

Clinical Decision Support (CDS) When Ordering Lab Tests in Epic

There are thousands of laboratory tests available and it is not possible for any one physician to keep up with all the changes occurring every month. This is especially true of molecular laboratory testing and the dramatic increases in the sensitivity of these tests.

One of the goals of laboratory leadership is to provide guidance on problematic lab testing also known as Clinical Decision Support (CDS). We will highlight different examples of CDS in LabWire in the coming months. This month we are looking at GI PCR.

Problem: GI PCR being ordered on inpatients

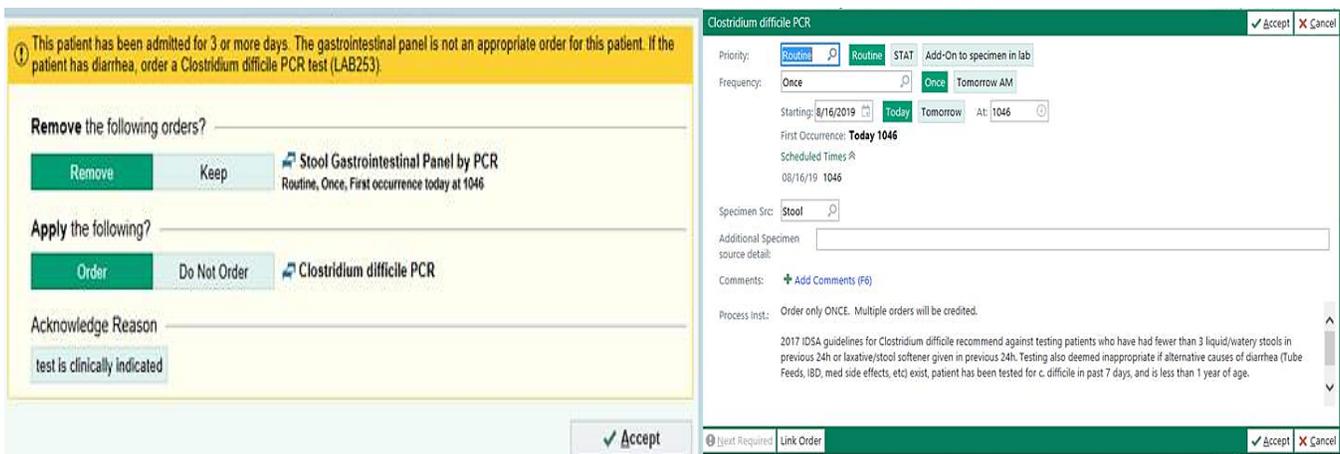
Why: Other than C. diff, the organisms detected by the GI PCR panel should never be acquired in a United States hospital.

CDS action: An alert not to order the test.

Example: GIPCR ordered on inpatients post 3 days of admission

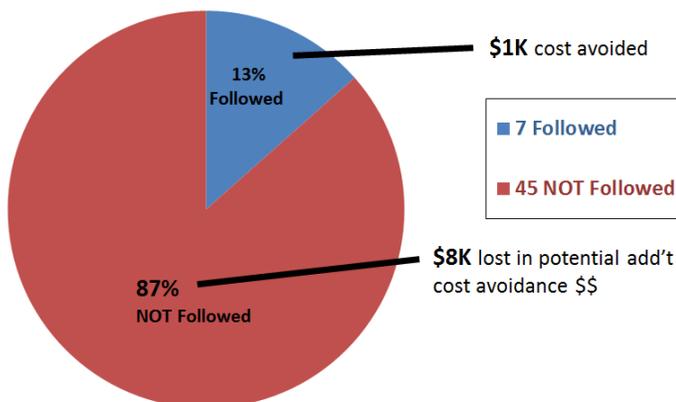
The CDS rule will trigger:

- A Display of Cdiff or GIPCR results within last 7 days and
- A Clinical Support message to discontinue or order Cdiff if 3 day liquid stools documented.



Results:

52 Total Support Messages Triggered (Jan-July 2019)



Summary:

Of the 45 not followed:

- 37 were negative & 8 positive for C. difficile
- Therefore, **not one case** required a GIPCR post 3-day admission.
- Working towards stronger support to decrease the amount of unnecessary GIPCR testing performed, capture additional cost avoidance, and ultimately lead to right test at the right time.

View conclusions at top of next page.



Clinical Decision Support (CDS) When Ordering Lab Tests in Epic (continued)

Conclusions:

- GI PCR may be appropriate at the time of admission for appropriate symptoms but does not make sense after admission
- Evaluation of the data indicates no clinical benefit when the GI PCR is ordered on inpatients after 3 days.
- Most of the CDS alerts for inpatient GI PCR are being ignored resulting in the losses in the tens of thousands of dollars per year.

Staphylococcus aureus Screen Test Changes – effective 9/26/19:

Current assay detects both MRSA and Methicillin Susceptible Staphylococcus aureus (MSSA).

Upon review, MSSA result was deemed a non-value add to the diagnosis of infection and colonization.

Therefore, the new screening test will only include detection of MRSA. The new screen also comes with enhanced sensitivity and specificity along with capability to detect new emerging MRSA targets that have been identify globally.

No change to the order and collection process. This will be a seamless transition.

GC & Chlamydia Rapid Molecular Testing Update – effective immediately

Assays are now FDA approved for Oral and Rectal sources. No change to order or collection container process.

New Saturday Walk-in Hours at Bronson South Haven Lab

Patients can now experience quick, convenient Saturday lab services at Bronson South Haven. The Bronson lab, located inside the hospital, is now offering no appointment necessary walk in blood draws each Saturday from 8 a.m. to noon.

New Bronson Laboratory Due to Open on June 1, 2020
400 John Street, Kalamazoo



Bronson lab has occupied the same 24,000 square foot space for the past 30 years. With a combination of new innovations in clinical laboratory medicine technology and the increase in volume due to Bronson's growth in the last 10 years, the current building infrastructure and space have been stretched beyond capacity. Annual test volume alone has grown from a couple hundred thousand tests to more than three million.

To address the need for more space, a new laboratory facility is currently being constructed at 400 John Street, adjoining the historic Kahn building/Kalamazoo Gazette is scheduled to open on June 1, 2020.

The 55,000 square foot building will have two stories with a partial basement for storage. The clinical analytic lab will occupy the first floor, sharing the space with a dock, warehouse and lab service support. The second floor will house the pathologist's offices and mechanical penthouse. The laboratory will be connected via pneumatic a tube station to both the north and south campuses.

Key dates include:

- Framing and enclosure is scheduled to be completed in October 2019.
- Interior and receiving dock will be prepped for instrument deliveries by mid-February 2020.
- Orientation, training and open house anticipated during May 2020.
- Laboratory transition from current space to new facility is targeted for May 26-June 1, 2020.