Brockville General Hospital

Brockville General Hospital uses Rhapsody Integration Engine to seamlessly share data with authorized healthcare providers

INTEGRATED INFORMATION SHARING ENSURES PATIENTS RECEIVE THE BEST QUALITY OF CARE AVAILABLE

Brockville General Hospital (BGH) is a three-site community hospital located 85 kilometres east of Kingston, Ontario that serves a catchment area of 66,000 residents, including a mix of rural and smaller urban communities, and a referral area of up to 125,000 people. Together, the sites employ more than 900 staff members and offers full acute care services, including emergency and intensive care; medical/ surgical care; obstetrical care; ambulatory clinics; day surgery; ECG; stress testing; radiology; ultrasound, an Ontario Breast Screening Clinic; complex/palliative care; and rehabilitation.

ACCESSING PATIENT INFORMATION: AN INTEGRATION CHALLENGE

Prior to implementing Orion Health's Rhapsody Integration Engine in May 2011, sharing information among healthcare providers within the Brockville General Hospital community was conducted manually. There was no electronic integration between the hospital and Family Health Team practices (family physicians) in terms of sharing reports which is the main focus of their current integration project.

> " Since Rhapsody functions as a software application, you can get into it very quickly. You hardly even need to touch the programming side because all the tools are already built in. "
>
> **Rowland Taylor, IM/IT Department**
> *Brockville General Hospital*

What this meant was that a patient would meet with the physician and would have to run through his or her medical history with the doctor. If a patient was referred to radiology, for example, the patient's x-ray results would be printed out, reviewed by someone in the department, and then manually assigned to the practicing physician. The report would then be couriered to the physician's office where it was then opened and scanned into the existing EHR system.

On average, the manual report delivery process takes anywhere from one to two weeks to complete, and incurs costs for the hospital, including paper, administration and courier costs. The process is not only time consuming, but impacts the physician's clinical decisions because often times, the patient's follow up visit would be scheduled before the reports came in. This would mean that physicians were unable to review charts and provide direction on a patient's health plan in a timely fashion. In some instances patients would need to wait or reschedule.

In addition to the challenges faced by the physicians, the IT department responsible for managing the EHR faced a number of challenges, including:

- EHR systems that were cumbersome and required a heavier external support system as there was a lack of internal expertise;
- Restrictive SLAs;
- Inability to customize EHRs to suit the needs of BGH

THE SEARCH FOR INTEGRATION

When Brockville General Hospital received funding from eHealth to pilot an integration engine for the community, they knew they wanted a flexible, commercial, off-the-shelf solution that would meet their unique needs. More specifically, they were looking for an integration engine that would:

- Allow for seamless access to patient reports by authorized healthcare providers within the hospital community

- Allow for complex customizing without the use of vendor services
- Adapt to the eHealth Ontario discharge summary standards and OntarioMD's HLS specifications
- Fit on top of their existing EHR system
- Complement their newly acquired CDR (Clinical data repository/ Clinical document repository)
- Eliminate costs and save time

THE SOLUTION

"The training course for Rhapsody was three days and allowed us to get up to speed quickly. Since Rhapsody functions as a software application, you can get into it very quickly. You hardly even need to touch the programming side because all the tools are already built in." - Rowland Taylor, IM/IT Department, Brockville General Hospital

Since implementing Rhapsody, the process of accessing discharge summaries, x-rays and other medical record reports has been cut down from days to seconds because now the reports are shared electronically. Rhapsody was successfully used to integrate two hospitals in both the South East and Champlain LHINS to the Clinical Data Repository and then export reports to two EMR's in both LHINS, thus providing true collaboration between those LHINS.

As Rhapsody is specifically used to deliver discharge summaries x-ray and other Medical Record reports to the end user–the physician, the community will save thousands of dollars per year by making the sharing process electronic.

"Rhapsody is incredibly fast and allows us track things better operationally - what reports have been sent out to which hospitals, as well as re-inject missing reports very quickly. The solution is incredibly robust and flexible, offering a range of useful monitoring and message logging tools also." - Rowland Taylor, IM/IT Department, Brockville General Hospital

For this particular project, Rhapsody was used for:

- Mapping HL7 2.x to 3.0 report types
- Connecting hospital HL7 2.x interfaces to the Synergize CDR with customized mapper per hospital as needed.
- Creating XML Ontario HRM™ specification compliant report exports for EMR consumption from the CDR
- Mirror regional, eHealth, Canadian and Pan-Canadian standards
- Build integration that can be easily managed and customized internally, providing a highly agile integration environment.

"There are so many different standards and legacy systems out there that hospitals are using. We see Rhapsody as being absolutely pivotal because it doesn't matter so much what other systems the hospitals are using because you can quickly provide the integration with Rhapsody." - Rowland Taylor, IM/IT Department, Brockville General Hospital

BROCKVILLE PHYSICIANS ARE SEEING THE DIFFERENCE

From a patient treatment perspective, physicians experience improved clinical decision making because they now have access to patient reports instantaneously, making them better equipped to provide follow up care in a lot more timely fashion. An authorized practitioner can now view a report ahead of time, thereby making them better prepared to know the best course of action for a patient prior to the appointment.

"With Rhapsody, we are able to process thousands of reports almost instantaneously, which is surprising to us. It's truly a commercial, off-the-shelf product, and far more stable and robust than we had imagined. In the two years we had Rhapsody implemented, we really haven't had any issues. It's about the confidence it gives us." - Rowland Taylor, IM/IT Department, Brockville General Hospital

LOOKING TO THE FUTURE

In April 2012, Brockville General Hospital received funding for an expansion phase of the project, which includes integrating all hospitals in both the SE and Champlain LHINS with a minimum of 30 physician practices or 300 physicians within both of these LHINS by early 2014. The hospital is also planning to use Orion for other regional and internal projects and was successfully used in a regional eReferrals pilot project which is still underway

The ultimate goal is to completely integrate other local health agencies so that physicians would have an even more complete patient record to further enhance their clinical decision-making.

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ABOUT ORION HEALTH RHAPSODY INTEGRATION ENGINE

The Orion Health Rhapsody integration Engine was developed to manage and provide seamless message exchange and integration between hospital applications, databases and external systems. Consistently ranked highly by independent research organization KLAS Enterprises 'Best of KLAS solution' report card, Rhapsody has been specifically designed to meet the present and future needs of health integration by delivering a solution with the lowest cost of ownership and highest return on investment without having to replace existing information systems.