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Building a Team to Reduce CLABSI and CAUTI

Prepared by the HAP Quality Initiatives Department
Healthcare Associated Infection Prevention Managers
September 2019

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**EVERYONE
HAS A
STORY**

Purpose of the Toolkit

The purpose of this toolkit is to teach you the key elements that are essential in building a successful team to reduce central line associated bloodstream infections (CLABSI) and catheter associated urinary tract infections (CAUTI) on your unit. The toolkit will give you information on how to develop a team, assess your work practices, develop an action plan, implementation changes, and evaluate your success.

Team development

Who should be on your team? Were you selected or did you volunteer to be on the team? Do you have a passion for reducing CLABSI and CAUTI on your unit?

There should be at least 2 staff members to lead the team. It should be multi-disciplinary. Others you should consider:

- Infection prevention
- Staff from all shifts (at least one representative)
- Nurses as well as personal care techs (aides)
- A manager, if available
- Nurse educator
- Physician or mid-level provider champion
- Others as needed such as materials management, administration, transport, and PT.

Once your team is formed, you should set up a meeting where you will decide:

- How often you will meet
- How to communicate with each other (e.g. email, text message, staff lounge bulletin board)
- Review data (CLABSI/CAUTI)
- Develop a plan to move forward

To keep everyone engaged, it is important to connect **what** you are doing to the **why** you are doing it. Do you or a team member have a personal experience with a hospital-associated infection? Do you or a team member remember a patient's experience to share? No one wants to intentionally cause a patient harm, so having a patient story can energize the team to improve practices on your unit.

To work effectively as a team, you will need to have shared knowledge and shared attitudes. The more engaged your team is, the greater the likelihood of success. Teams are driven by “what’s in it for me?” and “how will the change in practice improve patient care?”.

Everyone’s voice is important, but don’t get stuck trying to “fix” everything. You need to identify problems or gaps in practices, decide on the actions to address them, and implement your plan.

Gap analysis

The gap analysis can be done by taking a **quick survey**. Go to <https://www.surveymonkey.com/r/PV287D9>

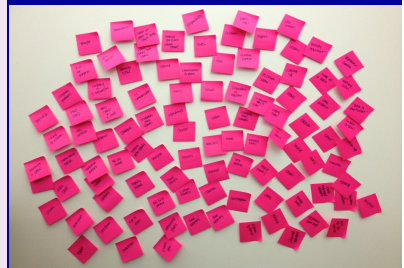
It can be taken as a team, or if time is limited, by a senior staff member that is familiar with your unit’s practices. The results will summarize your current insertion and maintenance practices for CLABSI and CAUTI. The team will also learn about the culture and attitudes on your unit. Your team should now have a good idea of the gaps in practice and attitudes that need improvement.

Action plan & Implementation

Now that your team has identified gaps in practice, it’s important to narrow down the ones you want to work on. This can be done by picking the easiest to accomplish or picking the one most likely to reduce infections. No matter what you chose, it should be done with input from the entire team. You can post “gaps” in a common area and ask staff to prioritize them. This will help get buy in with better chance of success.

Once you know what you will work on, develop a plan for implementation.

- ⇒ Brainstorm ideas of what will work to meet your goal. Remember, goals should be measurable.
- ⇒ Designate someone who will be responsible for getting the information/ interventions out to the staff.
- ⇒ Designate who will collect the audits.
- ⇒ Determine how information/data will be communicated to staff (email, bulletin board, newsletter, etc.)
- ⇒ Decide on how feedback will be collected from staff as to what is working and what is not? What needs to be tweaked?



Once you have implemented your plan, be sure to let staff know how your action plan is progressing. What data can you share?

- ⇒ Days since last infection
- ⇒ Infection rates and SIRs
- ⇒ Device utilization
- ⇒ Results of audits for maintenance practices

You should have a place on the unit that is dedicated to this collaborative, where you can post feedback and results. As you know, data can drive change.

Have your team develop a name for your project and a creative way to display the data?

Remember, not everyone changes at the same rate. Some will adopt new practices earlier than others. It's important to know that everyone has the ability to change but it may take some longer than others. The collaborative's aim is to ingrain best-practices so that when the collaborative is over, these practices are part of routine patient care.

Education and Interactions

Was lack of education one of your gaps identified?

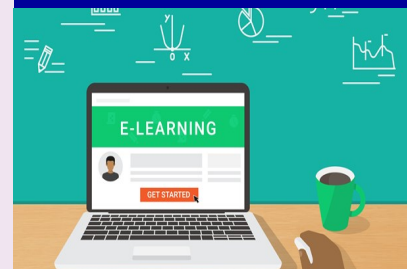
There are two eLearn modules available for general use on **CLABSI** and **CAUTI** prevention.

For **CLABSI**, go to: <https://rise.articulate.com/share/CFPdT4K9LlwI-IC0sSZcUHX2FwqSafvZ#/>

For **CAUTI**, go to: https://rise.articulate.com/share/2iPVsWiXNpvsBZReu15v2_yMGTJtWS04#/

They cover indications, insertion, maintenance, and removal of devices. Feel free to share them with your staff. If you need the url or pdf, please reach out to a project manager.

It is expected that you or your co-leader attend one networking call each month. This is when hospitals in the collaborative discuss their barriers to project implementation as well as share their successes. You can rotate the responsibility or attend them all. However it is important that information from these calls be shared with other team members.



Do you need more help? Not sure where to start? Have a question?

Contact us at: **Quality_Response@haponline.org**

So let's look at what are best practices for the reduction/prevention of both central line associated blood stream infections and catheter associated urinary tract infections.

CLABSI prevention

CLABSI are caused by bacteria entering the bloodstream. This can occur in several ways but most commonly it is attributed to insertion or maintenance practices.

Infections related to insertion usually occur within the first five days of dwell time. This is usually due to poor insertion practices.

Best practices for insertion include:

- Perform good hand hygiene
- Use maximum barriers including a large drape. Max barriers include cap, mask, gown and sterile gloves
- Use a chlorhexidine-alcohol prep
- Choose an insertion site– subclavian is better than jugular which is better than femoral
- Secure line but do not suture
- Dress the site with either an impregnated CHG disc or use a CHG tegaderm dressing

Other practices you should incorporate include:

- Use a checklist
- Nurses are empowered to stop the insertion if best practices are not being followed
- Femoral lines are avoided or replaced as soon as possible



Maintenance practices include both the dressing as well as the tubing.

Each disruption of the dressing increases the chance of an infection so it is very important to keep dressings dry and intact. Placement or location of the line often determines how hard it is to keep the dressing intact. If you notice that dressings are becoming frequently dislodged, you should bring this to the attention of the manager, inserting physician, or infection preventionist. Internal jugular lines can be angled better during insertion to make it easier to dress. Sometimes, a different dressing might need to be used, or a mastic (liquid medical adhesive) can be employed to make the skin sticker so the dressing adheres better. If you think the dressing is a problem, speak to your manager or infection preventionist about trialing a new dressing or mastic.

Dressing changes should be performed aseptically. How often are they changed? Most facilities change them every 7 days or as needed if moist or loose. What is the facility's policy on **cap changes**? Cap changes do not remove the need to scrub the hub including alcohol containing caps. Micro particles of the inner sponge can detach and be flushed into the IV if the hub is not cleaned before using.

Scrubbing the hub before accessing removes bacteria that can be introduced into the bloodstream with fluids or flushes.

When disconnecting a secondary IV, always cap the end. Do not let the line hang off the IV pole or plug into an upper port on the administration set.

What is your hospital's policy on **IV administration tubing** sets? Continuous tubing or primary tubing, if not disconnected, is usually changed every 72-96 hours unless it is used for propofol or TPN. Secondary tubing that is used for antibiotics or other medications is usually changed every 24 hours. If a primary tubing is disconnected for the patient to use the bathroom, go to therapy, or for testing, it is considered secondary and should be changed as such.

Always remember to wash hands or use an alcohol based hand rub (even if using gloves) before accessing a central line. Also change gloves and clean your hands when working on a different area of the body before accessing the line. For example, remove gloves and clean your hands after starting a tube feed and then accessing a line.

Avoid drawing blood samples from the central line. What is your hospital's policy?

The simplest way to decrease the use of central lines is to get them out as soon as possible. Discussion of line necessity should be part of your daily practice.



CAUTI prevention

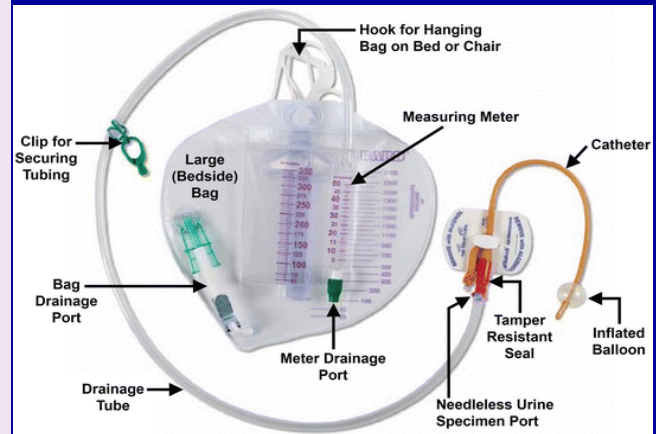
Insertion of urinary catheters should be done aseptically. Many hospitals have adopted the two person insertion team. One person is the observer and can help the patient maintain position and get supplies if needed. The other person is the inserter.

CAUTIs that occur from poor insertion practices can often be eliminated by a back to basics review of asepsis and a two person insertion team.

Maintenance of a urinary catheter includes:

- ⇒ Securement of the device.
- ⇒ Keeping the drainage bag below the level of the bladder and make sure it does not touch the floor.
- ⇒ Keeping the drainage tubing free of kinks or loops so that the urine is free flowing.
- ⇒ Maintaining the tamper resistant seal which keeps the drainage system closed.
- ⇒ Emptying the bag using a dedicated (for one patient only) clean collection container.

Indications or criteria for use of an indwelling urinary catheter should be followed. Your hospital should have a policy on appropriate criteria.



Nurse driven protocol

Does your hospital have a nurse driven protocol to remove the catheter once it does not meet criteria? If so, do you consistently use it? If not, why not?

Daily huddles or rounding are a good place to discuss the Foley catheter. The question should not be "can the Foley come out" rather "what is the plan to get this Foley catheter out?"

There are lots of alternatives to indwelling catheters. Let's look at them. First consider, why the Foley being used? Is it for incontinence, skin break down, strict I&Os or retention issues?

There are many alternatives to Foley catheter use. A patient can be straight cathed, use a bed side commode with regular toileting, use a urinal or an external catheter.

If the reason you are using an indwelling catheter is I &O and you are not actually titrating medication based on that, an external device might be substituted. There are external catheters for both men and women now.

Does your ICU use them?

Talk to your manager/infection preventionist about trialing them if they are currently not available.

Remember, if you don't have an indwelling urinary catheter, you can never get a CAUTI.

What is your OR and ER doing about decreasing their use? Does your ICU discharge patients to the ward with a Foley catheter. Talk to the infection preventionist about this.

For more information on indications or criteria for use, check out Dr. Jennifer Meddings **webinar**.

Go to <https://hen.adobeconnect.com/phuef4wzx67e/>

