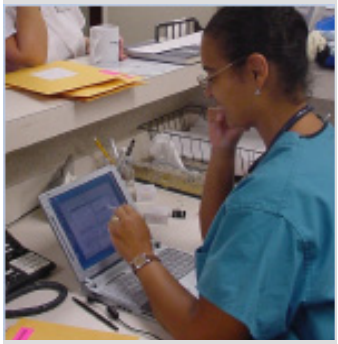
NOVO INNOVATIONS

Case Study

Atlanta Women's Specialists



"As a practitioner, it is important for me to be able to provide lab results as quickly and accurately as possible.

The EMR coupled with direct connectivity to the hospital and lab systems often enables me to report on a mammogram a day or two after the test, as opposed to the week or two it used to take,"

Dr. Yvette Smith
OB/GYN

Atlanta Women's Specialists (AWS), a six physician OB/GYN practice, logs between 120 and 150 patients per day, accounting for nearly 15,000 obstetric and 23,500 gynecological visits each year.

The practice handles approximately 85 deliveries per month at Northside Hospital, making reliable electronic communication with the hospital an integral requirement of the practice.

AWS needed a direct interface from Northside Hospital into their A^4 Healthmatics EMR to receive test results, reports and transcriptions to reduce costs, save staff time and improve the timeliness and quality of information.

AWS had already established electronic connectivity between the EMR and partners like Quest Diagnostics® Lab Information Systems and Genzyme Genetics. The only remaining partner that delivered information via fax and courier was Northside.

In February 2004, AWS went live with Northside's exchange and interoperability grid from Novo Innovations. The system provided secure electronic connectivity and interoperability between the hospital information systems and the AWS EMR – providing results from McKesson, Misys and other systems.

All that was required of AWS were the HL7 interfaces from A^4 Health System to enable the EMR to exchange information.

The grid offered immediate advantages:

- The software was easy to install in just a few hours using vendor supported interfaces
- It required no additional hardware, is private and highly secure and did not require opening firewall ports
- Information is delivered within minutes in a discrete data format
- No duplicate reports are sent

Before the grid, AWS staff would access reports and summaries sent via fax and manually match each one to a patient in the EMR. The volume of information often required several staff members to process the data received from the hospital in a single day.

With the grid in place, information is automatically delivered, directly into the EMR interface for insertion into the EMR. No staff is involved; no matching of patient identifiers is required and no call-backs are made for missing or lost faxes.

How does it work? The Novo Grid software (referred to as a node) runs on a computer on the AWS network to securely exchange data with a node in the hospital.

The hospital node examines HL7 messages from the Quovadx Cloverleaf interface engine to see if it needs to be sent to the AWS node (based on the ordering physician). If so, the grid packages, encrypts and sends the message to the AWS node.

The AWS node receives each message, decrypts it, and puts it directly into the EMR's HL7 message inbox. The EMR processes the message using patient's name, date of birth, gender and social security number to match it to a record in the EMR.

Once processed, the grid returns an HL7 acknowledgement from the EMR to the hospital, providing a secure audit trail.

Today, all lab, pathology and radiology test reports, discharge summaries, surgical notes and other types of information generated in the hospital are automatically exchanged. This has proven valuable in many areas.

- AWS has seen a reduction in labor of over 20 hours per week by eliminating the need to process faxes into the Healthmatics EMR.
- Physicians have seen an increase in the timeliness and quality of information.
- Information is no longer lost and call-backs to the hospital have been eliminated.
- No staff training or disruption has been required to learn and use the system.
- The system is remotely managed by Northside Hospital, ensuring that no messages are lost, and technical support is always available.

The success of the first year is now leading to new uses of the grid. Soon, prenatal records from the EMR will be distributed and synchronized between AWS and Northside, ensuring that these critical records are available and up-to-date throughout the term of the pregnancy.

The Novo Healthcare Grid at Northside Hospital continues to prove the viability of this exciting new approach to EMR exchange and interoperability systems.