Summary

CUSTOMER

Rhodes Group

CHALLENGES

Reduce inefficiency and increase the accuracy and speed of specimen collection, labeling and analysis.

OUTCOME

Mobile, cloud-enabled interoperable solution to streamline efficiency in specimen collection and labeling.

Rhodes Group + InterSystems

Rhodes Group Partners with InterSystems to Drive Laboratory Efficiency and Patient Safety

Against the challenges of diminishing reimbursement by CMS through the Protecting Access to Medicare Act, and a shortage of qualified laboratory professionals, clinical labs are under pressure to perform better and faster with fewer resources. Faced with shrinking profit margins, labs are looking for ways to improve efficiency and cut costs – while at the same time delivering results in a new reimbursement environment that places a premium on value.

Developers of laboratory software solutions like Rhodes Group play a key role in helping labs achieve these goals. Their latest application, eMyLabCollect, tackles inefficiencies in the collection & labeling of any specimen, streamlining operations for both the hospital and the laboratory.

Specimen Collection & Labeling Today

Traditionally, this process has been rife with inefficiency and risk, with hospitals using primarily handwritten labels for specimens. As a result, laboratory operators and the hospitals themselves often have little visibility or ability to track the specimens throughout the process. It also forces labs to decipher handwritten labels, remove them and replace them with new, instrument-ready labels. This labor-intensive receiving process consumes valuable limited

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Creative data technology

resources like time in an environment where labs must utilize these resources effectively to remain profitable. The need for relabeling also comes with the inherent risk of transcription errors which impacts time, cost and patient safety for the health system.

An Opportunity for Innovation

What if an application could leverage interoperability to receive lab orders and patient information from any system, and know the type of analyzer the specimen requires upfront? And what if the clinician could print an instrument-ready, barcoded label at the point of collection? This would allow the labs to eliminate re-labeling altogether, saving time and labor and enabling them to better optimize scheduling their resources like equipment and staff.

Additionally, an application that is not dependent on any particular Lab Information System (LIS) or Electronic Medical Record (EMR), and which integrates with these systems to receive information from any system via HL7 message, could remove limitations and open up opportunities. For example, such a flexible application could help hospitals collect specimens and labs process samples from outpatient settings such as nursing homes or home care organizations more easily. It could also enable visiting clinician services to deploy mobile staff to rural locations to patients who may not be able to travel to a care setting.

To enable mobile collections in these outpatient settings, Rhodes reasoned that personnel should be able to collect five urine or blood samples at a nursing home, for example. Three of these would be destined for one particular hospital and two for another. The application would produce the correct instrument-ready label for each patient, with the ability to track all orders throughout the process to their corresponding hospital, doctor, and analyzer. When samples arrive at the lab, they should already have the correct label and be ready to go.

Rhodes Group built this exact specimen collection and labeling tool, calling it eMyLabCollect. Clinicians or phlebotomists can download the application to any mobile device (available on both the App Store and Google Play) and see the assigned patients on their schedule. The app even identifies the most efficient route the mobile providers should take to reach their assigned patients and provides driving directions via an integration with mapping tools.

A future version of eMyLabCollect will print RFID (radio-frequency identification) labels, allowing the mobile provider to ship an entire tray of samples to a lab to be processed with greater speed and even less labor on the front end.

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Steve Ayer, VP of Strategic Initiatives and Partnerships, Rhodes Group

Choosing the Right Technology Partners

To build eMyLabCollect, Rhodes Group turned to InterSystems, a longtime partner with a commitment to excellence in healthcare and vast experience. Globally, more than one billion health records are managed by solutions built on InterSystems technology.

eMyLabCollect uses the InterSystems IRIS for Health™ data platform to deliver healthcare data interoperability, analytics, and high performance data management. “Leveraging what IRIS for Health has, it takes most of the complexity of dealing with healthcare data and interoperability out of our hands. I think InterSystems is probably the only vendor that can make that claim,” says Steve Ayer, VP of Strategic Initiatives and Partnerships, Rhodes Group.

InterSystems also works with several technology partners to ensure customer success. After a trial period to assess the best fit for their solution, Rhodes Group chose to partner with Microsoft and leverage the Azure environment. Ayer states that the InterSystems and Microsoft support teams worked seamlessly together to ensure a successful deployment.

Broader Reach, Lower Total Cost of Ownership

IRIS for Health offers the capabilities Rhodes Group needs, such as integration and data management, in one development platform that they would otherwise need multiple point solutions to replicate. Doing so would add complexity and cost to their development; by leveraging IRIS, they were able to lower their total cost of ownership and pass the savings along to the customer.

eMyLabCollect is sold on a subscription basis and is deployed in the Azure cloud in a multi-tenant configuration. For Rhodes Group, Azure offers impressive security and straightforward pricing giving them the ability to easily forecast solution costs which provides added benefits to their customers.

The low net cost of the product – even factoring in the InterSystems data platform and cloud hosting costs – allows Rhodes to offer this solution at about half of what their closest competitor charges.

“It’s not just a cost advantage, either,” said Ayer. “Our solution handles collection in outpatient settings, whereas our closest competitor’s does not. So, we have a much broader reach plus a lower cost of ownership.”

No Limits on Growth as Success Builds

Large hospitals and reference laboratories are taking note of the massive benefits this solution could provide them. As more eMyLabConnect customers come onboard, the company is confident in the ability of the underlying IRIS for Health technology to deliver high availability, disaster recovery, and scalability.

“As we add more tenants to the application’s multi-tenant cloud environment, and their size grows, we’ll take advantage of the database sharding capability to handle that,” explained Ayer, “So IRIS for Health will allow us to grow without having to re-architect the application.”

“The partnership between Rhodes Group and InterSystems has been a great one,” says Ayer. “Eventually our entire platform for laboratories, providers, and payers will be on InterSystems.”