EMR integration and your Laboratory Information System

Integrating your Hospital Electronic Medical Record (EMR), or Physician Outreach EMR system to your Laboratory Information System (LIS)? You don’t have to go it alone. We have experience and want to work with you to ensure your outbound system works with your current or new Laboratory Information System.

Correct orders, results, billing, compliance, and patient safety are all critical to success. When system tables are populated for integration, our experience has shown the importance of having laboratory builds done by certified laboratory personnel (e.g. ASCP), who also meet the EMR’s certification requirements. Misstep's during build can lead to project scope creep, jeopardize go-live, or worse you could go-live with an incomplete system. Incomplete system build affects billing resulting in lost revenue, and affect patients orders and results leading to improper and delayed diagnosis.

Our tips for planning a successful integration for your Lab:

Orders/Tests Build:

**ISSUE:** Orders/Tests Build must be done correctly in order to avoid increased testing time and increased interface issues as the project moves forward.

**SOLUTION:**
- Obtain a complete laboratory testing order list including all inpatient work, outpatient work, and outbound EMR systems order codes.
- Testing team should include certified laboratory personnel (e.g. ASCP) to ensure the lab orders are built to completeness, and Round Trip testing is done correctly.

Physician Build:

**ISSUE:** If Physician Build is not done correctly, the system will not allow orders to be placed, or results to post after go-live.

**SOLUTION:** Obtain a complete list of all inpatient and outside physician office doctors so they can be built in the LIS to allow orders and results to process as expected.

Billing Build:

**ISSUE:** Billing Build needs to be completed prior to testing in order to allow accurate system testing.

**SOLUTION:** Time and time again, we have seen that not having the Billing Build done before testing has resulted in lost revenue for the Hospital and Lab.
- Ensure all laboratory orders have charge codes built in the billing system for later testing.
Interfaces:

**ISSUE:** Lack of a clinical resource on your interface team will lead to validation and terminology issues between your integrating EMR and LIS systems when pairing order codes for translations.

**SOLUTION:** Performing this step correctly will prevent resulting go-live orders from being placed incorrectly.
- Have a laboratory clinical resource assigned or teamed with an interface analyst.
- Have a clinical analyst review translation tables.
- Have an ASCP certified resource setup the Data Innovations or Dawning build to insure correct specimen mapping for all lab analyzers.

Results Testing:

**ISSUE:** To correctly validate a full round table of the FULL system build, there are three key areas where testing and validation must occur.

**SOLUTION:** We have spent years performing just these types of tests for our clients.
- Mapped Record Testing (MRT): Order codes from the EMR are validated to the LIS (code for code).
- Billing Validation: Orders placed via EMR should be checked to make sure what is actually charging. *Note:* This can be tricky since billing systems are typically build last. Project timelines may not sync.
- Round Trip Testing: Validate order codes from the EMR post to your LIS. Validate results from LIS post to all downstream EMR’s, checking for complete CAP regulatory standards.

Years of experience in laboratory workflow have shown us how important it is to plan these steps properly and execute with the appropriately trained personnel. Our goal is to share what we have learned and join your project as needed to ensure your laboratory software transition is on time, on budget, and provides your Lab with all of the benefits promised. We look forward to hearing from you.

**Contact us for your Laboratory Consulting:**

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