

## Circle Health uses the Mass HIway to Facilitate Sharing of Patient Information with Atrius Health



Circle Health is a collaboration of physicians, hospitals, and other providers and organizations whose goal is to provide complete connected care in their community through innovative programs and improved care management. Its affiliates include Lowell General Hospital, Tufts Medical Center, MelroseWakefield, and many other healthcare organizations throughout Massachusetts. Circle Health provides primary, urgent, and specialty care to patients in an effort to serve all community needs.

Atrius Health is an innovative nonprofit healthcare leader providing effective connected care to more than 720,000 adult and pediatric patients in eastern Massachusetts at 32 clinical locations across more than 50 specialties and with 825 physicians. Our medical group works together with home health and hospice services using our VNA Care subsidiary, and in close collaboration with hospital partners, community specialists and skilled nursing facilities. Our vision is to transform care to improve lives. Atrius Health provides high-quality, patient-centered, coordinated, cost effective care to every patient we serve. By establishing a solid foundation of knowledge, understanding and trust with each of its patients, Atrius Health enhances their health and enriches their lives. Learn more about Atrius Health at [www.atriushealth.org](http://www.atriushealth.org).

### Challenge

A few years ago, Circle Health noticed that many patients seen by their affiliate Lowell General Hospital also receive post-acute care at Atrius Health. As a consequence, Lowell General often

sends discharge summary reports to Atrius Health concerning these patients. Because the organizations use different electronic health record (EHR) systems, the only option available to the physicians at Lowell General at the time was to fax the forms and call their colleagues at Atrius Health to ensure they had the correct and complete patient data.

This process was inefficient and time consuming, so Circle Health began to develop alternatives. They tried other ways to notify Atrius Health physicians when their patients were seen at Lowell General, but nothing worked well enough, and both parties agreed the focus should be on real-time actionable data transfer.



## Solution

To resolve the issue, Circle Health implemented a health information exchange (HIE) connection to Atrius Health. Using a HIway Local Access for Network Distribution (LAND) device, Circle Health can now send real-time notifications electronically from Circle Health to Atrius Health with the use of an Admit Discharge Transfer (ADT) interface. Atrius Health then imports the documentation automatically into their electronic medical record. Atrius Health team schedules post-acute care and follow up with their patients. This enables the Atrius primary care team to have real time access to clinical information needed for post hospital care.

Circle Health worked with the Mass HIway to install LAND devices at both Lowell General Hospital campuses, allowing for easy communication between each location and Atrius Health. The electronic workflow enabled them to virtually eliminate the need to call their colleagues to relay information or to fax the required paperwork. The new workflow has accelerated the patient transfer process and resulted in more expedient care for the patients.



*“There is an increasing need to ensure that outpatient primary care providers remain connected to the in-hospital care of their patients, such as care rendered by ED providers, pediatric and adult hospitalists, and proceduralists. Real-time ADT messages, including diagnosis, sent from Circle Health via the Mass HIway to Atrius Health allows Circle Health to keep PCPs abreast of their patient’s arrival at discharge or transfer from our facility. PCPs can contact hospitalists with valuable information that will improve in-hospital patient care, and they can coordinate follow up appointments upon notice of discharge. This process provides an excellent opportunity for seamless transitions between outpatient and inpatient care.”*

– Arthur M. Laurentano, MD, MS, FACS  
Chief Medical Officer, Circle Health

## Timeline

The LAND devices were installed at Circle Health’s Lowell General Hospital campuses in the spring of 2016. After initial implementation and testing, the devices went live in April 2016. Since then, the physicians have consistently sent discharge summaries from Circle Health’s Lowell General Hospital to Atrius Health via the Mass HIway.

## Challenges

As with any workflow, there can be challenges when implementing a new process into existing procedures. Circle Health and Atrius Health initially faced some issues with the new technology,

for instance when the system would go down unexpectedly. This was mostly caused by ongoing maintenance and not specifically related to the new process.

Over time, Circle Health was able to develop scheduled maintenance procedures to avoid unforeseen technology outages, which mitigated this challenge. Circle Health's interface team now monitors the error queue to make sure messages are being processed without interruption, and any issues that arise are resolved immediately.

### **Feedback from Staff**

Feedback from staff was overwhelmingly positive. All physicians and nurses at Circle Health and Atrius Health adopted electronic information flow with few problems, integrating it into their daily work. Staff at both organizations believe that it has vastly improved care coordination. They now have more instantaneous real-time access to the necessary information needed to care for their patients.

### **Impact**

The main goal of this new workflow was to improve care coordination with Atrius Health and to make post-acute follow up care easier for their physicians. The intention was to use this new method to send discharge summaries for all patients that transferred from Circle Health to Atrius Health.

After implementation, Circle Health now sends approximately 1000 to 1100 ADTs weekly to Atrius Health using the new workflow. This comprises of the vast majority of the ADTs generated for the patients that transfer to Atrius Health facilities. This has enabled Circle Health to move away from phone calls and faxing, except for in rare instances where electronic distribution is not possible, such as when a patient does not or cannot provide consent..

### **Recommendations**

Circle Health's most important recommendation for any organization planning to implement similar workflows is to remember that technology in itself is just a tool. They believe that the workflow needs to drive the technology, and not the other way around. Organizations need to define their desired patient discharge process, and keep this end goal in mind when developing their new workflows.

Providers are now more responsible for following up with their patients than ever before and they need the right tools and technology to do that. Adding new processes, without taking into account what providers and staff actually need, will likely make the workflows unnecessarily complex. On the other hand, keeping the process simple eliminates bottlenecks and barriers.

### **Expansion**

In addition to Lowell General Hospital, Circle Health has worked to expand this workflow to their other affiliate organizations, leveraging the success of this HIE use case to move towards electronic communication in other use cases and with other partners. They have approached the expansion process in two tiers:

- Sending documentation to EHRs at partnering hospitals, and
- Sending the information directly to Primary Care Physicians' mobile devices.

This expanded process is anticipated to significantly improve care coordination with the many facilities Circle Health partners with. The physicians and case management teams will have easier real-time access to the information they need to better assist their patients.

For more information, visit <https://www.circle-health.org/index.html>.