

Tips for Data Collection and Measurement

Measurement team:

- Engage all stakeholders in data collection and monitoring process
- Assign one person each day, on each unit, to monitor the critical test values called to the unit that day; have each unit record the data on a standardized data collection form and fax (send) it to the measurement team for compilation; this can eliminate retrospective chart review and provide helpful descriptive information about the critical tests that are called, your communication process, and the type of clinical action that might be required for your patients; this could serve as the foundation for protocol development to standardize the process

Measurement:

- Real-time data tracking is best; if possible work towards automating the process of notification from the laboratory and other diagnostic testing centers with built in alerts if automated process not successful.
- Print a daily list of all critical test values called to every floor; set up a regular process to be sure each test was communicated and that the chart reflects appropriate documentation of the process; this will eliminate retrospective chart review and move you closer to real-time tracking of results
- If real-time data tracking is not possible, try to review charts while patients are still in the hospital; get the list from the lab of all critical values reported the previous day and audit those charts; this method eliminates the chart retrieval process from medical records
- Set goal to review 100% of all critical test results called out of the lab to assure reliability of the process
- Follow up on every outlier to learn about where your processes have failed and where you can make improvements to your communication system

Measurement strategies:

- For baseline assessment, review the number, type, and location of your critical test reporting for one week, or one month, depending on the size of your institution; review these data and select a test(s) to track that you believe is most problematic for your institution;
- For monthly data collection, randomly select and review at least 20 charts each month from all those with a critical value; don't get bogged down with data collection
- Periodically complete real-time tracking and review of critical test results; monitor real-time tracking also after hours or on weekends
- If your institution has a large number of critical test values reported out daily, begin by focusing on only one critical test value, and tracking every critical test value of that is reported for that test, e.g. potassium or glucose, each month; the goal should be to track every critical test value to verify that your process is reliable
- Eliminate dialysis patients from the data collection pool

- *Goal is to be sure our process of MD notification is reliable; we want to be sure these results were reviewed by the responsible physician and a clinical decision was made for the patient, based on these results*
 - Begin by improving your process of documenting that the responsible physician is notified (acknowledged); “time to clinical acknowledgement” means that the responsible physician has received the results and accepts the responsibility for acting on those results
 - Tracking the average time to clinical acknowledgement helps you get started on the project and track your project; some teams felt this measure helped them build interest in this initiative by illustrating the faults in the existing system
 - Your team may decide to move to median time; although you likely see improvements, continue to track every outlier
 - Decide how to handle missing data one suggestion is to substitute a standard value (e.g. your average time)
 - Don’t just look at charts with good documentation
 - Report results on every case, those with end point data and those without; all of those are failures in your system
 - Discuss and decide on the end point your hospital will use for this communication process – *Typically the endpoint is the time the responsible provider has made a decision about the treatment plan for the patient, based on the results/interpretation of this test*
 - The endpoint can be defined as:
 - An order
 - A decision to wait; do nothing (monitor)
 - Decision to repeat the test
 - Change or order a medication
 - Other testing
 - You will find the endpoint in:
 - Orders – verbal orders, medication orders
 - Patient flow sheet
 - Timed clinical documentation in progress notes from medicine or nursing
 - Some additional measurement options are:
 - Time responsible provider (MD) notified (acknowledged)
 - Time of documented clinical decision made for the patient based on the critical test result/interpretation; note that MD acknowledged results and decision made for the patient
 - Time clinical action (intervention) taken for the patient
 - Share stories of successes and failures within your system to build interest and support for the project; make results highly visible to staff on clinical units
- The following forms “Data Collection Form” and a “Self Graphing Spreadsheet” can be found at the MA Coalition’s website at: www.macoalition.org/initiatives