



# IT'S ABOUT SUCCESS

## IMAGE SHARING TECHNOLOGY REVOLUTIONIZES WORKFLOW FOR RADIOLOGY CENTERS AND PHYSICIANS CONNECTED TO ROCHESTER RHIO

### OVERVIEW

Created in 2006, Rochester RHIO, a nonprofit, community-run organization was formed to give health care providers instant access to accurate and more complete patient information. Rochester RHIO is a secure, electronic health information exchange (HIE), powered by Axolotl's Elysium® Exchange. It provides authorized medical providers with patient information from more than 20 health care organizations in the Greater Rochester New York region including hospitals, reference labs, insurance providers and radiology practices – serving more than 1.2 million patients.

### THE CHALLENGES

Early in the RHIO development, Rochester RHIO recognized the importance of including imaging as an integral part of the HIE. Traditionally, medical image sharing had required clinicians to log directly on to multiple disparate Picture Archiving and Communication Systems (PACS) in order to view their patients' images, requiring clinicians and patients to transport CD's, DVD's and films between locations, or manually transmitting very large DICOM studies.

A more reliable and cost effective means to access diagnostic quality medical images was essential to improving the timeliness of patient care, reducing wasted health care dollars and the associated unnecessary exposure to radiation from redundant exams, and eliminating the costs of inefficient image distribution and management—all challenges that had been associated with these more traditional approaches.

It was also essential that the Rochester RHIO be able to integrate a technology directly into its existing Elysium Exchange HIE network, seamlessly connecting the disparate PACS at eight radiology and cardiology imaging centers.

### THE SOLUTION

Rochester RHIO teamed up with Axolotl's partner eHealth Global Technologies, Inc. (eHGT) to implement an image exchange service. Elysium Image Exchange, an easy to use, cost-effective service that seamlessly integrates with Axolotl's Elysium Exchange suite of products, provides authorized users with one click access to diagnostic quality medical images. Within a few months, Rochester RHIO was "live" in six radiology centers.



Dr. Daniel Jacobson,  
President of Rochester  
Radiology and Rochester  
Diagnostic Imaging

“Elysium Image Exchange offers a tremendous advantage over traditional methods to obtain and view medical images. This new method of distributing patient images throughout the community allows us to access and view our patients’ medical history within seconds.”



Regional Health Information Organization



## THE SOLUTION *(continued)*

Authorized users within the HIE can now quickly access images from all disparate PACS located at any radiology and cardiology imaging provider that participates in the Rochester RHIO. All images from anywhere in the HIE, including X-rays, MRI, CT scans and Ultrasound, are now available in full diagnostic quality at any time, from any computer with a secure Internet connection.

“All authorized primary care physicians, specialists and radiologists connected to the Rochester RHIO can now view images on-screen from any participating radiology provider for a more complete picture of their patients’ health. The anytime, anywhere access can help in emergency situations, second opinions and routine visits.” Ted Kremer, *Executive Director of Rochester RHIO*

With Elysium Image Exchange, the Rochester RHIO allows authorized users to see a comprehensive patient record, including radiology images, in an easy to implement and cost-effective application. Physicians using either Axolotl’s Elysium EMR Lite, a CCHIT certified EMR, or Axolotl’s Virtual Health Record (VHR), a community wide EHR, are able to view and access the diagnostic quality medical images instantly from all the participating radiology centers, using a single and unified image viewer.

“Providing radiology images electronically from the Lakeside Health System helps our referring physicians, and improves patient care and health care efficiency in our area. The Elysium Image Exchange capability allows primary care and specialty physicians in the Greater Rochester area to see diagnostic quality images from studies conducted at Lakeside, eliminating the need to burn CDs, track down films, and repeat costly radiology tests.” John Schrenker, *CIO, Lakeside Health System*

Elysium Image Exchange is providing electronic sharing of diagnostic quality medical images, full diagnostic quality viewing, instant access to recent and prior imaging exams and significant time savings as patient data is available at the time of care — all via the Rochester RHIO.

### SUMMARY OF RESULTS

- Secure, community-wide network for sharing medical images across the Rochester RHIO.
- Seamless, easy to integrate service to retrieve and securely deliver diagnostic quality medical images in a cost-effective solution.
- Capability to access and view medical image exams and update patient medical health records 24/7 from a single interface; providing the entire RHIO with a current, complete picture of health for the patient.
- Physicians and caregivers have a common viewer, regardless of the image source, which includes full diagnostic quality viewing and is easy to learn and use.
- Radiologists have instant access to prior imaging exams from anywhere in the RHIO to improve the efficiency and effectiveness of primary diagnostic reading and reporting.
- Reduced excess health care costs by eliminating unnecessary duplicate imaging procedures as a result of making reports with images available immediately, when and where they are needed.
- Improved patient safety by eliminating unnecessary radiation exposure associated with duplicate exams.
- Increased efficiency by eliminating the burden on patients and staff of tracking down and hand carrying images between locations.
- Ability to view and process complex image exams, including 3D volume rendering and digital subtraction angiography, without requiring additional computing bandwidth by desktops/workstations used to view images.