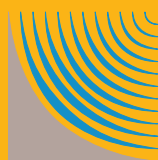


CASE STUDY



SONULTRATM
CORPORATION

NORRAD's* TIMMINS DISTRICT HOSPITAL CREATES A PROVINCE WIDE PACS AND OBSTETRICAL/GYN ULTRASOUND INFORMATION NETWORK

*Northern Radiology

CLIENT:
TIMMINS DISTRICT HOSPITAL

GEOGRAPHY:
NORTHERN ONTARIO CANADA

PARTICIPANTS:
Eight Networked NORRAD Hospitals,
potential for 31 facilities

MEDICAL SOLUTION VENDORS:
TOSHIBA MEDICAL, AGFA,
SONULTRA CORPORATION

CHALLENGE: Develop an electronic, paperless workflow to centralize interpretation and management of OB/GYN ultrasound exams within AGFA's IMPAX PACS for eight NORRAD hospitals. The integrated solution should dramatically reduce report turnaround, improve QA, enhance research capabilities, standardize care, and expand the capacity of the department.

SOLUTION: Sonultra's ULTRA 64™ OB/GYN Ultrasound reporting solution and ImageAdvantage™ advanced system integration provide an essential building block for developing a streamlined paperless solution within NORRAD's existing infrastructure. AGFA provided the IMPAX Imaging solution, and Toshiba and Philips supplied the ultrasound equipment. The collaborative solution required a detailed plan outlining the desired workflow from the NORRAD team of physicians, sonographers and IT Department, as well as a coordinated effort from the vendor participants, in particular AGFA and Toshiba of Canada.

Challenge

Timmins District Hospital, one of the mainstays of NORRAD's network of 31 hospitals, wanted to centralize the clinical interpretation and image management of their OB/GYN ultrasound exams. The network, which covers several thousand square kilometers, faced many challenges, in particular the standardization of patient and report data from numerous incompatible Hospital Information Systems, Modality Work List Brokers, and ultrasound equipment. The motivation was to improve patient care, to increase physician and sonographer productivity, and to automate paperless report distribution. Centralization of multiple data sources for research and teaching was a valuable byproduct from such a large undertaking.

Solution

Timmins District Hospital needed a reliable, easy to use, robust OB/GYN reporting system integrated within its existing AGFA PACS infrastructure. The solution had to streamline reporting and to provide referring physicians with rapid on-line access to patient reports. In addition, the solutions needed to be flexible enough to accommodate remote viewing and documentation of exams in progress, while accommodating a wide spectrum of OB and GYN exams originating from a large network of providers. Finally, data needed to be archived with images and accessible for 20+ years.

Accessibility & Data Management

Maintaining the individuality of report data from multiple facilities is essential for clinical accuracy and for the proper labeling of reports. With the ability to combine or segregate the information at will, with or without images, the solution allows for greater collaboration for research, teach-

ing and diagnoses. The system currently integrates a half-dozen different makes and models of ultrasound scanners at eight different hospitals, utilizing multiple reading stations.

Scalability, and Standardization and Data Management

The system architecture is fully scalable, and capable of combining or segregating information from any or all 31 facilities on the NORRAD network. Sonultra's ULTRA 64™ with ImageAdvantage™ provides a number of tools, including an integrated knowledgebase, for developing efficient documentation, and for research and improved Quality Assurance. An additional tool for standardizing clinical reports among a diverse group of practitioners improves report continuity, while preserving the individuality of each reporting physician.

Productivity & Integration

Constructing a paperless environment improves report turnaround through advanced automation. Standardizing clinical protocols and incorporating them via Sonultra's patent pending approach removes numerous repetitive steps, thereby reducing sonographer and physician interface time to seconds. Research is facilitated by improvements in structured reporting and the categorization of cases. The integration of Sonultra's solutions into an existing hospitals infrastructure transitions a facility to a paperless environment without the need to expand infrastructure. Standardizing multiple facilities across a diversified network streamlines resources and provides significant long term savings and expansion opportunities for all parties involved. Reliable integration with integrity.

