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

Implementation Guide for Long-Term Care Facilities

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The Health Research & Educational Trust (HRET)

*AHRQ National Implementation of Comprehensive Unit-based Safety Program (CUSP) to Reduce Catheter-associated Urinary Tract Infection (CAUTI) in Long-term Care Facilities
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INTRODUCTION

Infections that develop in health care settings are known as health care-associated infections (HAI). HAIs are especially significant in long-term care (LTC) settings, as they account for 1.6–3.8 million infections and 388,000 deaths annually. Additionally, infections have very high costs to LTC facilities: $38-$137 million annually for antimicrobial therapy and $673 million-$2 billion for hospitalizations. Catheter-associated urinary tract infection (CAUTI) is a common, costly and potentially life-threatening HAI for LTC residents. An estimated 5-10 percent of all LTC residents have urinary catheters, including 12 percent of all new admissions at the time of transfer from acute care facilities to LTC facilities. The AHRQ Safety Program for Long-Term Care: HAIs/CAUTI is a national quality improvement collaborative designed to reduce CAUTIs and enhance patient safety culture. It is funded by AHRQ, and it is part of the United States Department of Health and Human Services (HHS) Action Plan to Prevent Health Care-Associated Infections.

The AHRQ Safety Program for Long-Term Care: HAIs/CAUTI is coordinated at the national level by HRET, the research affiliate of the American Hospital Association (AHA). The overall project goals are to:

- Develop/adapt evidence-based CAUTI elimination and safety practices for LTC facilities
- Reduce CAUTI rates
- Improve safety culture through improved teamwork and communication

Additional goals for this project are to enhance expanded infection prevention efforts for multi-drug resistant organisms (MDROs) such as Clostridium difficile and urinary tract infections (UTI) and by providing education on how to:

- Improve hygiene practices (e.g. hand, environmental)
- Prevent the overprescribing of antibiotics by promotion of “antibiotic stewardship”
- Promote appropriate placement and maintenance of indwelling catheters
- Reduce re-hospitalizations

HRET’s national project team includes experts from the University of Michigan, Abt Associates, Society of Hospital Medicine, Association of Professionals in Infection Control and Epidemiology (APIC), Qualidigm and Baylor College of Medicine. State hospital associations, as well as other state-based and professional organizations, are the central project partners that are relied upon to coordinate, promote,

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and coach facility teams as they implement the CAUTI prevention protocols and the C.A.U.T.I and T.E.A.M.S. interventions.

ABOUT THIS GUIDE

Intended Audience
The Facility Implementation Guide was created to serve as a handy reference to facility team leads who coordinate the program in their facility. Facility Leads should share this guide with other team members involved in the implementation of the AHRQ Safety Program for Long-Term Care: HAIs/CAUTI program.

How to Use This Guide
Facility team leads should read through the entire manual and then refer regularly to specific sections as needed. Other team members should be encouraged to read the manual, particularly sections that refer to their role on the project. For example, the data coordinator needs to be very familiar with the Assessing Impact section which covers the outcome and process measures, as well as the data collection and reporting schedule.

The terms, “program” and “project” are used interchangeably throughout this guide. However, the national project team would like facility team members to view the clinical and cultural interventions not as a time-limited project, but rather as a resident safety program that becomes integrated into everyday work and sustained over time.

The Program intervention section is organized according to the three project phases: planning, execution and sustainability. Each phase includes a description of recommended activities and a “Track Your Progress” checklist. A summary checklist of all the activities is included in appendix A.

Training and Education walks through the educational components of the program that includes face-to-face training, distance learning opportunities and a train-the-trainer component for LTC facility teams to be trained on-site by their own staff leadership.

Measuring Progress and Assessing Impact describes the outcome and process measures needed to measure program progress, and the data collection and reporting schedule.

The final sections, Tools and Resources and the appendix, provide you with useful information and resources, for example, a glossary of terms and acronyms, a sample team meeting agenda, how to administer the nursing home survey on patient safety culture, etc.
Facility Expectations

Facilities participating in the program are expected to do the following:

- Identify and engage a Facility (project) Team Lead who will attend training sessions provided by the HRET team.
- Form an active, multidisciplinary project team.
- Conduct training sessions at LTC facilities for staff nurses, nurse aides, housekeeping, dietary, etc. on the C.A.U.T.I. and T.E.A.M.S. interventions.
- Communicate with residents and families about the program.
- Participate in team coaching sessions (teleconferences/webinars) on a monthly basis.
- Collect facility demographic data and submit to HRET at program start.
- Collect data pre- and post- survey data for the AHRQ Nursing Home Survey on Patient Safety Culture (herein, safety culture survey) and submit to HRET.
- Collect data on CAUTIs and urine cultures ordered and submit to HRET monthly.
- Collect skills questionnaire before each of the three learning sessions and staff training compliance quarterly and submit to HRET.
- Strongly encourage staff to evaluate ALL educational events immediately following all training events, using the web-based evaluation tool.

All required project activities are explained in detail in the training and education and assessing impact sections of this manual. The program strategy and timeline provides a summary overview of the project activities involved in each phase of the program.

COMMUNICATION AND SUPPORT

Communication

Lead Organization

Throughout the project period you will have the support of your lead organization. Your facility’s project contacts are as follows:

Organizational lead(s), name, phone, email:
Newsletter Updates & E-blasts

Your organizational lead will remind you of activities and due dates via electronic weekly updates and e-blast announcements. These updates will highlight upcoming opportunities for education and training which includes onboarding webinars, training modules, national content webinars and coaching calls. The weekly updates will also provide information on the face-to-face learning sessions, resource materials, successful facility practices, as well as provide alerts of updates to the project website.

Support

Technology

Project Website

The website provides you with information on the project, a calendar of events and links to register for webinars, archived webinars, tools and resources, copies of the weekly update, and other resource materials. It is a password-protected site.

Please enter the username and password (all lower case) listed below:
Username: ltcsafety
Password: ltcsafety

Adobe Connect Distance Learning Platform

The project uses Adobe Connect, a web conferencing platform, to host webinars. Facility Team Leads will be able to access the educational opportunities, i.e. webinars and front-line staff training videos, from anywhere using a computer or mobile device that has an Internet connection. Alternatively, you can participate as a group with a computer with Internet connection and telephone with a speaker phone or use the computer speakers to in listen only mode.

HRET advertises all webinars through the project website. Your organizational lead will also send you information via project newsletters, e-blast announcements and calendar invitations to register for the events.
STRATEGY AND TIMELINE

Interventions
Clinical and cultural interventions will be implemented and assessed for improvement in the safety culture and reduction of CAUTIs in LTC facilities. Each of these interventions were developed and/or adapted based on evidence-based CAUTI elimination and safety practices for LTC facilities.

Clinical Interventions
This project will test whether the following interventions (the C.A.U.T.I. Intervention) listed below can be effective in reducing CAUTIs in LTC facilities:

- Catheters in newly admitted and re-admitted residents should be assessed to determine if they are still needed and removed promptly if not indicated
- Aseptic insertion of indwelling catheters and hand hygiene before and after resident or catheter contact should be practiced
- Use regular assessments to insert new catheters only if indicated for appropriate conditions and re-assess periodically
- Training of staff, resident and family on catheter care and appropriateness
- Incontinence care planning to address individual resident conditions

Cultural Interventions
This project will also assess the safety culture at your facility. The safety improvement intervention, T.E.A.M.S., is designed to assist you in developing skills and strategies to improve all aspects of resident safety, not just infection prevention.

The T.E.A.M.S. intervention includes the following processes:

- 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

Project Timeline
The project lifecycle (Figure 1) is 14 months, beginning with registering your LTC facility into the in the planning phase (1) through the completion of the program activities to reach a point of sustainability (phase 3). A description of the baseline activities, data collection requirements, training and educational opportunities, and technical assistance are highlighted below. The cohort-specific timeline and details of the specific activities are linked to corresponding sections of this guide.
Phase 1: Planning
Phase one covers the first two months of the project. It includes the baseline activities and processes that must be in place before the work on the project can begin.

**Activities to Complete**

1. Build your team
2. Register your facility
3. Complete and submit Facility Team Roster
4. Complete Facility Demographics
5. Complete the facility action plan
6. Complete the AHRQ Nursing Home Survey on Patient Safety Culture
7. Complete Skills Questionnaire #1
8. Attend Learning Session #1
9. Attend four onboarding webinars
10. Educate all front-line staff on all four onboarding training topics using train-the-trainer materials

**Getting Started**

**Building the Team**
The project team is critical to successfully implementing the AHRQ Safety Program for Long-Term Care: HAIs/CAUTI quality improvement project. A description of who you should identify to be part of the required and core team, as well as the ad hoc team, is listed below. Once the required team has been identified and recruited, the facility team lead should register their facility into the project.
**Who Should Be on the Project Team?**

The project team will be led by a facility team lead and consist of a set of core team members plus others who participate on an ‘as needed’ basis (i.e. the ad hoc team). See Figure 2 for a summary of the roles and responsibilities and team roles/responsibilities in appendix B for a detailed list of roles, suggested staff members and responsibilities for the core and ad hoc teams. Every LTC facility’s staffing configuration is different. Use the information in the table as a guide for forming your team.

**Core Team**

The core team must have the following four roles identified and filled: facility team lead; administrative champion; survey coordinator and data coordinator. In small facilities, individuals on the core team may be assigned more than one role. In addition to the required roles, we suggest that the team include six to eight members, including a nurse champion, physician champion, infection control/preventionist, and key members of the clinical staff (e.g., RNs, LPNs and CNAs). Informal leaders or respected members of the clinical staff are highly encouraged to be part of the project team, as their participation will be important to project success. Backup team members should be identified for the four required roles to support the project requirements when individuals are out of the office. It is also important that a plan is in place for staff turnover to maintain continuity for all the program components.

**Facility Team Lead.** The facility team lead may be any member of the staff who has an interest in preventing infections in the LTC facility. The facility team lead will be expected to promote the goals of the project to manage, assemble the project team and keep that team engaged throughout the project. The facility team lead also must ensure that all the team members complete their assigned activities (e.g., survey administration, data collection/submission).

It will be the facility team lead’s responsibility to attend educational webinars (live or archived on the program website) and face-to-face learning sessions. For each onboarding and content webinar and training module, the LTC facility team lead will also receive train-the-trainer materials and an instructional guide on how to use the materials to teach front-line staff. The facility team lead can use
the flexible curriculum design of these materials to determine how best to deliver the education to front-line staff.

**Administrative Champion.** The administrative champion should promote the project goals and assist the team with prioritizing safety concerns, policies and procedures. The administrative champion should advocate with senior leadership and the board for LTC facility staff to participate in program activities, as well as share program updates and deliverables with senior leadership and the board. It will be the administrative champion’s responsibility to assist the facility team lead with removing barriers to staff participation and safety improvement efforts.

**Survey Coordinator.** The survey coordinator should ensure the completion of the facility demographics, baseline and final safety culture surveys by all of the staff, and the completion of the skills questionnaire by at least 10 staff members prior to each learning session.

**Data Coordinator.** The data coordinator should collect the required data as per the collection schedule, and remind the team of data collection requirements and deadlines.

**Ad Hoc Team**
The ad hoc team will provide additional resources and skills when requested.

**Figure 2. Program Team Members' Roles and Responsibilities**

<table>
<thead>
<tr>
<th>WHO</th>
<th>RESPONSIBILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility Team Lead</td>
<td></td>
</tr>
<tr>
<td>Administrative Champion</td>
<td></td>
</tr>
<tr>
<td>Data Coordinator</td>
<td></td>
</tr>
<tr>
<td>Survey Coordinator</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Required Roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promote project goals; secure resources and staff time for training and QI efforts; collect and submit required data measures; train, support and mentor front-line staff</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Core Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required roles and Nurse Champion, Physician Champion, Infection Preventionist, Nurse Manager, Front-line Staff, Staff Educator</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ad Hoc Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housekeeping, Maintenance, Social Services, Nutritionists, Pharmacy Staff, IT, Residents, Family Member Advocates</td>
</tr>
</tbody>
</table>

| Participate in training activities; complete required outcome measures; educate residents/families, communicate with clinicians |

| Understand goals of project; participate in training activities and attend meetings; implement discipline-specific protocols |

**Recruiting the Team**
The facility team lead, administrative champion and/or nurse champion should identify potential team members. Each potential team member should be approached individually and invited to participate in
this exciting project that will contribute to improving the safety of their residents and staff. Highlight that team members have been selected based on their expertise in a particular area, their distinctive skills or that they are recognized as a leader amongst their peers. Team members should be assured that facility management has approved their participation in the project and that their work assignments will be covered while they attend meetings or are involved in other project activities. Stress that the facility is pleased to have been selected to participate in this project and that successful participation in this project is a high priority for facility leadership. Once assembled, complete the facility team roster form (appendix C. Facility Team Roster).

Schedule an introductory meeting with all core team members. Draft an agenda to orient the team to the project. See appendix D for a sample agenda. Slides for the various topics will be provided for you.

Promote your facility’s participation in this program by posting flyers about the project in public areas of the building, including it in the facility newsletter (if applicable), and announcing it at staff, resident and family council meetings.

Register Your Facility
Each facility team lead must register for the project online. You will receive a link to your online registration from your lead organization or complete registration on the project website.

The required registration data collected includes:

- Team leader name, telephone number and email address
- Facility name, address and phone number
- Medicare Federal Provider Number (if applicable)
  - If you do not have a Medicare provider number, facility address and contact information will be required
- Number of facility staff members working at least 8 hours per week (whether contracted or employed)
- Number of Medicare and/or Medicaid federally certified beds
- Information about staff access to computers with internet access during work hours for project use.

**Required Team Member Contact Information for Registration**

- Facility Team Lead
- Data Coordinator
- Survey Coordinator
- Administrative Champion

If you have any issues while completing this form, contact ltcsafety@aha.org for assistance.

**Training and Education Activities**
The planning period includes Learning Session #1, which is the foundational event for educating teams about the project interventions and their project participation responsibilities. It also includes the
onboarding series to educate facility team leads and LTC facility staff on topics that are essential to project success.

**Data and Outcome Measures**
During the planning period, teams complete the facility demographics, skills questionnaire and the Nursing Home Survey on Patient Safety Culture. Outcome data is not collected during the planning period.

**Phase 2: Execution**
Phase 2 will provide further educational opportunities for each facility and will be the start of outcome data collection to measure progress.

**Activities to Complete**
1. Review facility team lead instructional videos for all four training modules
2. Educate all front-line staff on all four training module infection prevention topics using the train-the-trainer materials
3. Participate in Safety Culture Survey Results Forum
4. Participate in monthly content webinars
5. Educate all front-line staff on monthly content webinar topics using the train-the-trainer materials
6. Participate in monthly coaching calls
7. Complete outcome data submission monthly
8. Complete skills questionnaire #2
9. Complete quarterly Team Communication Guide submission
10. Attend learning session #2

**PHASE 2: TRACK YOUR PROGRESS**

- Outcome Data
- Training Module #1 All Staff Training
- Training Module #2 All Staff Training
- Training Module #3 All Staff Training
- Training Module #4 All Staff Training
- Safety Culture Survey Results Forum
- Content Webinar (month 4)
- Content (4) All Staff Training
- Content Webinar (month 5)
- Content (5) All Staff Training
- Content Webinar (month 6)
- Content (6) All Staff Training
- Content Webinar (month 7)
- Content (7) All Staff Training
- Content Webinar (month 8)
- Content (8) All Staff Training
- Content Webinar (month 9)
- Content (9) All Staff Training
- Content Webinar (month 10)
- Content (10) All Staff Training
- Content Webinar (month 11)
- Content (11) All Staff Training
- Skills Questionnaire #2
- Learning Session #2
- Team Communication Guide
Training and Education Activities
Educational opportunities are intended to strengthen knowledge and skills related to CAUTI reduction and HAI prevention. Participation in and delivery of the training modules and content webinar train-the-trainer materials to all facility team staff, as well as participation in coaching calls are essential to the success of this project.

Data and Outcome Measures
Data collection during the execution period includes collection of CAUTI outcomes, the skills questionnaire and the quarterly team communication guide. With regards to outcome data, the number of residents and number of residents with urinary catheters are collected daily (Sunday through Saturday), while number of symptomatic CAUTI are collected as they occur. Number of urine culture orders can be collected daily or monthly depending on laboratory reports available in the facility.

Phase 3: Sustainability
Phase 3 of the project covers months 12-14, when the focus of the project turns to ensuring that the interventions that have been put in place will continue without interruption.

Activities to Complete
1. Participate in monthly content webinars
2. Educate all front-line staff on monthly content webinar topics using train-the-trainer materials
3. Complete quarterly Team Communication Guide submission
4. Participate in monthly coaching calls
5. Complete outcome data monthly
6. Complete the safety culture survey
7. Complete Skills Questionnaire #3
8. Attend learning session #3

Training and Education Activities
Phase 3 will continue to provide educational opportunities for each facility via monthly content webinars and train-the-trainer materials, coaching calls and Learning Session #3.

Data and Outcome Measures
Outcome data collection will conclude after month 13 of the project. The final Nursing Home Survey on Patient Safety Culture will be administered in month 13, the final team communication guide and final skills questionnaire must be submitted during month 14.

PHASE 3: TRACK YOUR PROGRESS
- Outcome Data
- Content Webinar (month 12)
- Content Webinar (month 13)
- Content Webinar (month 14)
- Final AHRQ Nursing Home Survey on Patient Safety Culture
- Skills Questionnaire #3
- Learning Session #3
- Team Communication Guide
TRAINING AND EDUCATION

A training and educational events calendar is listed on the project website. Your organizational lead should also be sending you newsletters or reminders in advance of these events.

Learning Sessions
While a majority of the educational programming for LTC facilities is distance-based, the national project team found that having an opportunity for teams to meet each other face-to-face is very important to enable peer learning and creating a peer support network that will continue past the program participation period. The sessions will prepare the LTC facility teams to utilize data collected to inform and implement CAUTI prevention and resident safety skills and techniques. The activities will also present methods to collect, submit and track data to assess progress.

The facility team lead should attend, along with as many members of the core team if available. This is typically a one-day meeting. Your organizational lead will work with you and your cohort to identify a convenient date and location for the meetings.

Learning Session #1 will introduce you to the project and the national faculty and explain the clinical and cultural program interventions. During the session, you will be guided through the process of drafting a facility action plan. At the conclusion of the learning session, you will take the action plan back to your facility to review with your team, and obtain management buy-in. The final action plan should be submitted to your organizational lead within one month of learning session #1.

Learning Session #2 occurs during phase two and addresses current data trends and includes peer presentations sharing lessons learned to date. Topics may include faculty presentations on current project data trends and clinical topics of interest to LTC facility teams, activities related to learning from defects and sustainability planning and opportunities for peer-to-peer learning. Learning session #2 occurs in the middle of the project to provide the participating LTC facilities an opportunity to use lessons learned and best practices to adjust the facility action plan, assess and develop a sustainability plan or try new strategies to achieve project goals.

Learning Session #3 is conducted in Phase 3 project and focuses on spread and sustainability, as well as a celebration of the work accomplished over the past year. Topics may include presentations on current project data trends and clinical topics of interest to LTC facility teams, sustainability plans and opportunities for peer-to-peer learning on best practices and lessons learned.

Curriculum
Most of the project curriculum is designed for two different audiences – the LTC facility team lead and the front-line staff. The facility team lead(s) will lead and coordinate the project at a facility. Facility team lead(s) are generally administrators, directors of nursing (DONs), designated infection preventionists and/or quality improvement or risk managers. Front-line staff may include certified nursing assistants, technicians, floor nurses and others who provide direct care or services to residents throughout the resident’s stay in the facility.
The curriculum was designed to educate these two different audiences using a variety of formats and strategies. The design takes into account the challenge of removing front-line staff from the floor to attend educational sessions and the needs of the staff that are responsible for infection prevention and safety culture in LTC facilities.

For LTC facility team leads, much of the content will be taught by national project team faculty and experts via live webinars and pre-recorded videos. For each topic, the LTC facility team lead will also receive train-the-trainer materials and an instructional guide on how to use the materials to teach front-line staff. Each topic is designed to be delivered in short educational segments to maximize engagement. The train-the-trainer materials can be customized to fit the educational needs and training processes of front-line staff; the facility team lead can choose to use all or some of the slides, videos and/or activities to meet the needs of the team. The facility team lead can use the flexible curriculum design to determine how best to deliver the education to front-line staff, including in-services, stand-up meetings, rounds and daily huddles.

**Figure 3. Educational Components**

<table>
<thead>
<tr>
<th>Name of Series</th>
<th># of Topics</th>
<th>Frequency</th>
<th>What</th>
<th>Format for Facility Team Lead</th>
<th>Format for Front-line Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onboarding</td>
<td>4</td>
<td>Weekly</td>
<td>Project orientation</td>
<td>Webinar</td>
<td>Trained by Facility Team Lead</td>
</tr>
<tr>
<td>Training Modules</td>
<td>4</td>
<td>Biweekly</td>
<td>Infection prevention</td>
<td>Videos</td>
<td>Videos, trained by Facility Team Lead</td>
</tr>
<tr>
<td>Safety Culture Survey Results</td>
<td>1</td>
<td>Once</td>
<td>Safety culture</td>
<td>Webinar</td>
<td>N/A</td>
</tr>
<tr>
<td>National Content</td>
<td>~10</td>
<td>Monthly</td>
<td>Clinical and cultural interventions</td>
<td>Webinar</td>
<td>Trained by Facility Team Lead</td>
</tr>
</tbody>
</table>

After Learning Session #1, facilities are given access to eight education modules, which cover topics that impact project success. These modules start with four onboarding topics followed by four (infection prevention) training module topics.

**Onboarding Series**
A series of four weekly onboarding webinars will be offered during the first few weeks of the program. These webinars are designed to provide fundamental information needed to get started in the project, such as how to build a culture of safety team, what criteria defines a CAUTI and how to collect and enter data.

There will be a 45-minute webinar for facility team leads on each topic, which includes the content, train-the-trainer guidance and an open forum for questions and answers. A train-the-trainer resource manual and materials that accompany this webinar will contain instructional materials on how to teach the material and engage front-line staff with the content. Additional materials, including a slide set, a 15-minute training video for front-line staff, a pre-/post-test or team activity and resource materials.
**Training Modules**

After the onboarding series, facility teams will begin a four-part training module series. This series is intended to strengthen knowledge and skills related to CAUTI reduction and HAI prevention. The training modules will be released biweekly as pre-recorded content on each training module topic (e.g., hand hygiene, environment and equipment, standard and isolation precautions and antibiotic stewardship). The train-the-trainer format for each topic includes:

- A 15-minute train-the-trainer and instructional guide that outlines how the facility team lead should teach and engage front-line staff with the content and
- Two or three short instructional videos that total 30 minutes for the facility team leads to use to deliver the content to front-line staff.

**National Content Webinar Series**

Facility team leads should participate in monthly, national content webinars after onboarding and training modules are launched. The webinars are designed to provide additional education on the C.A.U.T.I. and T.E.A.M.S. interventions and present information on evidence-based practices. Facility teams will be invited to present their experiences implementing the project. All participating facility team members across all cohorts are invited to these webinars, but certain topics may lend themselves to select staff attendance.

Content webinars will be offered monthly during the approximately 10 months remaining in the project. These webinars occur on the third Thursday of each month at 11:15 a.m. CT. Each content webinar includes a 45-minute webinar for facility team leads, train-the-trainer instructions and an open forum for questions and answers. A train-the-trainer resource manual will include an instructional guide on how facility team leads can teach and engage front-line staff with the content, a slide set and a 15-minute video for front-line staff, as well as a pre-/post-test or team activity and resource materials to support the delivery of the content.

**Safety Culture Survey Results Forum**

The Safety Culture Survey Results Forum webinar provides facility team leads and LTC facility administrators with information on how to interpret and use the safety culture survey results to engage facility staff and resident/family councils to leverage culture change in their facility. A review of the 12 dimensions of the Nursing Home Survey on Patient Safety, strategies to implement change and an opportunity to for an open forum to discuss approaches to develop an action plan for high priority areas with other LTC facilities will be available.

This one-hour webinar will be conducted within one month of the release of the baseline safety culture survey results data, approximately two months after the safety culture survey deadline. There are no train-the-trainer materials on this topic for front-line staff.

**LTC Safety Toolkit**

The Long-Term Care (LTC) Safety Toolkit is designed to support learning and implementation efforts to improve safety culture in LTC facilities. In six learning modules, the toolkit provides concepts and tools which aim to change the way facilities do their work and provide care, allowing for better outcomes and
higher quality of care for residents. The toolkit is a prepared set of educational materials that can be used by facility’s educators, team leaders, quality committee leaders, directors of nursing and others to provide facility-directed staff education based on the learning needs of the employees. All toolkit modules and materials are available on the LTC Safety website.

**Coaching Calls**
During coaching calls, the organizational lead will work with facility teams on overcoming barriers, reviewing data trends, answering questions and generally assisting the teams to stay on track. National faculty experts will also be assigned to your monthly call to help answer any questions you have about the C.A.U.T.I. and T.E.A.M.S. interventions. The facility team lead, team champions, data and survey Coordinator should attend these coaching calls, as well as any other staff who would like to participate.

Each monthly coaching call will last approximately one hour and will be scheduled by the organizational lead. An expert faculty member will attend all of the calls, along with the support of an HRET staff member for the first four months.

**Staff In-services and Meetings**
The Team Communication Guide is a tool that can be used to facilitate discussion during monthly team meetings or staff in-services. It can help teams assess their CAUTI prevention strategies, identify opportunities for improvement and develop action plans. Completing and submitting the team communication guide will be required at the end of each project quarter.

The first section of the guide is aligned with the T.E.A.M.S. intervention and focuses on team communication and assessment. The second section helps you track how often each step in the C.A.U.T.I. intervention was completed and to discuss the successes of implementing the C.A.U.T.I. intervention or any opportunities for improvement. The third section can be used to identify any barriers to your team’s progress in CAUTI prevention and/or improving resident safety culture, which will allow you to discuss and develop action plans to overcome these barriers.
MEASURING PROGRESS AND ASSESSING IMPACT

Establishing, standardizing and tracking data measures are necessary for effective project management and implementation in order to drive project success. The measurement goals for the project are to determine CAUTI rates, monitor urine culture requests and catheter utilization rates, and assess team safety culture. All data collected for this project are kept confidential and no resident-level or protected health information will be collected. Facility-level data will only be available to the facility, to the respective org lead and to the national project team—all of whom have signed confidentiality agreements. Additionally, HRET provides ongoing support to org leads and facility teams as it relates to data management. HRET staff and the assigned faculty coach are available to support org leads in this effort.

Measuring Progress

Data measured in the AHRQ Safety Program for Long-Term Care: HAIs/CAUTI project are described in this section.

Outcome Measures

Outcome measures for the AHRQ Safety Program for Long-Term Care: HAIs/CAUTI assesses the number of symptomatic CAUTIs in participating LTC facilities for residents with catheters and for all residents in the facility. The intervention is also targeted at decreasing urine culture requests and catheter utilization to achieve an overall reduction in CAUTI rates. These outcome measures help LTC facility and national project teams know if the intervention is helping to reduce urine culture requests and CAUTIs.

In order to capture catheter outcomes and utilization rates, total resident days and total catheter days are collected on a daily basis. Staff will also collect the number of residents with a CAUTI based on the Centers for Disease Control and Prevention (CDC) National Health Safety Network (NHSN) LTC definition. (See Appendix E. for NHSN CAUTI criteria resources.)

In summary, the following data will be collected:

- Number of new symptomatic CAUTIs attributable to your facility each month during the intervention period
- Number of urinary catheter days
- Number of resident days
- Number of urine cultures ordered for every resident (i.e. with and without catheters)

The number of residents and number of residents with an indwelling urinary catheter are collected daily (Sunday through Saturday), while the number of symptomatic CAUTI are collected as they occur. The number of urine culture orders can be collected daily or monthly depending on laboratory reports available in the facility. Monthly totals for each of these measures are required to be submitted into CDS.
and/or NHSN monthly. The Outcome Data Definitions (Appendix F) flyer provides more information on the technical components of data collection.

**TIP:** Daily outcomes data should be collected at the same time every day. For example, most facilities record their census at midnight; if this is the practice in your facility, we recommend that midnight be the time to capture the number of indwelling urinary catheters.

The data entry elements and collection schedule is displayed in Figures 5 and 6 is described in more depth in the Data Collection section.

This process will be covered during onboarding webinars #2 and #3.

**Process Measures**

Process measures assess behaviors which can be influenced to reduce CAUTI risk. Reviewing this data can help facility unit teams and the national project team recognize where improvements can be applied to modify practices in the facilities to achieve best possible outcomes. Process measures include the skills questionnaire, the team communication guide and tracking training participation.

**Training Participation**

Success of the project depends upon many things, including the level of staff engagement and our ability to raise the knowledge base of staff at all levels about infection prevention. Therefore, facility-specific compliance with project-related training will be monitored. You will be asked to report on the number of staff and their roles who participate in the live webinars (onboarding webinars, training modules and content webinars), as well as those who view the archived webinars. It is also expected that facility team leads utilize the train-the-trainer materials to train front-line staff on the content between each activity. Data will be gathered by HRET through tracking registration of the participant (registrant) of live webinars only. A sample template for tracking participation can be found in appendix G or for a simplified tracking document for all activities refer to appendix A.

**Skills Questionnaire**

The skills questionnaire will be administered by the organizational leads three times during the course of the project to align with each of the three learning sessions and the three phases of the project. This questionnaire will be used to monitor the effectiveness of the educational components provided throughout the program.

There are two versions of the skills questionnaire – one for licensed staff (e.g. RNs, LPNs or more advanced degrees/certifications) and another for unlicensed staff (e.g. CNAs, other technicians or support staff). A **minimum of 5 licensed questionnaires and 5 unlicensed questionnaires must be completed at each facility prior to all three learning sessions.** Core team members should complete the skills questionnaire; however, team roles can sometimes be filled by the same individual, therefore, you may need to reach out to additional or ad hoc team members and facility staff to reach the minimum of 5 licensed and 5 unlicensed questionnaires per facility. Each staff member completing the skills questionnaire will be asked for their state, facility name and lead organization; individual staff names will not be gathered or recorded. Therefore, all individual staff member results will be anonymous. Staff
members are not expected to know the answers to all of the questions at the beginning of the project, but are expected to gain knowledge over the course of the project and become more confident in their answers as the project progresses. Results from the skills questionnaire may be used to tailor coaching calls.

It is the responsibility of the survey coordinator to ensure that all skills questionnaires are completed and submitted online by the due date that coincides with each learning session date.

**TIP:** Reassure staff that they are not expected to know all of the answers to all of the questions at the beginning of the project, but are expected to gain knowledge over the course of the project and become more confident in their answers as the project progresses. Consider holding group sessions with staff unfamiliar with the skills questionnaire answers to guide them through the completion process as some items may not be initially clear.

**Team Communication Guide**
The team communication guide is intended to be used to help nursing home project teams facilitate discussion during team meetings, develop action plans, improve safety culture, and prevent CAUTIs by assessing infection prevention successes and identifying opportunities for improvement. This tool can also be used to guide the project team towards overcoming barriers to CAUTI prevention. This process measure provides important feedback that the organizational lead and/or the national project team can continually reference as the intervention is being implemented to assist the team with diagnosing, tracking and communicating ways to reduce or eliminate barriers. Collaborating as a team to complete the tool also serves as an activity where skills from the T.E.A.M.S. intervention can be employed.

The assessment questions that accompany the guide must be submitted by any member of the project team once per quarter (months 4, 7, 10 and 13) in HRET’s CDS, with input from the rest of the team to report on progress of the implementation of the C.A.U.T.I and T.E.A.M.S. interventions and the teams’ ability to address encountered barriers. Although HRET requires quarterly data submission, project teams are encouraged to use this guide during their monthly team meetings to discuss progress and barriers toward 100 percent implementation of each process measure.

**Culture Measures**
To measure culture of safety, the program uses two tools: the Facility Demographics and AHRQ’s Nursing Home Survey on Patient Safety Culture.

**Facility Demographics**
The program collects data on facility demographics to better understand the characteristics of each facility as well as current policies and procedures in place for infection prevention, catheter management and CAUTI prevention.

This assessment is completed by the team leader one time for the facility at the beginning of the project. Results from the facility demographics may be used to tailor coaching calls and content webinars.
Safety Culture Survey
AHRQ developed a validated survey, Nursing Home Survey on Patient Safety Culture, to track changes in resident safety culture over time, while evaluating the impact of patient safety interventions.

The Nursing Home Survey on Patient Safety Culture contains 42 questions measuring 12 different dimensions:

- Communication openness
- Compliance with procedures
- Feedback and communication about incidents
- Overall perceptions of resident safety
- Staffing
- Supervisor expectations and actions promoting safety
- Handoffs
- Teamwork
- Staffing
- Demographic questions
- Management support for resident safety
- Organizational learning
- Two overall rating questions*

*The two overall rating questions are: 1) I would tell friends that this is a safe nursing home for their family, and 2) please give this nursing home an overall rating on resident safety.

This survey is useful for measuring organizational conditions that can lead to adverse events and resident harm in the nursing home. It can be used to:

- Raise staff awareness about resident safety and why it is so important
- Assess the current status of safety culture in the facility
- Identify strengths as well as areas for improvement
- Evaluate the cultural impact of resident safety interventions
- Compare your facility findings with others (individual facility results are not identified)\(^5\)

Once your facility has completed and submitted a sufficient number of surveys for analysis and reporting, you will receive facility-specific reports, along with assistance in interpreting the results through coaching calls. The reports will be used to identify opportunities for improvements as well as to celebrate success.

Who Completes the Safety Culture Survey?
All staff regularly working at least 8 hours per week in your facility (whether employed or contracted) should be invited to complete the AHRQ Nursing Home Survey on Patient Safety Culture. This survey will be completed at the beginning and at the end of the project. Each facility will identify a survey coordinator who will be responsible for distributing the survey. The coordinator can also be the facility team lead or data coordinator. S/he will encourage staff to complete the survey, which takes about 10-15 minutes to complete.

The organizational lead will send a reminder with the survey link to your facility team lead. Detailed instructions for survey completion are in appendix H.

Approximately two months after the submission deadline, a Safety Culture Results Forum webinar will provide facility team leaders and administrators with information on how to analyze, interpret and utilize their own data to effect change in your facility, as well as an opportunity to discuss strategies for to communicate survey results with staff and develop an action plan with other facility teams.

Data Collection
There are several purposes for data collection and measurement. It can be used for benchmarking against competitors, conducting research or for internal quality improvement. Occasionally, the act of collecting data itself can raise awareness or create sustainable processes for monitoring. Each of the data points must be collected by facilities participating in the project.

Data Entry
Training and instructional guides are available on how to submit data through the project database, the Comprehensive Data System (CDS). If facilities are already entering outcome data into NHSN, then HRET will work with these facilities to confer rights to transfer data from NHSN to CDS. Detailed information about data entry into CDS may be found in the CDS Data Entry Guide.

There are many resources available to support data collection as well, including the Data Collection Tool to document data over the course of the month.

Figure 5. Data Entry and Reporting Portals

<table>
<thead>
<tr>
<th>CDS</th>
<th>Data Collected</th>
<th>Who Completes It</th>
<th>Frequency</th>
<th>Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome Measures</strong>*</td>
<td>Data Coordinator</td>
<td>Monthly, by the 15th of the following month</td>
<td>1st week of each month for month prior</td>
<td></td>
</tr>
<tr>
<td><strong>Team Communication Guide</strong></td>
<td>Facility Team Lead or Survey Coordinator</td>
<td>Quarterly, by the 15th of the following quarter</td>
<td>Learning Session 2 and 3</td>
<td></td>
</tr>
<tr>
<td><strong>Cvent</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registration</td>
<td>Facility Team Lead</td>
<td>1x to enroll</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Facility Demographics</td>
<td>Facility Team Lead</td>
<td>1x at enrollment</td>
<td>1 month after submission deadline</td>
<td></td>
</tr>
<tr>
<td>Skills Questionnaire</td>
<td>5 licensed staff 5 non-licensed staff</td>
<td>3x around each Learning Session</td>
<td>1 month after each Learning Session</td>
<td></td>
</tr>
<tr>
<td>Safety Culture Survey</td>
<td>At least 60% of staff working ≥ 8 hours per week (contracted and employed)</td>
<td>2x – baseline and follow-up (end)</td>
<td>6 weeks after submission deadline</td>
<td></td>
</tr>
</tbody>
</table>

*For cohort-specific dates, teams are instructed to consult their cohort-specific project calendar.

Data Collection Schedule
Data collection occurs as part of the responsibilities of AHRQ Safety Program for Long-Term Care: HAIs/CAUTI participation. The timeline (Figure 6) highlights data collection elements throughout the project.
Performance is monitored on a regular basis according to the project schedule. The national project team has worked hard to reduce the data collection burden to facility teams. Still, CAUTI data collection can be a complex process depending upon the facility’s existing procedures. It is recommended that facility teams keep a copy of their cohort-specific version of the CAUTI project timeline available throughout their involvement in the project, in order to track the required data elements at any given point.

**Reporting**

Facilities, organizational leads and the national project team use reports to monitor the achievements being made or potential areas where there is still room for improvement. Reports enhance the understanding of program status and make it possible to evaluate and modify project efforts, as needed. The collection and reporting of data is an effective means of providing feedback to teams and supports overall project improvement and sustainability.

**Obtaining Reports**

Facility teams can access data reports in HRET CDS for outcome data, safety culture survey and the team communication guide. Organizational leads also have access to these reports, allowing them to assist teams with reporting questions. Facility demographics, skills questionnaire and culture survey reports are also sent directly to the organizational leads from HRET. National project summary reports are also posted on the project website.

**Using Reports**

Because the data collection and monitoring process of this project is critical to monitor CAUTI rates, urine culture requests and to remain aware of catheter utilization, it is important to review reports on a regular basis and provide consistent team feedback. The national project team encourages teams to be creative in how reports are applied, and brainstorm ways to utilize reports that may not be listed below. Below are some suggested steps for how teams can use reports.
1. Review report information at the monthly coaching planning call with the faculty coach and HRET advisor. Organizational leads can pull the reports before the call and determine data trends and interventions to discuss.

2. Review report information at the monthly team meeting. Team leads can pull the reports before the meeting and supply printouts for other team members to review.

3. Possible questions to ask each other during team meetings:
   a. Are CAUTI rates decreasing?
   b. Is catheter prevalence increasing or decreasing?
   c. Is the number of urine culture requests decreasing?
   d. Are indications appropriate? If not, are there any indications your team should focus on?
   e. What are other teams doing to improve outcome measures?
   f. Do we have adequate support from our nursing, physician, and other executive champions?

4. Do we have adequate support from our nursing, physician, and other executive champions?

5. Share successes with your facility. If the report shows that your CAUTI rates are decreasing or have dropped below the national average, share these successes with your facility.

6. Distribute information to senior leadership.

7. The team communication guide can be especially useful for teams to identify successes and barriers to develop agendas for team meetings, coaching calls or additional training efforts.

Feedback and Monitoring
Facility teams and organizational leads have access to all data reports through the project website and weekly updates from organizational leads. These reports may be useful during regular facility team meetings to monitor progress, improvement and training needs. Organizational Leads will provide one-on-one support to facilities who request help.
TOOLS AND RESOURCES

**Antibiotic Stewardship Brochure**
Print out this brochure to educate residents and families on the appropriate use of antibiotics and help promote shared decision-making.

**Centers for Disease Control and Prevention CAUTI Toolkit**

**CDC’s National Health Safety Network training for LTC facilities**

**Indwelling Urinary Catheter Insertion and Maintenance Checklists**
The indwelling urinary catheter insertion and maintenance checklists can be used to help your facility teams ensure that residents are protected through application of nationally recognized, evidence-based practices during invasive procedures (e.g. catheter insertion/maintenance) to reduce the risk of infection.

The Indwelling Urinary Catheter Insertion Checklist can be used anytime a new indwelling urinary catheter is inserted. A detailed Instructions for Catheter Insertion Use checklist is available.

Similarly, the Indwelling Urinary Catheter Maintenance Checklist should be completed at least once a month on all residents with a urinary catheter. A detailed Instructions for Catheter Maintenance Use checklist is also provided.

**Learn From Defects Tool**
Staff and administrators can use this one-page tool to identify the types of systems that contributed to a defect (a clinical or operational event, situation or safety issue you do not want to have happen again) and follow up to ensure safety improvements are achieved.

**Safety Culture Survey Promotional Flyers**

**Staff Safety Assessment**
This one-page form contains two questions to ask front-line providers and staff that will help determine what risks are present at your nursing home. It can assist in identifying what safety issue your team may want to work on next.
# Appendix

## Appendix A. Activities Checklist

<table>
<thead>
<tr>
<th>Step</th>
<th>Task</th>
<th>Resource Materials</th>
<th>Who's Responsible?</th>
<th>Due Date</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.0 PHASE 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>Complete facility registration online</td>
<td>Facility Registration</td>
<td>Administrative champion or Facility Team Lead</td>
<td></td>
<td></td>
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<tr>
<td>1.2</td>
<td>Complete and submit facility team roster form to organization lead</td>
<td>Facility Team Roster</td>
<td>Facility Team Lead</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3</td>
<td>Complete online skills questionnaire (#1)</td>
<td>Skills Questionnaire (Phase 1)</td>
<td>10 staff members: 5 licensed, 5 unlicensed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.4</td>
<td>Complete facility demographics assessment online</td>
<td>Facility Demographics Assessment</td>
<td>Nurse champion or Facility Team Lead</td>
<td></td>
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</tr>
<tr>
<td>1.5</td>
<td>Attend learning session #1</td>
<td>Learning Session #1 Handouts</td>
<td>Facility Team Lead and 1 other core team member</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.6</td>
<td>Complete baseline safety culture survey</td>
<td>Safety Culture Survey</td>
<td>Data or Survey Coordinator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.7</td>
<td>Complete and submit facility action plan to organization lead</td>
<td>Facility Action Plan</td>
<td>Facility Team Lead</td>
<td></td>
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<tr>
<td>1.8.1</td>
<td>Onboarding #1: Building Your Culture of Safety Team</td>
<td>Webinar, Train-the-Trainer Materials</td>
<td>Facility Team Lead</td>
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<td></td>
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<tr>
<td>1.8.2</td>
<td>Onboarding #2: Understanding CAUTI Definitions</td>
<td>Webinar, Train-the-Trainer Materials</td>
<td>Facility Team Lead</td>
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<tr>
<td>1.8.3</td>
<td>Onboarding #3: Data Collection Training</td>
<td>Webinar, Train-the-Trainer Materials</td>
<td>Facility Team Lead</td>
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<tr>
<td>1.8.4</td>
<td>Onboarding #4: Infection Prevention Surveillance</td>
<td>Webinar, Train-the-Trainer Materials</td>
<td>Facility Team Lead</td>
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<tr>
<td><strong>2.0 PHASE 2</strong></td>
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<tr>
<td>2.2.1</td>
<td>Training Module #1: Hand Hygiene and Standard CAUTI Prevention</td>
<td>Webinar, Train-the-Trainer Materials</td>
<td>Facility Team Lead</td>
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<td>2.2.2</td>
<td>Training Module #2: Environment and Equipment</td>
<td>Webinar, Train-the-Trainer Materials</td>
<td>Facility Team Lead</td>
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<td>2.2.3</td>
<td>Training Module #3: Isolation Precautions</td>
<td>Webinar, Train-the-Trainer Materials</td>
<td>Facility Team Lead</td>
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<td>2.2.4</td>
<td>Training Module #4: Antibiotic Stewardship</td>
<td>Webinar, Train-the-Trainer Materials</td>
<td>Facility Team Lead</td>
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<tr>
<td>2.3.1</td>
<td>Content webinar (month 4)</td>
<td>Webinar, Train-the-Trainer Materials</td>
<td>Facility Team Lead</td>
<td>3rd Thursday of month, 12:15-1 PM (ET)</td>
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<tr>
<td>2.3.2</td>
<td>Content webinar (month 5)</td>
<td>Webinar, Train-the-Trainer Materials</td>
<td>Facility Team Lead</td>
<td>3rd Thursday of month, 12:15-1 PM (ET)</td>
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</tr>
<tr>
<td>2.3.3</td>
<td>Content webinar (month 6)</td>
<td>Webinar, Train-the-Trainer Materials</td>
<td>Facility Team Lead</td>
<td>3rd Thursday of month, 12:15-1 PM (ET)</td>
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<tr>
<td>2.3.4</td>
<td>Content webinar (month 7)</td>
<td>Webinar, Train-the-Trainer Materials</td>
<td>Facility Team Lead</td>
<td>3rd Thursday of month, 12:15-1 PM (ET)</td>
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<tr>
<td>2.3.5</td>
<td>Content webinar (month 8)</td>
<td>Webinar, Train-the-Trainer Materials</td>
<td>Facility Team Lead</td>
<td>3rd Thursday of month, 12:15-1 PM (ET)</td>
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<tr>
<td>2.3.6</td>
<td>Content webinar (month 9)</td>
<td>Webinar, Train-the-Trainer Materials</td>
<td>Facility Team Lead</td>
<td>3rd Thursday of month, 12:15-1 PM (ET)</td>
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<td>2.3.7</td>
<td>Content webinar (month 10)</td>
<td>Webinar, Train-the-Trainer Materials</td>
<td>Facility Team Lead</td>
<td>3rd Thursday of month, 12:15-1 PM (ET)</td>
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<tr>
<td>2.3.8</td>
<td>Content webinar (month 11)</td>
<td>Webinar, Train-the-Trainer Materials</td>
<td>Facility Team Lead</td>
<td>3rd Thursday of month, 12:15-1 PM (ET)</td>
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<tr>
<td>2.3</td>
<td>Complete online Skills questionnaire (#2)</td>
<td>Skills Questionnaire (Phase 2)</td>
<td>Facility Team Lead</td>
<td>10 staff members: 5 licensed, 5 unlicensed</td>
<td></td>
</tr>
<tr>
<td>2.4</td>
<td>Attend learning session #2</td>
<td></td>
<td>Facility Team Lead and 1 other core team member</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5</td>
<td>Submit outcome measures</td>
<td>CDS Reporting</td>
<td>Data Coordinator</td>
<td>Ongoing</td>
<td></td>
</tr>
<tr>
<td>2.6</td>
<td>Submit Team Communication Guide report</td>
<td></td>
<td>Facility Team Lead</td>
<td>Quarterly</td>
<td></td>
</tr>
</tbody>
</table>

### 3.0 PHASE 3

<table>
<thead>
<tr>
<th>3.1</th>
<th>Submit outcome measures</th>
<th>CDS Reporting</th>
<th>Data Coordinator</th>
<th>Ongoing</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2.1</td>
<td>Content webinar (month 12)</td>
<td></td>
<td>Facility Team Lead</td>
<td>3rd Thursday of Month, 12:15-1 PM (ET)</td>
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<tr>
<td>3.2.2</td>
<td>Content webinar (month 13)</td>
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<td>3.2.3</td>
<td>Content webinar (month 14)</td>
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<td>Facility Team Lead</td>
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<td>3.1</td>
<td>Complete online skills questionnaire (#3)</td>
<td>Skills Questionnaire (Phase 3)</td>
<td>Facility Team Lead</td>
<td>10 staff members: 5 licensed, 5 unlicensed</td>
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<td>3.2</td>
<td>Attend learning session #3</td>
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<td>Facility Team Lead and 1 other core team member</td>
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<tr>
<td>3.3</td>
<td>Submit Team Communication Guide report</td>
<td>Team Communication Guide</td>
<td>Facility Team Lead</td>
<td>Quarterly</td>
</tr>
<tr>
<td>3.4</td>
<td>Complete final online safety culture survey (#3)</td>
<td>Safety Culture Survey</td>
<td>Data or survey coordinator</td>
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</table>
## APPENDIX B. Team Roles/Responsibilities

<table>
<thead>
<tr>
<th>Membership Type</th>
<th>Role</th>
<th>Responsibilities</th>
<th>Suggested Staff/Discipline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Core</td>
<td>Facility Team Lead</td>
<td>Recruit team members, promote project goals, deliver information to management about progress, oversee project activities, attend all educational events, implement project interventions (C.A.U.T.I. and T.E.A.M.S. interventions) using the train-the-trainer materials provided, delegate tasks and hold others responsible, lead regular team meetings, track and monitor project progress</td>
<td>Influential staff person who has authority to make decisions, such as: (Assistant) Director of Nursing, Nurse Practitioner, Clinical Nurse Specialist, or Infection Control Nurse</td>
</tr>
<tr>
<td>Required Core</td>
<td>Administrative champion</td>
<td>Obtain clinical leadership buy-in, promote program goals, allocate the necessary resources, facilitate removal of barriers, participate in Safety Culture Results Forum, monitor participation and performance improvement results, ensure that the program remains an organizational priority, ensure continuation of the project if/when there is turnover among core team members</td>
<td>Executive Director or Administrator</td>
</tr>
<tr>
<td>Required Core</td>
<td>Data Coordinator</td>
<td>Collect and enter outcome data, retrieve reports and review with the facility team lead, participate in onboarding 2 and 3 webinars and frontline staff training.</td>
<td>Any staff member(s) with reporting and organizational skills and with access to a computer</td>
</tr>
<tr>
<td>Required Core</td>
<td>Survey Coordinator</td>
<td>Participate in Safety Culture Results Forum, ensure all culture and process data are submitted on time: 1) facility demographics; 2) safety culture survey; 3) skills questionnaire; and training compliance</td>
<td>Any staff member(s) with reporting and organizational skills and with access to a computer</td>
</tr>
<tr>
<td>Role</td>
<td>Title</td>
<td>Responsibilities</td>
<td>Key Staff Members</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Core</td>
<td>Physician champion</td>
<td>Reinforce program aims, educate clinical staff about appropriate indications for urinary catheter use, serve as a liaison to promote project interventions to medical staff and hospital medical staff, support implementation among team, physicians, nurse practitioners/physician assistants</td>
<td>Medical Director or other physician</td>
</tr>
<tr>
<td>Core</td>
<td>Nurse champion</td>
<td>Provide leadership support and guidance for the team, develop and share expertise in program interventions, facilitate the education of other nurses, serve as a role model for nurse empowerment</td>
<td>Director of Nursing or designee</td>
</tr>
<tr>
<td>Core</td>
<td>Infection control/preventionist</td>
<td>Review and participate/educate front-line staff on topics in training module series, provide infection prevention expertise and reinforce infection prevention best practices</td>
<td>Nurse</td>
</tr>
<tr>
<td>Core</td>
<td>Clinical team</td>
<td>Support and mentor direct care staff, relay project information to residents/families and staff, communicate with physicians/NPs/PAs, provide in-service training, collect and report infection control data</td>
<td>Nurse manager and/or charge nurse, nursing assistant, staff development coordinator/educator, QI/QA lead</td>
</tr>
<tr>
<td>Ad Hoc</td>
<td>Other LTC staff</td>
<td>Attend team meetings as needed, support the team on specific activities, implement discipline-specific protocols</td>
<td>Housekeeping/maintenance, social services, nutritionist, pharmacist, resident or family member, physical therapy, other</td>
</tr>
</tbody>
</table>
APPENDIX C. Facility Team Roster

Acknowledgement of Understanding of the Expectations by Team Members

Each member of the AHRQ Safety Program for Long-Term Care: HAIs/CAUTI team should sign this form. The facility team leader should send this document to their respective organizational lead.

**Facility Name:**

<table>
<thead>
<tr>
<th>Team Role</th>
<th>Name</th>
<th>Credentials</th>
<th>Title</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility Team Lead</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative champion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Coordinator</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Survey Coordinator</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infection preventionist/epidemiologist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse champion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physician champion</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
APPENDIX D. Sample Facility Team Meeting Agenda

The **AHRQ Safety Program for Long-Term Care: HAIs/CAUTI**

**Introductory Team Meeting Agenda**

Project overview and goals

- Why this project is important (from HRET slides)
- Advantages for the nursing home (from HRET slides)

Role of facility team members

- Promote project goals
- Provide input and assist with staff training on CAUTI and safety culture improvements
- Submit process and outcome data

Project timeline
APPENDIX E. NHSN Criteria

NHSN criteria for defining CAUTI for residents in long-term care facilities, including diagnostic and constitutional indicators

CAUTI criteria - NHSN definitions pocket cards

**Criteria for defining CAUTI in long-term care residents:**

<table>
<thead>
<tr>
<th>One or more of the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Fever*</td>
</tr>
<tr>
<td>☐ Rigors (shaking chills)</td>
</tr>
<tr>
<td>☐ New onset hypotension</td>
</tr>
<tr>
<td>☐ New onset confusion/functional decline AND increased white blood cell count*</td>
</tr>
<tr>
<td>☐ New costovertebral angle pain or tenderness</td>
</tr>
<tr>
<td>☐ New or increased suprapubic pain or tenderness</td>
</tr>
<tr>
<td>☐ Acute pain, tenderness, or swelling of the testes, epididymis, or prostate</td>
</tr>
<tr>
<td>☐ Pus around the catheter site</td>
</tr>
</tbody>
</table>

**AND**

<table>
<thead>
<tr>
<th>Any of the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>If catheter removed in last 2 calendar days:</td>
</tr>
<tr>
<td>☐ Voided urine culture positive for ≥100,000 colony forming units (CFU)/ml of no more than 2 species of microorganisms</td>
</tr>
<tr>
<td>☐ In/Out catheter urine culture positive for ≥100 colony forming units (CFU)/ml of any number of microorganisms</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>If catheter in place:</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Indwelling catheter urine culture positive for ≥100,000 CFU/ml of any number of microorganisms</td>
</tr>
</tbody>
</table>

**Fever**

Must have one of the following:

- ☐ Single oral temperature >100°F (37.8°C)
- ☐ Repeated oral temperature >99°F (37.2°C) OR rectal temperature >99.5°F (37.5°C)
- ☐ Single temperature >2°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)

**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
AHRQ Safety Program for Long-Term Care: CAUTI

Collect outcome data!
What are the results of your efforts to prevent CAUTI? Collect outcome data monthly to find out.

Resident Days

- Every day a resident (with or without a catheter) is in your facility = one resident day.
- Collect at the same time, each day of the month.

Catheter Days

Every day a resident has an indwelling urinary catheter = one catheter day.
- Catheter needs to stay in place (i.e. not an in and out catheterization)
- Catheter is through the urethra (i.e. not suprapubic or urostomies)
- Collect at the same time, each day of the month

Number of Urine Cultures

This includes urine cultures ordered for every resident (i.e. with or without catheters) each month.

Number of CAUTIs

- CAUTI is counted on the first day that the cluster of signs and symptoms, lab reports and the presence of a catheter for more than 2 consecutive days are found together.
- CAUTI is an event which may continue for days or even weeks, but it is counted only once, not each consecutive day.
- Note that a resident may have multiple CAUTI events in one month

Remember: Data helps you determine your progress!

Example:
A facility has 7 residents with indwelling urinary catheters for the month of June. During the midnight census the following data are collected:

<table>
<thead>
<tr>
<th>Resident</th>
<th>Days with Catheter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>30</td>
</tr>
<tr>
<td>2</td>
<td>30</td>
</tr>
<tr>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
</tr>
</tbody>
</table>

\[(30 \times 3) + 10 + 12 + 7 + 4 = 123\] catheter days

Questions? Contact ltcsafety@aha.org.
## APPENDIX G. Training Participation Tracker

<table>
<thead>
<tr>
<th>Training Activity</th>
<th>Date</th>
<th>Time</th>
<th># Participants</th>
<th>Plans to Train Front-line Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onboarding #1: Building Your Culture of Safety Team</td>
<td>Thursday, April 30, 2015</td>
<td>1:00-1:45 PM CT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Onboarding #2: Understanding CAUTI Definitions</td>
<td>Thursday, May 7, 2015</td>
<td>1:00-1:45 PM CT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Onboarding #3: Data Collection</td>
<td>Thursday, May 14, 2015</td>
<td>1:00-1:45 PM CT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Onboarding #4: Infection Prevention Surveillance</td>
<td>Thursday, May 21, 2015</td>
<td>1:00-1:45 PM CT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training Module #1: Hand Hygiene</td>
<td>Released week of May 25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training Module #2: Environment &amp; Equipment</td>
<td>Released week of June 8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training Module #3: Isolation Precautions</td>
<td>Released week of June 22</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training Module #4: Antibiotic Stewardship</td>
<td>Released week of July 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content webinar (month 4)</td>
<td>July 16, 2015</td>
<td>11:15 AM – Noon CT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content webinar (month 5)</td>
<td>August 20, 2015</td>
<td>11:15 AM – Noon CT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content webinar (month 6)</td>
<td>September 17, 2015</td>
<td>11:15 AM – Noon CT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content webinar (month 7)</td>
<td>October 15, 2015</td>
<td>11:15 AM – Noon CT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content webinar (month 8)</td>
<td>November 19, 2015</td>
<td>11:15 AM – Noon CT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content webinar (month 9)</td>
<td>December 17, 2015</td>
<td>11:15 AM – Noon CT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content webinar (month 10)</td>
<td></td>
<td>11:15 AM – Noon CT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content webinar (month 11)</td>
<td></td>
<td>11:15 AM – Noon CT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content webinar (month 12)</td>
<td></td>
<td>11:15 AM – Noon CT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content webinar (month 13)</td>
<td></td>
<td>11:15 AM – Noon CT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content webinar (month 14)</td>
<td></td>
<td>11:15 AM – Noon CT</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX H. AHRQ Nursing Home Survey on Patient Safety Culture – Administering the Survey

Steps for Administering the Survey

1. Gather the facility CAUTI team, including your organizational lead, to discuss the safety culture survey.
2. Determine if your facility would like to be included in the AHRQ comparative database and let your organizational lead know. Complete the data use agreement and submit it to your organizational lead, if applicable.
3. Identify how you will use and promote the survey collection and reporting of results within your facility.
4. Complete survey timeline with support from your organizational lead and facility CAUTI team, including the administrative champion. It is important that the value of this survey is demonstrated and modeled throughout the facility.
5. Promote survey with support from facility leaders. You may also develop and distribute your own materials. We encourage you to make it fun!
6. Engage staff in asking questions about the value, benefits and use of the survey.
8. Gather the facility CAUTI Team, including your organizational lead, to discuss the safety culture survey results and action plans for review and dissemination with staff.

Steps for Sharing Survey Results

1. Set a time to review results with staff six to eight weeks following survey completion to review results and discuss actions related to the feedback. AHRQ provides a list of initiatives related to

2. Continue to follow-up with staff regarding the importance of resident safety culture.

3. For questions about submitting your survey data to the AHRQ Nursing Home Survey on Patient Safety Culture comparative database, please email DatabasesOnSafetyCulture@westat.com or contact the helpline at: 1-888-324-9790.

Survey Respondents
All employees are encouraged to complete the survey; however a 60 percent or greater response rate is required. This goal is to optimize the validity of the results. Reports will be regularly available to you through your organizational lead, to help you monitor the survey response rate of your facility. All staff regularly working at least eight hours per week in your facility (whether employed or contracted) should be invited to complete the AHRQ Nursing Home Survey on Patient Safety Culture.

Survey Mode
Please encourage all staff to complete the survey online. However, if necessary, surveys can be administered via paper and collected anonymously (e.g., locked or closed box drop-off) for later manual data entry. For example, if computer access is limited at your facility you may choose to print the survey for distribution to staff to maximize the number of staff completing the survey.

Staff Time
You may also want to consider scheduling uninterrupted time for staff to complete the survey; for example, you could make a computer available during an extended 15 minute staff break. During this time, you should be available to answer any questions they may have. Additionally, if staff are more comfortable taking the survey home to complete and entering online later, that is a good practice to ensure staff are comfortable completing the survey.

It is the survey coordinator’s responsibility to ensure that all paper forms collected from staff are entered through the online link. Therefore, it is highly encouraged that, if possible, staff be given the time and opportunity to complete and enter the survey during their regular work hours to minimize late entry online.