THA SEPSIS COLLABORATIVE

TIME TO ANTIBIOTIC ROADMAP

A growing body of evidence suggests that timely antibiotic administration is associated with reduced sepsis mortality. This roadmap provides a simple guide and resources for improving antibiotic timeliness.

STEP 1 - ENGAGE LEADERSHIP

Foundational leadership engagement questions to ask may include the following:

- What are the barriers to organizational support for implementation?
- What characteristics of successful leadership engagement are missing?
- What needs to be in place to enhance leadership buy in and support?

STEP 2 - KNOW YOUR ORGANIZATION'S CURRENT PRACTICE

Three tools for learning current practice include measurement, observation, and interviews.

- ***Measurement:*** Use the Time-To-Antibiotic Assessment Tool on the back of this form to answer five yes/no questions on up to eight sepsis records.
- ***Observation:*** Spend time observing sepsis care delivery and note actions and workflow related to timely antibiotic administration.
- ***Interviews:*** Ask staff to describe their antibiotic-related actions and workflow, including common causes of delay. Talk with providers, pharmacy, nursing, lab (phlebotomy) and any other pertinent stakeholders.

Resource on back: List of common tasks required prior to antibiotic administration.

STEP 3 - IDENTIFY CAUSES OF DELAY

Once current actions and workflow are well-understood, identify those which contribute to delay in antibiotic administration. Questions to ask may include the following:.

- Which tasks are delayed most often? Why?
- Which tasks create the longest delay? Why?
- Which healthcare roles or departments are involved in tasks with delays?

Resource on back: List of common contributors to delay.

STEP 4 - RANK CAUSES OF DELAY BY PRIORITY FOR IMPROVEMENT

Some causes of delay may be easier to improve than others. Rank the list of identified contributors to delay in priority order for improvement. Questions to consider include:

- Which contributors can be resolved quickly and easily?
- Which contributors will make the biggest impact on time to antibiotic if resolved?

STEP 5 - IMPLEMENT AN IMPROVEMENT INITIATIVE

Implement an improvement initiative on the priority cause of delay.

- Involve staff who routinely do the task in planning and implementing the initiative
- Use small tests of change in rapid cycle improvement
- Track performance through ongoing measurement, observation, and/or interviews

STEP 6 - HARDWIRE SUCCESSFUL PRACTICES

Note the strategies that result in improvement and integrate them into routine practice.

- Is the process standardized?
- Does the process rely on the memory or vigilance of staff?
- Does the process include forced functions or redundancies as double checks?

Resource on back: IHI Action Hierarchy Tool

THA TENNESSEE HOSPITAL ASSOCIATION

TIME TO ANTIBIOTIC ASSESSMENT TOOL

Instructions: For each record, enter Yes or No for each process. Note additional pertinent points in the Other section. Enter N/A if a process is not applicable.

PROCESS	CHART 1	CHART 2	CHART 3	CHART 4	CHART 5	CHART 6	CHART 7	CHART 8
Initial antibiotic ordered within one hour of sepsis/infection diagnosis								
Initial antibiotic infusing within one hour of sepsis/infection diagnosis								
IV access established timely								
Blood cultures drawn timely								
Other:								

COMMON TASKS REQUIRED PRIOR TO ANTIBIOTIC ADMINISTRATION

- Bring patient to care environment to receive treatment
- Obtain antibiotic allergy information
- Start an IV
- Collect labs, blood cultures
- Call code sepsis
- Obtain antibiotic order from provider
- Get an accurate patient weight
- Pharmacist approval of order, dosing
- Possibly acquire additional IV access
- Gather supplies to administer IV
- Obtain antibiotic (med cabinet, pharmacist)
- Check antibiotic compatibility with pressors

COMMON CONTRIBUTORS TO DELAY IN ANTIBIOTICS

- Difficulty getting IV access
- Waiting on lab to draw blood cultures
- Waiting on provider to order antibiotic:
- Provider busy
- Provider waiting on diagnostic test results
- Waiting on pharmacist to approve or dose antibiotic
- Waiting on pharmacy to prepare and dispense antibiotic
- Sending patient for diagnostic testing
- Staff not aware of urgency related to antibiotic timeliness
- Antibiotic stewardship concerns
- Nursing delay in administration:
- Nurse busy
- Nurse not aware blood cultures have been drawn
- Nurse not aware antibiotic is available

RESOURCE:

IHI Action Hierarchy Tool helps ensure your planned actions are strong and sustainable. The tool can be downloaded at http://www.ihi.org/resources/Pages/Tools/Patient-Safety-Essentials-Toolkit.aspx under the section entitled "Download Documents." You must sign up for a free account to download the tool.