

Custom Solution Manages Scanned Clinical Reports



Background

The area of a clinical lab which sends specimens to "reference laboratories" for analysis is commonly called "the Send Out" area. The client was part of a clinical laboratory that had a homegrown Laboratory Information System (LIS) which lacked the capability to store or display image data. However, downstream Hospital Information Systems (HIS) had acquired the ability to handle image data.

Since the HIS systems could display images, it was more efficient and more effect to scan the paper clinical reports from reference laboratories than to either try to manually enter all the data or to provide copies of the paper on demand. M+H was asked what possibilities we saw for a minimally disruptive, drop-in solution for this problem.

Business Challenge

In order to be a success, the Send Out area has to accurately, quickly and accountably send an image of an incoming paper report to the ordering clinician. Some clinicians want their reports to arrive as faxes; others want to look up the result on-line, intermixed with all other lab results for the same patient.

Send out work is not very profitable, since only a handling fee can be charged. So any and all reasonable and accurate automation is required. But send out staff are not the highest trained or most qualified staff members, so the software to support the process has to be reasonably bullet-proof.

Solution

The client did their own business process engineering. Working with the business process that was specified, M+H proposed a highly integrated but separate software application to support this process. Our solution is a web-based application suite which includes an LIS interface for patient and sample demographics, bar code label generation for reports, bar code recognition for reports, automated transmission of report images to the LIS for on-line viewing and automated faxing of report images to the verified fax numbers of ordering clinicians who prefer to receive faxes.

When the client decided to replace their homegrown LIS with a commercial off-the-shelf LIS, the client decided to keep our solution in place as the new LIS did not provide all the functionality of our solution.

Results

Using our solution, the Send Out area dramatically decreased processing time and increased customer satisfaction.