



Management Practices to Support Infection Prevention

Sarah R. MacEwan, PhD

Assistant Professor, Division of General Internal Medicine
College of Medicine, The Ohio State University

Hosted by Martin Kiernan
martin@webbertraining.com





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Agenda

Background

The SMART Project

Practice #1: Communicating HAI Data

Practice #2: HAI Review & Feedback

Practice #3: Speaking Up

Practice #4: Rewards & Recognition

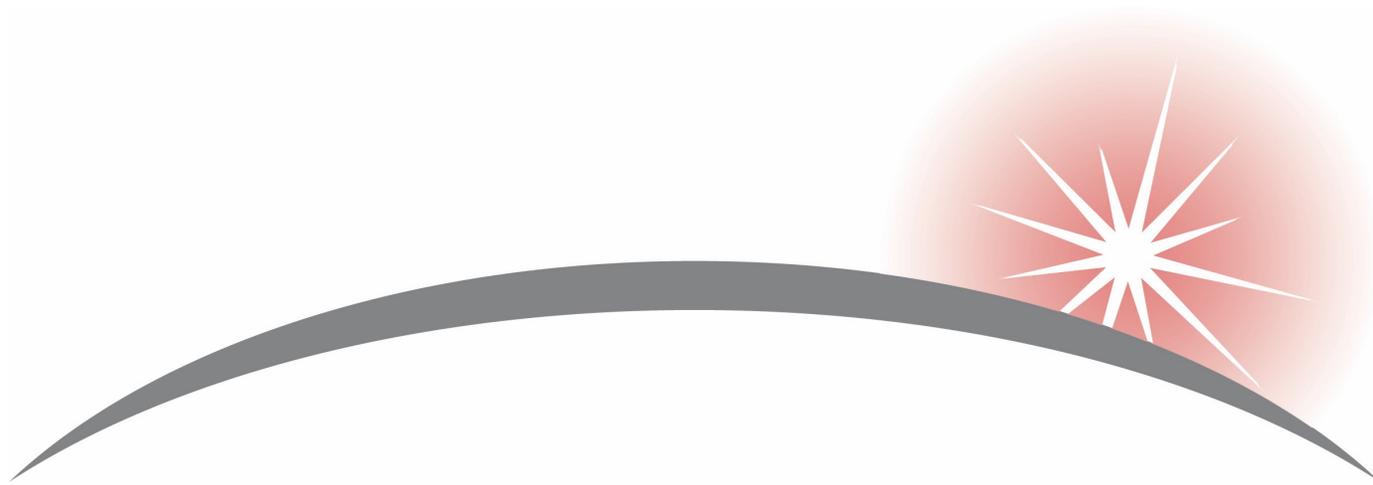
Practice #5: Patient & Family Education

Using a Web-Based Toolkit for HAI Prevention





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Research Team Members

Principal Investigator:

Ann Scheck McAlearney, ScD, MS

Associate Dean for Health Services Research

Executive Director of the [Center for the Advancement of Team Science, Analytics, and Systems Thinking in Health Services and Implementation Science Research \(CATALYST\)](#)

Distinguished Professor in the Department of Family and Community Medicine



Co-Investigators:

- Naleef Fareed, PhD, MBA
- Megan Gregory, PhD
- Courtney Hebert, MD, MS
- Jennifer Hefner, PhD, MPH
- Timothy Huerta, PhD, MS
- Susan Moffatt-Bruce, MD, PhD, MBA
- Cynthia Sieck, PhD, MPH
- Daniel Walker, PhD, MPH

Team Members:

- Eliza Beal, MD, MS
- John Oliver DeLancey, MD, MPH
- Matthew DePuccio, PhD, MS
- Alice Gaughan, MS
- Tyler Griesenbrock, BA
- Sarah MacEwan, PhD
- Amanda Robinson, MS
- Laura Rush, DVM, PhD
- Lindsey Sova, MPH
- Robert Strouse, MFA
- Jaclyn Volney, MPH



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Searching for Management Approaches to Reduce HAI Transmission

SMART began with the observation that ...

Two types of healthcare-associated infections (HAIs) - central-line associated bloodstream infections (CLABSIs) and catheter-associated urinary tract infections (CAUTIs) - are considered to be among the most preventable types of HAIs. Although some hospitals have managed to virtually eliminate these HAIs in their intensive care units, others continue to struggle attaining zero infections.

As a result, SMART is intended to identify the management practices associated with better performance at reducing and preventing HAIs. SMART seeks to open the "black box" of management practices to better understand the specific strategies that can influence HAI prevention. Through our national research we identified the following strategies that can contribute to the successful reduction of HAIs:

- Goal Setting and Management Support
- Strategic Alignment/Communication and Information Sharing
- Systematic Education
- Interprofessional Collaboration
- Meaningful Use of Data
- Recognition for Success

You may reach the SMART Team by email at smart@osumc.edu.

If you would like to be notified of updates to the Toolkit, please provide your email address [here](#).



Evidence supporting HAI prevention

- Specific Interventions for Intensive Care Units (ICU)
 - Protocols for device insertion and maintenance
 - Process standardization
 - Checklists
 - Provider education
- Change in practice culture
 - Role of bedside clinicians
 - Communication and collaboration
 - Empowering nurses to speak up and “stop the line”

But...

- Success has not been uniform
 - Some hospitals face challenges achieving results
 - Others challenged to sustain gains
- Research regarding factors that impact organizations' success at adopting evidence-based practices has been limited...



...Preliminary Research Efforts Revealed Role of Leadership, Goal Setting, and Speaking Up to Support Infection Prevention

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What is SMART?

- **SMART:**

- 5-year project funded by the Agency for Health Research and Quality (AHRQ)
- Goal has been to address healthcare-associated infection (HAI) prevention

- **Background:**

- Emerged from prior research on prevention and reduction of central line-associated blood stream infections in U.S. hospitals
- Found little management guidance to accompany clinical practice “bundles”

- **Study Aims:**

- Examining how management factors contribute to HAI reduction success
- Creating SMART Toolkit accessible on website



Methodology

Part 1: Site Visits

- 18 site visits to U.S. hospitals
 - Participation based on geography, size, teaching status, ownership status
- Onsite interviews with key informants representing different areas involved in infection prevention
- Site visit interview questions:
 - Topics included management practice areas such as communication strategies, data sharing related to HAI prevention, rewards and recognition for preventing infections, etc.



Methodology (continued)

Part 2: Findings Synthesis & Dissemination

- Management Toolkit Development
 - Informed by interviews across the U.S.
 - Will enable hospitals to answer questions:
 - *How is my hospital doing?* (in both absolute and relative terms)
 - *What can I do to impact my outcomes?*



Hospital Study Site Characteristics

Site	Region	Size [†]	Teaching hospital	CAUTI performance [‡]	CLABSI performance [‡]	Key informants			
						Administrative leaders	Clinical leaders	Infection prevention & quality	Frontline staff
1	Midwest	Small	Yes	Average	Average	2	3	4	11
2	Midwest	Large	Yes	Worse	Better	2	11	8	11
3	Midwest	Small	No	Average	Average	1	5	4	9
4	Northeast	Large	Yes	Average	Better	2	8	5	11
5	Northeast	Medium	Yes	Average	Better	7	4	6	10
6	Midwest	Large	Yes	Better	Average	3	7	9	11
7	Northeast	Small	No	Average	Average	1	10	7	11
8	Northeast	Large	Yes	Better	Better	3	4	5	7
9	South	Extra-large	Yes	Worse	Average	3	12	9	6
10	South	Small	No	Average	Better	1	5	4	6
11	Midwest	Extra-large	Yes	Better	Average	3	21	10	12
12	Midwest	Small	No	Average	Average	1	4	2	9
13	West	Large	No	Average	Average	1	12	2	26
14	West	Small	No	Average	Average	4	10	1	11
15	Northeast	Medium	Yes	Worse	Average	3	6	11	10
16	South	Extra-large	Yes	Better	Better	7	5	5	10
17	South	Medium	No	Average	Better	2	4	4	5
18	South	Extra large	No	Better	Better	5	6	6	5

[†]Hospital size is indicated by number of beds, such that small=less than 300; Medium=300-499; Large=500-899; Extra-large=900 or greater hospital beds.

[‡]Hospital performance is indicated relative to the national average according to standardized infection ratios reported by the Centers for Medicare and Medicaid Services' Hospital Compare data.



Practice #1: Communicating HAI Data

Why Meaningful Communication of HAI Information to Frontline Staff Matters

Sharing HAI information with those who provide direct patient care is critical to maintain focus on infection prevention practices and support adjustment of behaviors to prevent infections.

Effectively communicating information about HAIs can engage frontline staff in efforts to prevent infections, as described by a study interviewee:

"...getting staff involved and showing them what the current metric is and what we're trying to achieve and getting their input on how we can help solve the problem because they're the ones that really do the work every day and they're the ones that gave us a lot of the solutions that we were then able to share data and track."

However, not all HAI information is useful for frontline staff. It is important to focus on HAI metrics and measures that are meaningful to this audience.

"... They might not have the CAUTI SIR ratio, but they have days since their last CAUTI, so that's more meaningful I think to the staff, rather than looking at a rate because you have to have like your goal, or whatever, so if the staff could look up and say, 'Oh my gosh, it's been 300 days since our last CAUTI.' That's pretty awesome."



Improving Communication of HAI Information to Frontline Staff

Measures and metrics of HAI data

Communication frequency and timing

Means of communicating HAI data

Impact of communicating HAI data

Choosing Measures and Metrics

HAIs, and the infection prevention processes to prevent them, can be tracked in many ways. Measures and metrics created from HAI data can be used to understand successes and failures in reducing HAIs.

Common Measures And Metrics Include:

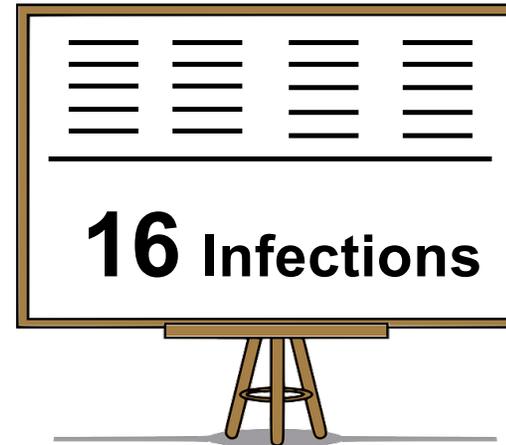
- Days since last infection
- Number of infections
- Infection rate
- Standardized infection ratio (SIR)
- Device days
- Utilization rate
- Standardized utilization ratio (SUR)
- Infection prevention process information
(e.g., audit reports, number of Foley catheters removed with a nurse-driven protocol, etc.)

In our interviews, some measures and metrics were perceived as more meaningful to frontline staff than others. For example, measures and metrics such as days since last infection or numbers of infections were perceived as more meaningful to frontline staff than infection rates or standardized infection ratios.



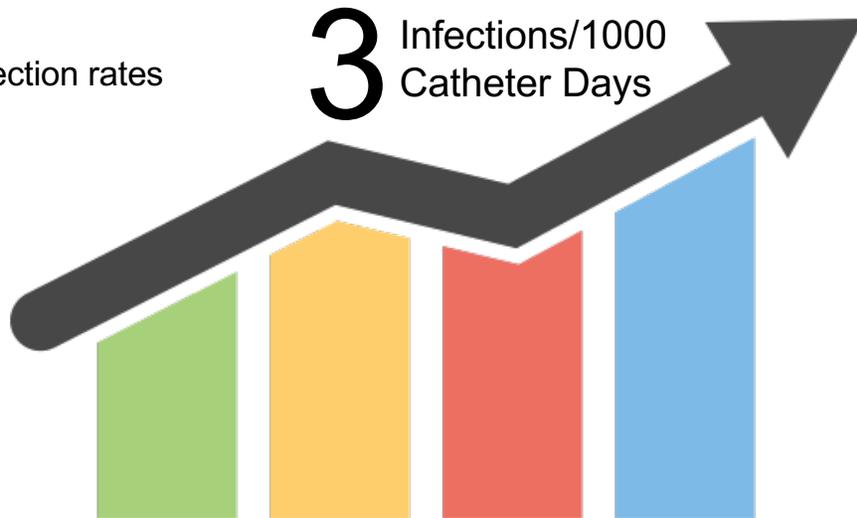
Common Measures and Metrics

Days Since Last Infection



Number of Infections

Infection rates



Standardized Infection Ratio

Choosing Measures and Metrics

When considering which measures and metrics to share with your frontline staff, the most meaningful and motivational information are those that:

Link Measures Or Metrics To Goals

Major prevention goals should be linked to the measures and metrics for both the organization and the unit. This approach can signal the success or failure of infection prevention efforts and provide motivation to frontline staff.

We've gone 78 days without a CLABSI. We are almost to our unit goal of 100 days!

Report Measures Or Metrics Over Time

Updating staff on current measures and metrics, in comparison with those from the past, can help frontline staff gauge the impact of changes to their infection prevention practices or identify areas for improvement.

Our unit had three CAUTIs this month; that's two more than we had last month. As a unit, let's make discussion of Foley catheter maintenance and removal a priority in huddles this month.



Choosing Measures and Metrics

Provide Measures Or Metrics Specific To The Unit And Individual

Measures and metrics specific to the unit and individual provide a focused view that can inform the improvement of local infection prevention practices. Providing unit level information helps identify the challenges and strategies specific to the patients and workflow of that unit. Providing individual level information (e.g., nursing scorecards) helps identify successful implementation of clinical practices, as well as errors in those practices. This information also helps identify successful areas and individuals, who can share best practices with the rest of the organization.

One of our nurses achieved 100% on their CLABSI dressing audits this month. They have shared with our unit their personal strategies for CLABSI dressing changes, which is helping others in the unit to improve their techniques.

Personalize Measures And Metrics By Associating Them With Patient Information

Identifying the personal impact of infections makes this information more meaningful to staff, who can recognize or recall the patient and reflect on what could have gone differently to prevent that infection.

Mrs. Smith that we took care of last week got a CLABSI- let's think about what we could have done to prevent this one so we can prevent the next one.

Share Information About Preventive Efforts, Not Just Infection Outcomes

Communicating measures and metrics of infection prevention practices (e.g., device days, device removal, hand hygiene) allows frontline staff to adjust their behaviors to prevent future infections, not just react to those infections that occur.

Our Foley utilization is higher than normal this month. Please be sure you are using the nurse-driven protocol to remove Foleys as soon as they are no longer medically necessary.



Communication Frequency and Timing

The frequency and timing of communicating HAI information is important to keep frontline staff focused on infection prevention, to support timely reactions to infections, and to encourage real time adjustment of infection prevention practices to reduce HAIs in the future.

Different means of sharing HAI information may be suited to different frequencies of communication. Regardless of the frequency, delivering HAI information at consistent intervals helps demonstrate that HAI prevention is a priority and maintains focus on infection prevention processes.

- **Daily** - Provide updates on HAI measures and metrics in daily discussions in huddles or rounds. Inform frontline staff about confirmed infections as promptly as possible.
- **Weekly** - Update HAI information on bulletin boards and share unit performance in weekly emails.
- **Monthly** - Share scorecards monthly with hospital and unit information.



Communication Frequency and Timing

When considering the frequency and timing of communicating HAI information to frontline staff:

Update Frontline Staff Daily With Information To Maintain Engagement And Motivation

Sharing HAI information on a daily basis demonstrates that infection prevention is a priority. Consistently sharing HAI information at daily huddles or rounds can help keep the focus on infection prevention practices.

No new infections to report today. Don't forget to assess your patients' Foley catheters and central lines for removal before the end of the shift.

Notify Frontline Staff About New Infections As Soon As Possible

Promptly informing frontline staff about new infections is critical to support reflection and reaction to improve infection prevention practices. Identifying infections by recognizing the patient and their circumstances, rather than a statistic, can help emphasize the importance of infection prevention efforts.

Yesterday, we received confirmation that Mr. Smith developed a CLABSI. This means his hospital stay will be extended as we treat his infection. We will be meeting later today to do a deep dive into his care to identify what may have contributed to his infection. We'll follow up later this week to review any gaps in clinical practice.

Provide Timely Feedback That Can Impact Infection Prevention Practices In Real-Time

Regularly updated HAI information can inform adjustments to improve infection prevention efforts. Sharing this information frequently allows frontline staff to adjust their work practices when areas for improvement are identified.

This week's audit report shows a decrease in our adherence to Foley catheter maintenance. What challenges have people experienced completing their Foley care in the past week that we can address to improve Foley care in the next week?



Means of Communicating HAI Data

Choosing effective means of communicating HAI information can help to ensure this information reaches the frontline staff.

Common Means Of Communicating HAI Information Include:

- **Posting on hospital units** - Share HAI measures or metrics on a bulletin board in break rooms or nursing stations.
- **Emails** - Send a monthly newsletter to summarize HAI information and recognize success in infection prevention.
- **Scorecards** - Include HAI information for the hospital, units, and individuals on monthly scorecards
- **Dashboards** - Provide current HAI information in an electronic format accessible to frontline staff.
- **Discussions** - Maintain a focus on infection prevention practices by discussing them daily in huddles or rounds.

When considering the means of communicating HAI information to frontline staff:



Means of Communicating HAI Data

Make Information Easy To Find

We are preventing infections in the ICU

It has been:

6 3 Days since our last Central Line Infection

4 2 5 Days since our last Catheter Associated UTI

3 9 1 Days since our last Ventilator Associated Pneumonia

1 5 9 Days since our last fall with injury

- Post information prominently in well-trafficked staff areas (e.g., break rooms, nursing stations)
- Minimize "clicks" to navigate to electronic information



Means of Communicating HAI Data

Make Information Easy To Understand

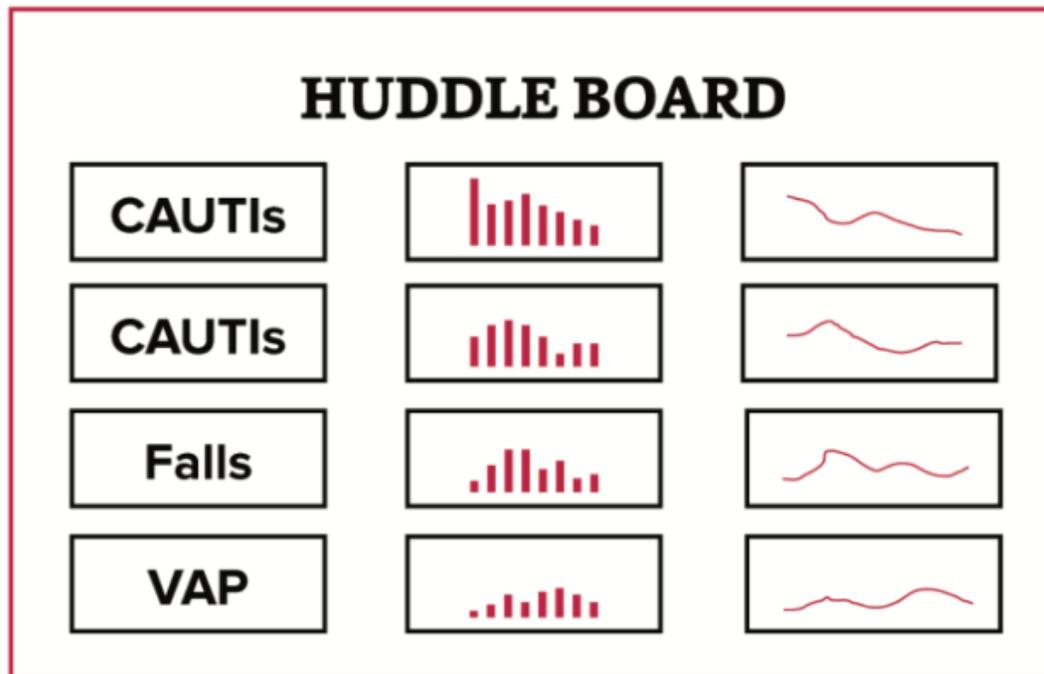
- Present counts, percentages, or simple rates, rather than ratios or other complicated measures
- Use colors to denote high performance (e.g., green) and low performance (e.g., red) on scorecards, bulletin boards, or newsletters
- Use charts or graphs to show change in performance over time
- Use visuals to relate measures and metrics to goals

Quality Indicator	Unit	Target	YTD	J	F	M	A
Central Line-Associated Blood Stream Infections (CLABSIs)	ICU	0	1	0	0	0	1
	East	0	0	0	0	0	0
	West	0	1	1	0	0	0
	All Units	0	2	1	0	0	1
Catheter-Associated Urinary Tract Infections (CAUTIs)	ICU	0	1	1	0	0	0
	East	0	0	1	0	0	1
	West	0	0	0	0	0	0
	All Units	0	3	2	0	0	1

Nursing Quality Dashboard

Means of Communicating HAI Data

Choose Means That Maintain Focus On Infection Prevention



- Circulate HAI information by multiple means to reach all staff members (e.g., email, postings, and in-person discussions)
- Utilize huddles or rounding to discuss HAI information daily
- Use other means of communication to direct and support daily discussions (e.g., bulletin boards, dashboards)

Impact of Communicating HAI Data

Communicating HAI information can impact infection prevention processes through several mechanisms. To maximize the positive impact on infection prevention efforts, practices of communicating HAI information to frontline staff should:

Keep Focus On Infection Prevention Efforts

- **Promote ownership of HAI measures and metrics and accountability for infection prevention**
Provide HAI information at the unit and individual level to help convey that everyone's actions impact the prevention of HAIs. Promote accountability by being transparent about HAI information; let everyone see how everyone else is doing. Seeing evidence of good performance can foster pride in one's work, while seeing evidence of poor performance can fuel friendly competition to motivate improvement.
- **Share and discuss HAI information regularly to keep infection prevention a priority**
Make the reporting and discussion of HAI information a part of the routine in daily huddles or rounding. Talking about HAI information regularly shows that HAI prevention is a priority and can help maintain focus on infection prevention practices.

Identify Areas For Improvement In Infection Prevention Practices

- **Provide feedback on adherence to infection prevention practices**
Use HAI information to find where improvements can be made to infection prevention practices and guide actions to address these gaps. For example, if the Foley catheter utilization ratio has increased on a unit, react by reminding and re-educating frontline staff about nurse-driven protocols for catheter removal.
- **Investigate infections to identify gaps in infection prevention practices**
Use the identification of a new HAI as an opportunity to reflect on the care that patient received. Discuss with frontlines staff what could have gone wrong and what can be done in the future to prevent additional infections.



Impact of Communicating HAI Data

Motivate Staff And Celebrate Their Successes

- **Compare HAI measures and metrics to HAI reduction goals**

Motivate infection prevention practices of frontlines staff by comparing current metrics and measures to unit- and hospital-level goals. Provide visual reminders of goals in relation to current metrics and measures (e.g., post the number of infections over time in relation to a maximum number of infections that a unit must stay below to meet their goal of reducing their infection rate from the previous year).

- **Celebrate success with rewards and recognition**

Let frontline staff know you appreciate their hard work by celebrating success. Give rewards, like a trophy or party, when infection prevention milestones are achieved (e.g., 365 days without a CLABSI). Provide recognition for exemplary infection prevention practices of individuals or units (e.g., share congratulatory messages in meetings or emails for units with outstanding hand hygiene adherence or for individuals that remove Foley catheters through nurse driven protocols).

Spread Best Practices Identified Through Reporting Of Measures And Metrics

- **Identify successful units or individuals and share strategies to improve infection prevention practices** Use HAI information to identify units and individuals that have been successful at implementing infection prevention strategies and reducing HAIs. Use these units and individuals as examples for others and a resource for strategies to successfully implement infection prevention practices.



Practice #2: HAI Review and Feedback



Management Practice Elements in HAI Reviews

Timely review

Active awareness and engagement of hospital leadership

Multidisciplinary participation



Promoting Safety Culture in Infection Reviews

Focus on failures of processes and procedures

Avoid assigning blame to individuals

“You know, trying to make it less about whose fault is it and, you know, assigning blame to let’s fix the system, it is a system problem. Where can the system improve rather than pointing at an individual doctor or nurse who you know wasn’t following what they should’ve done. And how to improve different things like timeouts and those things.”



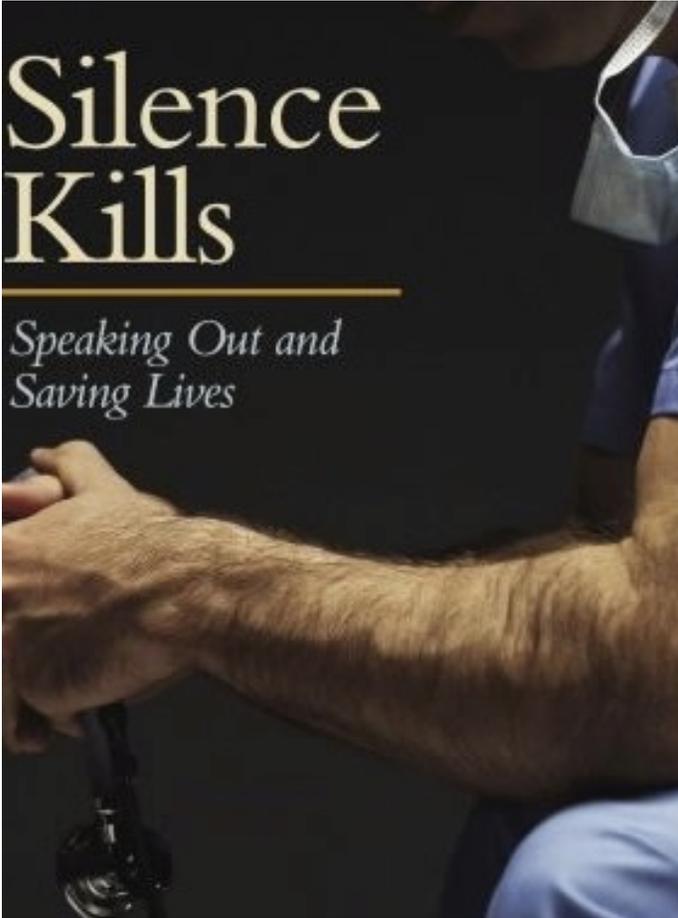
Using HAI Reviews to Identify Opportunities for Improvement

Can be led by individuals with different roles:

Infection control

Unit leadership





Silence Kills

*Speaking Out and
Saving Lives*

Practice #3: Speaking Up

Practicing the Art of Speaking Up

When you notice a team member has broken sterile technique, or when someone fails to practice hand hygiene, speaking up is important. Yet, speaking up in these situations can be difficult, especially when speaking up to a team member in another profession, due to differences in norms, status, and perceived hierarchy. Research shows not all members of an interprofessional team feel comfortable speaking up, even when another team member is doing something that puts a patient at risk.

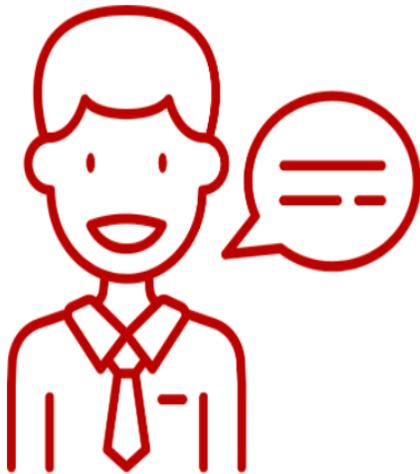
John, you didn't wash your hands and are about to put in a central line?

VS.

Did everyone wash their hands? We are about to put in a central line.

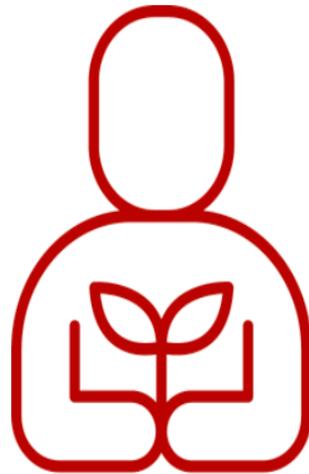


Speaking Up Skill Building



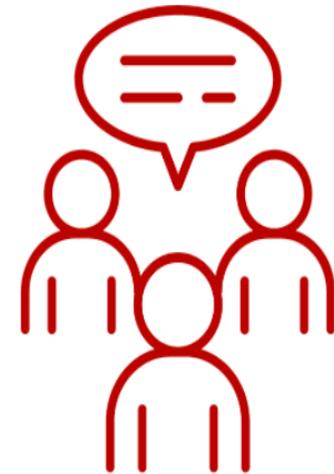
Building Confidence In Speaking Up

Practice speaking up when there is nothing on the line. Engaging in role-play exercises, or speaking up about small things outside of the work setting, can be a safe way to practice your skills.



Creating A Safe Environment To Speak Up

Leaders and others in positions of power can make team members feel safe to speak up by asking for feedback, making it clear that it is OK to disagree, and being receptive when a team member speaks up.



Depersonalization

Use language that makes it clear that this is about the issue, and not the person. This can make it easier for people to accept what you are suggesting.

Practicing these skills in simulated experiences can help support a culture where patient safety takes precedence. Perfecting these skills can contribute to confidence in an individual's ability to speak up, regardless of their role on the team, and can prepare team members to respond appropriately when someone does speak up.

Open Communication is Key

Patients are almost five times more likely to experience major complications or death when their care team demonstrates poor communication.



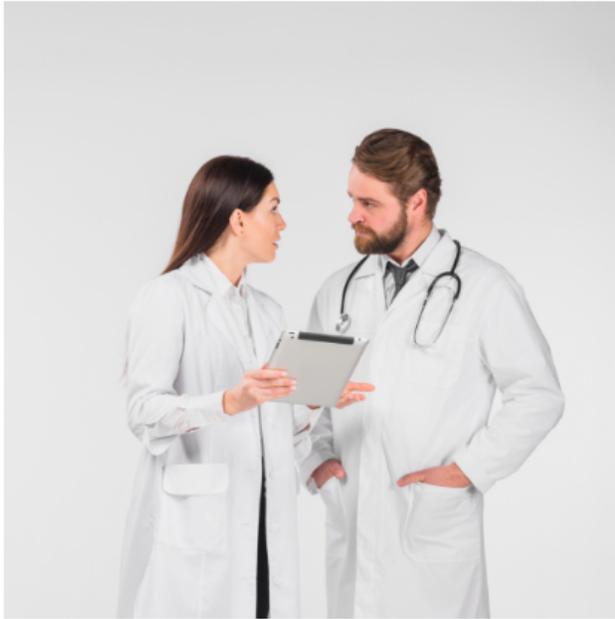
Psychological safety is a belief that one will not experience negative consequences to self-image, status, or career for speaking up with ideas, questions, concerns or mistakes. In the context of clinical care, things like power differences between team members can interfere with these beliefs. Team members display different levels of assertiveness that depend in part on their training, experience, certification, and perceived role. In general, team members who believe themselves to have lower status are less likely to assert safety concerns.

Yet, we also know that poor communication is one of the top causes of adverse events.

It is possible to improve skills such as assertive communication through practice. Structured practice (training) has been associated with improvements in safety climate, reductions in medical errors, improved task performance, and reduced patient mortality.

Effectively communicating safety concerns is critical to preventing HAIs such as CAUTIs and CLABSIs.

Communication Crash Course



There are several situations in which speaking up is critical to patient safety and infection prevention, among them:

- Breaks in sterile technique during central line insertion
- Timely removal of Foley catheters
- Appropriate insertion point maintenance
- Failure to wear required PPE
- Non-compliance with hand hygiene
- Removing central lines when they are no longer medically indicated

Preventing HAIs requires every member of the team. Teams can work to empower individuals to both speak up and respond when patient safety concerns are identified. Preparing everyone on the team is critical to ensure communication about patient safety goes smoothly.

AHRQ's Team Strategies & Tools to Enhance Performance & Patient Safety (TeamSTEPPS®) is one of the most commonly used healthcare teamwork training programs. Among other knowledge, skills, and attitudes (KSAs), TeamSTEPPS® teaches learners various tools to increase their communication and conflict management skills - both areas that are crucial to the concept of speaking up. Additionally, AHRQ's Comprehensive Unit-based Safety Program (CUSP) provides information about developing a psychologically safe environment in which speaking up is supported. Both of these programs have tools and applications that can extend to teach learners to speak up within the HAI prevention context.

These communication overview tools were adapted from these programs for use in the context of infection prevention. For more information, these programs can be accessed at:

[TeamSTEPPS®](#)

[Comprehensive Unit-based Safety Program \(CUSP\)](#)



Techniques for Speaking Up

SBAR

SBAR is a structured communication technique used to highlight meaningful, relevant information about a patient. It is usually used to provide the context needed for clinical decision making and to ensure that the care team has a shared understanding of the patient treatment.

While many use this approach for handoffs, it can also be used to structure a request or recommendation. For instance, it can be used to initiate a discussion about Foley removal.

SBAR stands for:

S	Situation: What is going on with the patient?
B	Background: What is the clinical background or context?
A	Assessment: What do I think the problem is?
R	Recommendation & Request: What would I do to correct it?

Techniques for Speaking Up

DESC Script

DESC is a structured communication technique used to manage and resolve conflict and disagreements. The DESC format can be followed to engage in conflict productively, by ensuring you convey the situation, your concerns, suggestions, and potential consequences.

The DESC script should be used when you are concerned about a task or process being done and team members have different points of view about the proposed action. DESC manifests your concerns about the process being used, and is best for situations that are not urgent as it tends to foster discussion about process.

DESC stands for:

D	Describe the specific situation or behavior; provide concrete data.
E	Express how the situation makes you feel/what your concerns are.
S	Suggest other alternatives and seek agreement.
C	Consequences should be stated in terms of impact on shared goals; strive for consensus.

Techniques for Speaking Up

Two Challenge Rule

The Two Challenge Rule can be used to introduce a concern, and can be of particular benefit when a person feels their concerns are not being addressed. While each member of the team is responsible for asserting their concern, sometimes in moments they can fail to be heard.

By reinforcing concerns twice, the individual increases the impact of their concerns and is more likely to be heard by other team members. At any time, other members of the team can hear these concerns and also reinforce them through a second challenge, empowering individuals to engage in the process as a collective, as opposed to individually. The fact that anyone can issue the second challenge, means this tool goes to the heart of teamwork - individuals may observe an issue but the team is responsible for resolving it.

If the issue still hasn't been acknowledged, the individuals should feel empowered to "stop the line" or escalate up the chain of command.



Techniques for Speaking Up

CUS Framework

The CUS Framework is a communication framework that uses signal words to relay safety concerns in such a way that all team members can understand the seriousness of the concern. When all team members are aware of these signal words, their use can clearly communicate safety issues and their seriousness.

The CUS framework is particularly useful to convey emergent patient safety concerns.

CUS stands for:

C	I am concerned
U	I am uncomfortable
S	This is a safety issue

Creating Psychological Safety

The highest performing teams have psychological safety - the shared belief that team members will be supported when they make a mistake, ask for help, or speak up. Psychological safety can facilitate the use of team strategies and tools (e.g., CUS) that help to reinforce the importance of speaking up to address patient safety issues.

Team leaders can use the following phrases to increase psychological safety and to show that they support speaking up in their team (AHRQ, 2018):

"If you see anything amiss, please speak up. We're a team and we have to have each other's backs."

- ✓ Promote team inclusiveness.

"It's fine to disagree. That's why we're talking about this together."

- ✓ Not being rude, disrespectful, or belittling to team members.

"Just like they say at the airport - 'If you see something, say something.'"

- ✓ Explicitly encouraging team members to speak up.

"Thanks for pointing out my mistake. You just saved me from a big blunder."

- ✓ Promoting learning from one another.

"I'm not sure I've done this right. Can someone check me?"

- ✓ Acknowledging the limits of their own knowledge.





Practice #4: Rewards and Recognition

Rewards and Recognition



Rewards are tangible incentives used to motivate high performance in individuals and may take the form of things like paid time off (i.e., monetary), gift cards (i.e., tokens of appreciation), or trophies and certificates (i.e., emblematic).

Recognition is an acknowledgement of high performance communicated to individuals, either publicly or privately. These are typically non-financial, like a temporary or permanent title, and sometimes occur in concert with rewards.

Leaders can provide rewards and recognition to staff to highlight their impact on infection prevention. Importantly, rewards and recognition can occur at both the individual and unit levels.

Why Are Rewards And Recognition Important?

Recognizing the essential contribution of team members is an important factor in any role. With all the demands facing healthcare workers, managers can miss the opportunity to appreciate the work that they do.

When staff feel overlooked and underappreciated, this can lead to:

- A loss of interest and morale
- Resistance to change
- Decreased cooperation
- Reduced productivity
- Increased turnover

Rewards and recognition can increase staff engagement and can be a powerful tool in encouraging individuals' high performance.

When staff feel recognized and rewarded for their work, they experience increased:

- Motivation
- Morale and excitement
- Job satisfaction and retention
- Productivity
- Collaboration and teamwork
- Creativity and problem solving

When the importance of individuals is acknowledged, they are more confident in their ability to prevent avoidable HAIs.



"Different rewards and recognition really help motivate the staff and demonstrate the value of good infection prevention practices."



Designing Meaningful and Effective Rewards and Recognition

Systems that reward and recognize the contributions of staff frequently occur at many levels of the organization. While some organizations have system-wide reward and recognition programs, high performing hospitals have also instituted programs within departments and units.



One hospital developed a "golden catheter" award for CAUTI prevention where one of their units was recognized for the actions of unit-level staff. In another hospital, a nurse manager detailed recognition for the most helpful member of the staff who was given "angel wings" - a title for the week - while someone who had a more difficult week was given a cape made out of unit supplies. Photos were posted in the unit with awards given to both.

In any institution, leaders can think about how they acknowledge the contributions of staff. Recognition and rewards do not have to come from the organization as a whole; rather, they can come from individual leaders. Here are some considerations for leaders developing these programs.



Considerations for Delivering Rewards and Recognition

Rewards and recognitions that embrace these considerations are going to reinforce excellence. When individuals don't know the actions that create rewards, they can't model the behavior required to receive them.

✓ WHO APPROVES?

WHO DELIVERS?

HOW OFTEN?

HOW VISIBLE?

HOW MUCH?

UNDER WHAT
CONDITIONS?

Who Approves?

Rewards and recognition can require signoff from various members of the organization. In some cases, organizations or departments establish a formal review process. In others, the award determination is more informal in nature.



Safety Challenge Award



An emblematic reward is offered to all units or departments that meet or exceed hospital goals for CAUTIs and CLABSIs. The challenge is usually in the form of some objective standard - 100 days without an infection.

Group Appreciation Award

A common form of rewards are food, and this recognition is well received. Token rewards can be offered to a group (i.e. unit) for events like reducing days for indwelling catheters by 15%. These rewards are often offered by either a Frontline Manager or an Administrative Leader. Important to note the financial cost associated with this approach that may require approval at additional levels in the organization.



Rewards for the Frontline

Excellence Award



An emblematic reward is offered to recognize excellence related to patient safety in the hospital. The award may be given out annually by hospital leadership, and generally is received in a public setting. Usually there is some emblem (trophy) that is associated with it.

Individual Appreciation Awards



Golden ticket (punch card for every Foley removal to earn a float pass)

Individuals appreciate token rewards like coffee coupons at the hospital cafeteria. Managers can use these tokens on an ad hoc basis to recognize events like an individual for speaking up for patient safety.

While less expensive, these tokens still can bear a cost that may require approval at additional levels in the organization.

The "golden ticket" (left) is an example of a token reward offered to an individual by their Frontline Manager. This reward likely does not have a financial cost associated with it, but will require approval at additional levels in the organization.

Recognizing and Communicating Success

The rise of email and newer communication streams like Twitter and Facebook has meant that recognition can be something you do quickly, publicly and effectively. Below are examples of many of the types of recognition that can be used to show staff members that you value their work.

✓ RECOGNITION EMAIL

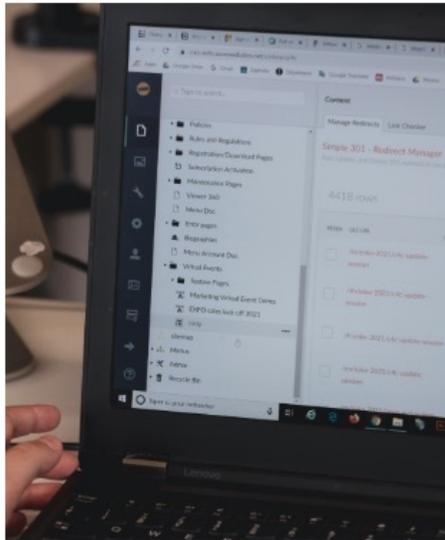
"BOTTOM-UP"

PHOTO RECOGNITION

HUDDLE CALL-OUTS

HOSPITAL-WIDE
RECOGNITION

SOCIAL MEDIA



Recognition Email

Recognition messages for the accomplishments of individuals and teams can be sent and are often posted around the unit to get the word out about positive outcomes. Messages do not have a cost associated with them, but can be quite meaningful. They can be more formal in nature (see Script for Recognition Email) or informal (see Congratulatory Message from Top-level Leader), generally require no additional approval, and can come from all levels of the organization. Emails can be individualized, or when appropriate, sent as a group message.





Practice #5: Patient & Family Education

Engaging Patients in Infection Prevention



Patients have a role in preventing HAIs while hospitalized and an interest in strengthening HAI prevention efforts. Patients should be empowered to advocate for their safety and supported when they speak up about their safety.

While many hospitals educate patients on general infection prevention, such as relaying the importance of hand hygiene, they don't always provide patient education that specifically addresses the prevention of CAUTIs and CLABSIs.

Engaging patients in infection prevention can help prevent HAIs such as CAUTIs and CLABSIs.

Your hospital may be missing key components of patient education for the prevention of CAUTIs and CLABSIs.



Delivering Patient Education for Infection Prevention

THE FIVE RIGHTS

When developing and tailoring patient education to reduce infection, it is important to consider the right information provided to the right person in the right format through the right channel and the right time. This borrows from the idea of The Five Rights, for example the Five Rights model for Clinical Decision Support, that can be applied to how an organization addresses patient education.

The Five Rights of Clinical Decision Support	The Five Rights of Patient Infection Prevention
The Right Information	The Right Educational Information
To The Right Person	To The Right Patient or Caregiver
In The Right Intervention Format	In The Right Format
Through The Right Channel	Through The Right Channel
At The Right Time In The Workflow	At The Right Time In The Patient Journey



The Right Information

Organizations may have Infection Prevention teams that can work to develop or adapt context-appropriate content to present data and stories in a manner that can impact patient behavior.

Click on each image below to learn more.



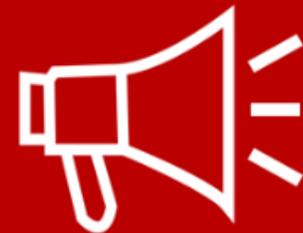
**Informing Patients
of the Risks of
Foley Catheters
and Central Lines**



**Patient and Visitor
Hand Hygiene**



**Consistent
Maintenance Care
of Devices**



**Support to
Speak Up**



The Right Person



Patients

Educating and empowering patients can allow them to contribute to the safety of their care and has been utilized successfully to address patient safety issues such as medical errors and care provider hand hygiene. When educated about the risk of HAIs, and the actions they can take to reduce these risks, patients can also contribute to the prevention of these infections.

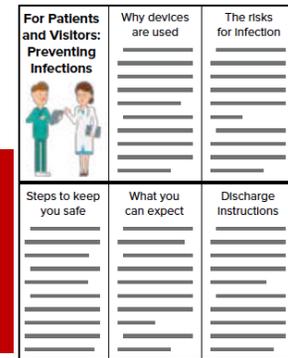
Family Members / Caregivers

In the hospital setting, not all patients may be feeling well enough to advocate for themselves. In this case, educating a patient's family member or caregiver can allow them to act on behalf of the patient. Educating the family or caregiver is also important when they may be closely involved in the care of the patient, for example post-discharge.

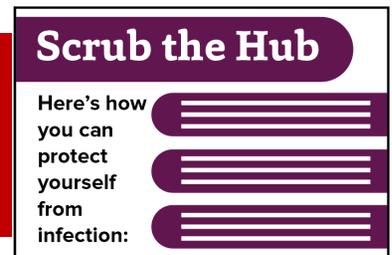


The Right Format

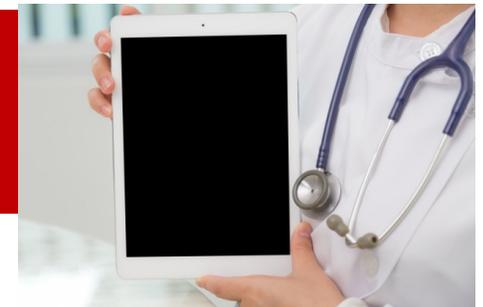
Paper resources (e.g., booklets, packets, handouts)



Posted resources (e.g., posters and digital signage)



Electronic resources (e.g., patient portals, internet)



Guidelines For Patient Education Resources

To create resources that are easy to understand, they should be:

- Written at a 6th-grade reading level or lower
- Use plain language (i.e., avoid medical jargon when possible and explain medical terms when necessary)
- Use short sentences and paragraphs
- Use visuals (e.g., pictures, illustrations, infographics) instead of words when possible



The Right Channel



Care Providers

Nurses are often the ideal providers of patient education due to their proximity to patient care. As they interact with patients at the point of care, nurses have the opportunity to communicate and reinforce infection prevention education topics throughout a patient's hospital stay.

However, involving multiple roles in patient education (e.g., nurses and physicians) is important to convey a consistent message about infection prevention to the patient. For example, some patients may be more likely to accept maintenance of their device if it is reinforced by their physician in addition to their nurse.

Infection preventionists can also play a role in the delivery of patient education. As experts in infection prevention practices, they can provide expertise to help clarify and reinforce education topics. For example, the involvement of an infection preventionist may be helpful to convince a patient that their device should not be left in for convenience due to the risk of infection.

Verbal Discussions

All educational topics should be covered through verbal discussion with the patient, even when other resources (e.g., handouts, signs, patient portals) are provided. These discussions may be particularly impactful at the time of device insertion, during device maintenance, and during rounding.

These verbal discussions should not happen just once; discussion about these patient education topics should occur multiple times to reinforce their importance. It may be necessary to reiterate educational topics especially when patients resist recommended care (e.g., declining maintenance or removal of devices).

Verbal communication of education topics can be supplemented with the other resources listed above. For example, remind patients that information is available for them to review in their admission handbook or patient portal and point out to patients the posted signs visible to them that are meant to remind them about their role in infection prevention practices (e.g., performing hand hygiene, performing device maintenance, and speaking up when they have a safety concern).



The Right Time

There are many opportunities to deliver patient education throughout a patient's hospital stay. Providing information at multiple times is important to reinforce these education topics.

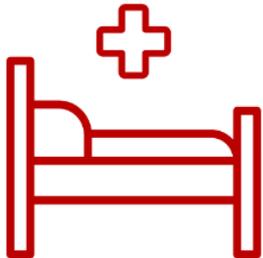


At Admission

Booklets or packets provided upon admission can cover general infection prevention information (e.g., hand hygiene) as well as practices specific to the prevention of CAUTIs and CLABSIs (e.g., the role of CHG baths for device maintenance). These resources can make it clear to patients as soon as possible that they have a role in their safety in the hospital and that they can speak up about their concerns. This sets the tone that the hospital culture supports patient engagement, which can encourage patient's participation in infection prevention practices.

During Care

Patient education about the risk of CAUTIs and CLABSIs should be provided at the time of device insertion. Patients should also be informed that these devices will be removed as soon as possible to reduce the risk of developing these infections. When performing clinical care of Foley catheters and central lines, describe why you are performing this care and its importance for infection prevention.



In The Hospital

Take advantage of other opportunities to deliver patient education when patients and their care providers are present. For example, rounding at the bedside may already involve discussion between providers about the removal of devices. Include patients in these discussions by letting them know why devices should be removed as soon as possible to reduce the risk of developing a CAUTI or CLABSI. Bedside rounding is also an opportunity to encourage patients to speak up. Hearing this message from multidisciplinary roles during rounding may be particularly helpful to create an environment in which patients feel comfortable speaking up to all members of their care team.

At Discharge

If patients are discharged with their devices they should be provided education about what signs of infection they should look for and how to care for their device at home. This should include discussion about if the patient can take care of the devices themselves or if a caregiver will be taking care of the patient. If a caregiver will be involved in the care of the patient after discharge, be sure they also receive the education they need to properly care for the patient's device. Direct patients and their caregivers to additional education resources (e.g., discharge instructions, outpatient portal, hospital websites) that they can easily access outside of the hospital.



Two Touch Points for the Development of Patient Education and Engagement Strategies:

1. Standardize an approach to education and engagement

Patient Facing Strategies

- **Standardize The Education:** Create standardized education materials for patients with a Foley catheter or central line and enforce an expectation of educating every patient with these devices.
- **Standardize The Delivery:** Establish clear expectations about who is responsible for educating the patient, when the education should occur, what resources and topics are included, and how the education should be documented.

Clinician Facing Strategies

- **Normalize The Knowledge:** All clinicians across the hospital should be aware of the strategies to engage patients in infection prevention.
- **Standardize The Deployment:** Ensure consistent patient engagement strategies occur across units. Patients may travel between units for different aspects of their care, but they should expect all units to be a united front on patient engagement. For example, if a patient is expected to count along with their nurse during the 15 seconds they "scrub the hub," this should occur regardless if they are transferred to a new unit within the hospital.
- **Reinforce The Message:** Make staff aware of procedures to escalate patient education, when necessary. This may be particularly important in situations where patients may refuse their infection prevention care (e.g., Foley catheter perineal care or central line CHG baths) and care providers need support to reinforce education to the patient. For example, let bedside nurses know who to go to enforce education - a charge nurse, nurse manager, physician, or leadership.

2. Use the Electronic Health Record (EHR) to support the delivery of patient education

The EHR can serve to automate the assignment of patient education and to document that education was delivered. In planning to use the EHR to perform this function, organizations can:

- Develop order sets for the deployment of Foley catheters and central lines that automatically create an order/alert for patient education about the device.
- Create alerts for patient education when infection prevention procedures are declined by the patient (e.g., the patient declines the CHG bath for their central line). An alert, in this instance, can help nurses escalate to other care providers (e.g., charge nurse, nurse manager, physician, or leadership) the need for patient education.
- Ensure care providers know it is their responsibility to document patient education in the EHR.



And there are additional management practices...



COMMUNICATING HAI DATA



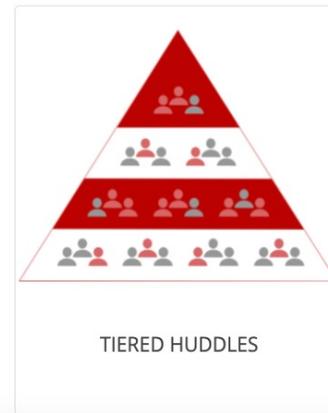
REWARDS & RECOGNITION



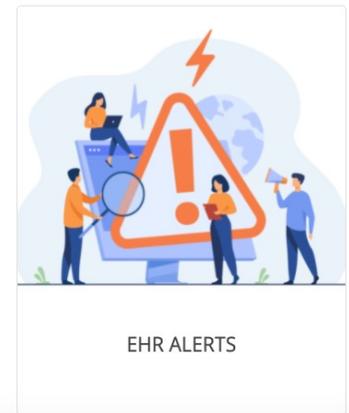
SPEAKING UP



PATIENT AND FAMILY EDUCATION



TIERED HUDDLES



EHR ALERTS

Using a Web-Based Toolkit to Support Infection Prevention Efforts



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✓ USING THE TOOLKIT

COMMUNICATING HAI DATA

REWARDS & RECOGNITION

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TIERED HUDDLES

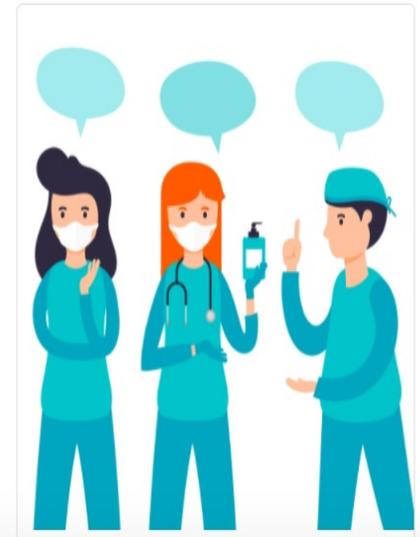
EHR ALERTS

Using the SMART Toolkit

Use the resources in this Toolkit to focus on management strategies that will help prevent and reduce hospital-associated infections (HAIs). Resources can be used by Frontline Staff, Managers, Clinical Leaders, and Administrative Leaders. The Facilitator Guides and Implementation Tools will assist you in exploring each topic in detail.

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- USING THE TOOLKIT
- ✓ COMMUNICATING HAI DATA
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Why Meaningful Communication of HAI Information to Frontline Staff Matters | SMART Toolkit

Sharing HAI information with those who provide direct patient care is critical to maintain focus on infection prevention practices and support adjustment of behaviors to prevent infections.

Effectively communicating information about HAIs can engage frontline staff in efforts to prevent infections, as described by a study interviewee:

"...getting staff involved and showing them what the current metric is and what we're trying to achieve and getting their input on how we can help solve the problem because they're the ones that really do the work every day and they're the ones that gave us a lot of the solutions that we were then able to share data and track."

However, not all HAI information is useful for frontline staff. It is important to focus on HAI metrics and measures that are meaningful to this audience.

"... They might not have the CAUTI SIR ratio, but they have days since their last CAUTI, so that's more meaningful I think to the staff, rather than looking at a rate because you have to have like your goal, or whatever, so if the staff could look up and say, 'Oh my gosh, it's been 300 days since our last CAUTI.' That's pretty awesome."

Frontline staff need HAI information that:

- Relates to HAI prevention goals
- Allows prompt reaction to infections and timely feedback on infection prevention practices
- Is presented in a way that prompts discussion and maintains focus on infection prevention
- Is used to inform and improve infection prevention practices

This module provides guidance to those responsible for sharing HAI information with frontline staff to maximize the impact of communicating HAI information on the successful implementation of infection prevention practices.

Meaningful communication of HAI information can inform and empower frontline staff in their efforts to prevent infections.



✓ MEASURES AND METRICS OF HAI DATA

COMMUNICATION FREQUENCY AND TIMING

MEANS OF COMMUNICATING HAI DATA

IMPACT OF COMMUNICATING HAI DATA

Choosing Measures and Metrics

HAIs, and the infection prevention processes to prevent them, can be tracked in many ways. Measures and metrics created from HAI data can be used to understand successes and failures in reducing HAIs.

Common Measures And Metrics Include:

- Days since last infection
- Number of infections
- Infection rate
- Standardized infection ratio (SIR)
- Device days
- Utilization rate
- Standardized utilization ratio (SUR)
- Infection prevention process information (e.g., audit reports, number of Foley catheters removed with a nurse-driven protocol, etc.)

In our interviews, some measures and metrics were perceived as more meaningful to frontline staff than others. For example, measures and metrics such as days since last infection or numbers of infections were perceived as more meaningful to frontline staff than infection rates or standardized infection ratios.

When considering which measures and metrics to share with your frontline staff, the most meaningful and motivational information are those that:

How Different Team Members Can Support the Communication of HAI Data to Frontline Staff

✓ FRONTLINE MANAGERS

INFECTION PREVENTIONISTS

CLINICAL LEADERSHIP



Communicating HAI information to staff is a powerful tool to maintain focus on infection prevention, react to infections, and improve practices to reduce HAIs. As the team members that are often responsible for sharing this information with staff, Frontline Managers should consider the ways in which this information is most useful for their audience (e.g., posting measures in the break room or discussing metrics in daily huddles). Considering different aspects of communicating HAI information to staff can help identify missed opportunities in delivering information that can inform infection prevention work practices. These aspects include the metrics and means produced from HAI data, the frequency and means of communicating this information, and the impact that HAI information can have on the work practices of the staff.

Frontline managers have the power to engage their staff in infection prevention efforts through the communication of HAI information.

Exceptional Experiences

"...I feel like data is an important and very powerful tool because if you can see your own data and show it to people, they understand what you are up against and what you are working with."

"I think that the thing that we really do is getting staff involved and showing them what the current metric is and what we're trying to achieve and getting their input on how we can help solve the problem because they're the ones that really do the work every day and they're the ones that gave us a lot of the solutions that we were then able to share data and track. But we needed to get them involved on the front end of what the solution should even be."

"... if you go through any unit, you will see in their break room, they have everything highlighted on their walls, exactly what they're doing in terms of their CAUTIs. They might not have the CAUTI SIR ratio, but they have days since their last CAUTI, so that's more meaningful I think to the staff, rather than looking at a rate because you have to have like your goal or whatever so if the staff could look up and say, 'Oh my gosh, it's been 300 days since our last CAUTI. That's pretty awesome.' You're probably going to see that in some of the units."

"I think it's the partnership between the staff on the unit, and that educators and managers on the unit, and IP [infection prevention], it is very much seen as a collaborative partnership. We try to provide outreach to them in a way that's meaningful to them, we provide data in a way that's meaningful to them because if it looks great to us but makes no sense to them it's not valuable, so we really try to take our cue from what the units want and go down to the unit level. You can't really... It's hard to tackle it at a hospital level, you can have a goal and the target, but you have to get down to the unit level to make the change."

"We have huddle boards. So we do safety huddles twice a day. We have a number of things that we track daily, and then we will report out, our charge nurses will report to the oncoming shift as far as what's going on with some things. In addition to that that's where myself and the assistant manager will post different things as well. So we've got you know the number of days since we've had a central line infection, we will report if we have a CAUTI, we'll share with them if we're trending up or we're trending down as far as utilization goes. Things like that, so we try and talk about all of those things with the entire unit just to kind of keep the awareness at the forefront."



Communicating HAI Information to Frontline Staff Facilitator Guide



Facilitator Guide: Complete

Portable Document Format (PDF)

This facilitator guide is designed to help you understand how to maximize the impact of communicating HAI information to frontline staff to support infection prevention efforts at your hospital.

[DOWNLOAD](#) ↓

[VIEW](#)



Facilitator Companion Presentation Slides

PowerPoint Document (PPTX)

The objective of this presentation is to provide guidance to those responsible for sharing HAI information with frontline staff to maximize the impact of communicating HAI information on the successful implementation of infection prevention practices.

[DOWNLOAD](#) ↓

Communicating HAI Information to Frontline Staff Tools



Communicating HAI Information To Frontline Staff Assessment Form - Communicators

Portable Document Format (PDF)

This assessment form is designed to help recognize how healthcare-associated infection (HAI) information is currently communicated to frontline staff at your hospital.

DOWNLOAD 

VIEW



Communicating HAI Information To Frontline Staff Assessment Form - Frontline Staff

Portable Document Format (PDF)

This assessment form is designed to help recognize how healthcare-associated infection (HAI) information is currently communicated to frontline staff at your hospital.

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VIEW

Communicating HAI Information to Frontline Staff Activity



Communicating HAI Information To Frontline Staff Needs Assessment Worksheet - Communicators

Portable Document Format (PDF)

This worksheet is designed to help identify areas of improvement for communication of HAI information to frontline staff and the resources and actions necessary to implement these improvements.

DOWNLOAD 

VIEW

✓ THE RESEARCH

THE TEAM

PUBLICATIONS

BIBLIOGRAPHY

SMART Toolkit Research

The **Searching for Management Approaches to Reduce HAI Transmission (SMART)** study, funded by the [Agency for Healthcare Research and Quality \(AHRQ\)](#), a five-year project focused on central-line associated bloodstream infections (CLABSIs) and catheter-associated urinary tract infections (CAUTIs), created a generalizable management practice toolkit that can be leveraged in the improvement of other HAI outcomes. SMART developed, validated, and is now deploying a national HAI Management Practice Guideline Survey, first across Ohio hospitals, then with hospital partners nationwide.

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✓ USING THE TOOLKIT

COMMUNICATING HAI DATA

REWARDS & RECOGNITION

SPEAKING UP

PATIENT & FAMILY EDUCATION

TIERED HUDDLES

EHR ALERTS

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COMMUNICATING HAI DATA



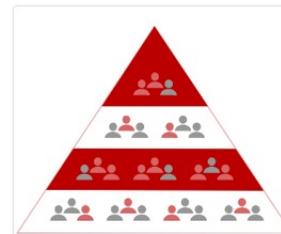
REWARDS & RECOGNITION



SPEAKING UP



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Conclusions

- Preventing infections is difficult
- Management practices can help
- Research continues...



Thank you for your interest!

Sarah R. MacEwan, PhD

Sarah.MacEwan@osumc.edu



October 17, 2023

[\(FREE European Teleclass - Broadcast live from the Infection Prevention Society conference\)](#)

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Speaker: **Prof Timothy Walsh**, University Of Oxford

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