheter changes, urinalysis, and cultures are not required.

I

Incontinence Care Planning

Consider alternatives to using a urinary catheter when developing individual resident care plans and behavioral interventions.

Consider timed and prompted voiding and use of a voiding diary.

Remember:
No catheter means no CAUTI!

Appropriate Indications for a Urinary Catheter

To assist healing of stage III or stage IV perineal and sacral wounds in incontinent residents



Chronic and acute urinary retention or obstruction

Hospice or palliative care associated with intractable pain



Would you like to know more? Participation in the AHRQ Safety Program for Long-Term Care: CAUTI gives you access to informative resources and events such as educational webinars and state-level training sessions that will help you to provide safer care for your residents. Talk to the project lead in your facility, or visit www.ltcsafety.org (login and password: ltcsafety).

The AHRQ Safety Program for Long-Term Care: CAUTI

Funded by the Agency for Healthcare Research and Quality

Culture consists of values, attitudes, and beliefs that can have an impact on resident safety, care outcomes, and staff satisfaction.

Culture influences how change can occur.

T. E. A. M. S.

REMEMBER T. E. A. M. S. TO IMPROVE CULTURE

T

Team Formation

Your first step in implementing the AHRQ Safety Program for Long-Term Care is to identify and form a team that will plan, champion, and implement the program. Start by asking who might be your people to recruit.



The most effective teams are diverse. Make sure your team includes people of differing perspectives and roles. A team should include:

- A well-respected formal or informal leader
- A member of administrative staff
- Nursing leader or champion
- Medical director or physician champion
- Nursing assistant
- Staff educator
- Quality improvement leader
- Resident representative
- Resident and family representatives
- Rehabilitation and social services

The AHRQ Safety Program for Long-Term Care provides educational guidance on assembling a team.






E

Excellent Communication



High functioning teams have great communication.



Team members, employees, residents, and family members should be encouraged to speak up.



Communication should be effective. Communication is transfer and shift changes is especially critical.

The AHRQ Safety Program for Long-Term Care provides:

- How to identify potential communication gaps
- Useful communication tools and strategies
- Examples of effective communication
- Open forums to take play, talk through difficult conversations, and share ideas for solutions to common barriers

A

Assess What's Working



Evaluate the current culture using the AHRQ Safety Survey on Patient Safety Culture and the Staff Safety Assessment.



Try using communication tools, and use strategies to what works well and what doesn't. Assessing and creating what we learn is what will change culture.



Monitor and track project data to encourage, inspire, and motivate the facility staff, residents, and family members.

Participate actively in activities and meetings of the AHRQ Safety Program for Long-Term Care, where you can learn from peers and national experts.

Reassess your culture annually. Are the intended changes happening?

M

Meet Monthly



Evaluating culture is an ongoing process. Meet regularly to discuss team successes and barriers and to review and share results. Review reports of resident safety issues, incidents, and near misses.

Don't create a new meeting if you already have an existing quality or safety committee doing similar work, and to be approved.



Identify ways to engage the resident champion in your shared actions.



Identify a safety issue for your team to tackle, and track it until either team identifies root causes of that issue.



Get a senior member to remain identified barriers to improved processes.

Consider attending the AHRQ Safety Program for Long-Term Care webinars together as a team, and talk about each topic and track your own webinars you can apply in your facility.



Identify someone to lead programs.

Identify someone to represent resident and family voice.



For the team: Create a team charter to formalize the mission and stay on track with the project.

S

Sustain Efforts



Make plans for sustaining your program over time.



Start small. Start by tackling the priority of the project first so you can build momentum.



Include resident safety needs and competency checks in completion of new staff. Include annual culture surveys and participate in annual staff competency checks.



Integrate delivery of the project in your day-to-day work. Include the following in ongoing activities and procedures:

- Education in OCA, resident care, and other programs
- In-carrier practices
- Forums for culture-related customer concerns
- Education of residents and families about risks associated with caregiver use



Monitor team progress. Share resident safety program goals with staff, physicians, food services, residents, and family members. If there is a change in program data in all facility leadership and resident council meeting agendas.



Celebrate team's success.

The AHRQ Safety Program for Long-Term Care: CAUTI

Funded by the Agency for Healthcare Research and Quality

Source:
 Culture Assessment Process: Professionals in Resident Safety. AHRQ Safety Program for Long-Term Care. CAUTI. 2014.
 The AHRQ Health Agency for Healthcare Research and Quality. 2014. Available at www.ahrq.gov/healthcare.
 Anderson, J.A., et al. "Social interaction strategies and reported for better care in nursing homes: a multiple case study." BMC Health Services Research 2014, 14:244.
 Chang, R.H., et al. "Safety Culture: A Change in Climate?" Homecare Practice and Improvement Society Research Proceedings. 2005.

AHRQ SAFETY PROGRAM FOR LONG-TERM CARE: HAIs/CAUTI

National Project Team:

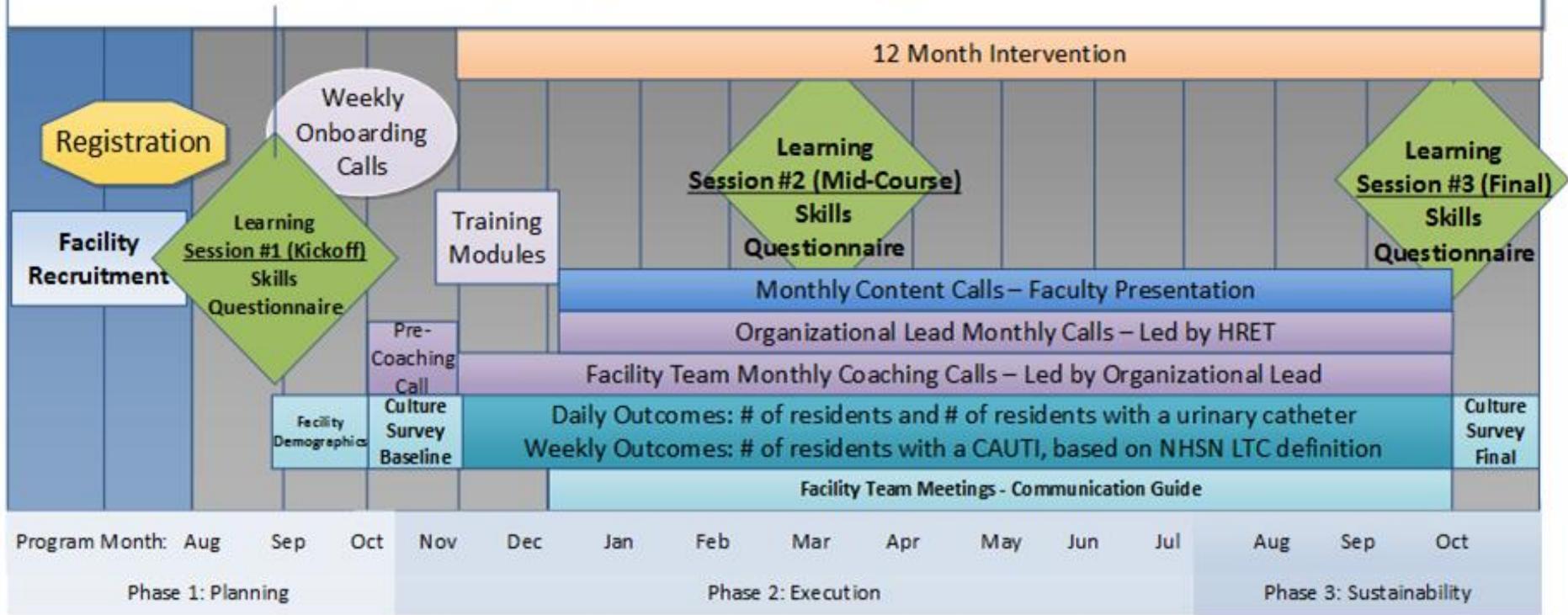


OPERATIONALIZING OUR INTERVENTION

- **Educational events**
 - 4 Onboarding Webinars
 - 4 Training Module Webinars
 - Monthly Content Webinars
 - Monthly Coaching Calls
 - 3 Learning Sessions (in-person or web-based)
 - Site visits
- **Materials:** Facility Implementation Guide and LTC Toolkit
- **Monthly Coaching support:** Project implementation experts and faculty on web conferences
- **Data:** Secure, online data collection and reporting of clinical and cultural outcome measures, user's manual

ACTIVITY & DATA COLLECTION SCHEDULE

AHRQ Safety Program for Long-Term Care: CAUTI



OUTCOME MEASURES

- Facility collects the following outcome measures
 - Daily # residents
 - Daily # residents with an indwelling catheter
 - # residents with a CAUTI (per NHSN definition)
 - Monthly # of urine cultures ordered
- Enters the data [at a minimum] monthly
- Skills questionnaire
- Facility culture assessment
- Results coming soon!: Project period, 2013-2016

CHALLENGES TO IMPLEMENTING BUNDLES

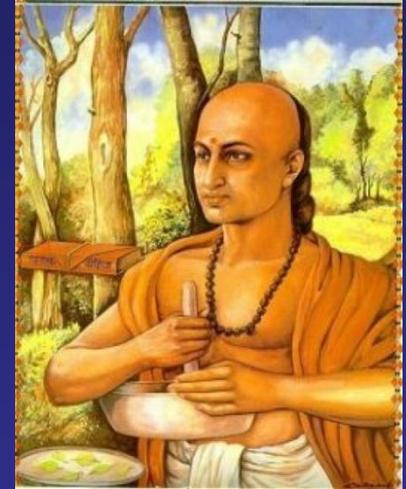
- Prioritization, adding to workload and workflow
- Lack of Champions
- Tailoring a national collaborative to individual facilities
- Variability in commitment from leadership
- Poor communication

APPROACHES TO ADAPTIVE CHALLENGES

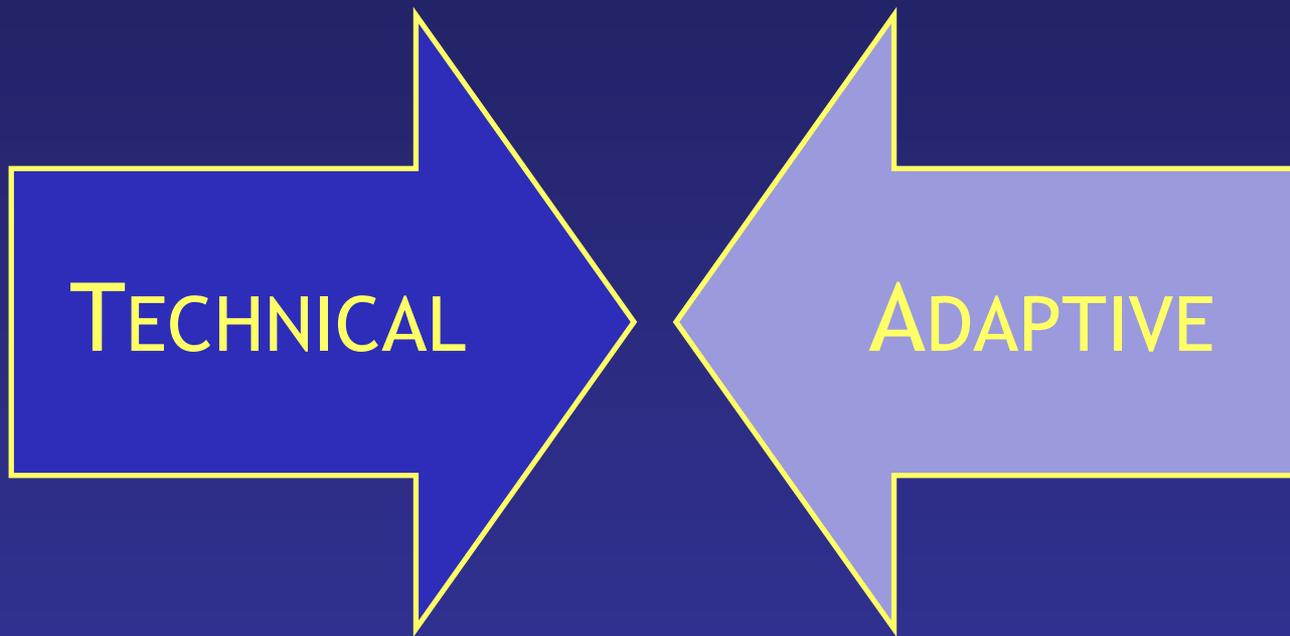
- Be unwavering in your goal and invite everyone to help you reach it
- Recognize the real and perceived losses
- Communicate the need for change
- Identify “what’s in it for me”
- Seek to understand rather than judge
- Monitor the organizational pressure

BRINGING ABOUT A CHANGE: CHANAKYA WAY (370-283 BCE)

- 'Sham': reasoning, 'evidence-based'
- 'Dam': reward, 'carrot', 'incentives'
- 'Dand': 'stick', discipline, 'F tags' or 'citations'
- 'Bhed': differentiating good from bad, comparing one to another, 'star ratings'



SUMMARY



- ✓ Easier
- ✓ Promotes consistency
- ✓ Use of components with strong clinical/research evidence of efficacy

- ✓ Difficult
- ✓ Engages established leaders
- ✓ Opportunities for new leaders to emerge
- ✓ Promotes new learning/new ways
- ✓ Establishes accountability (who, when, where)