According to the Centers for Disease Control and Prevention (CDC), over 1.3 million patients received hospice services in 2013. These patients were cared for by interdisciplinary teams of caregivers, including primary care providers, nurses and home health aides. With a multitude of providers having a hand in hospice care, ongoing communication at all service points contributes to patient, family and staff satisfaction, as well as patient safety.

However, The Joint Commission claims an estimated 80 percent of serious medical errors involve miscommunication between caregivers during the transfer of patients. Healthcare organizations must look to health IT and health information exchange (HIE) systems for communication solutions to augment and improve their care management and care transitions programs. In this article, we provide a case-study of two innovative organizations who are working together to reach these goals.

**Concord Regional Visiting Nurse Association** has served the healthcare needs of people of all ages in central New Hampshire since 1899 and has remained at the forefront of HIE in the region. Having implemented an Electronic Health Record (EHR) nearly 20 years ago, the organization recognized the need for more collaboration amongst its caregivers and the facilities in which they provided direct care.

In 2015, when the **New Hampshire Health Information Organization (NHHIO)** was awarded grant funding from the Office of the National Coordinator of Health IT (ONC) to support health information exchange in New Hampshire, Deb Mullen, CIO of Concord Regional VNA, was the first to apply for the grant.

Prior to the start of the grant, minimal healthcare information was being exchanged electronically with long-term and post-acute care (LTPAC) facilities by other healthcare organizations in New Hampshire. The larger healthcare organizations focused on sending data out of their certified electronic health record technology just to meet the Centers for Medicare & Medicaid Services (CMS) EHR Incentive Program requirements and were not prepared to implement bi-directional electronic information flow. Those that were sharing data electronically were finding that the complete needs of the patient may not have been included in a Summary of Care C-CDA, and legacy methods of data transmission had to be maintained. The ONC grant funding provided the assistance needed for LTPAC providers in the state to expand their own coordination of care efforts, using health information exchange, to begin efforts to create a consistent process and comprehensive patient medical record.

Concord Regional VNA has been providing hospice care to patients at Genesis Healthcare sites in New Hampshire for nearly two decades. The communication and coordination relied on outdated fax
machines, printers and multitudes of paper. With support from the grant, Concord Regional VNA and Genesis partnered on a pilot project that utilized Health Information Technology as the main source of communication for healthcare needs.

The two organizations set out to improve communication and care coordination by securely and electronically exchanging hospice patient assessment information and other relevant health information using the NHHIO’s Direct Secure Messaging webmail product. “Direct” is a national standard for interoperability using specific email-type addresses, defined messaging formats and transport protocols. Direct is similar to email but is highly secure and HIPAA-compliant. The goal of the pilot was to prioritize the timely delivery and receipt of necessary healthcare records using Direct Secure Messaging and to apply effective quality improvement strategies so that the required documents were accessible at the point of care.

Leaders from Genesis and Concord Regional VNA identified the appropriate personnel to involve in the pilot, including operations and clinical staff, in coordination with social services, community engagement and IT support. Both organizations agreed to involve personnel outside of the normal paper process for the pilot to allow for an objective examination of the overall process.

With the technical and operational support of NHHIO, Concord Regional VNA and Genesis met monthly to analyze their Direct messaging capabilities for both organizations. Both organizations have an EHR and have implemented NHHIO’s Direct Secure Messaging webmail alongside their EHR for a more flexible exchange of health information. The Genesis and Concord Regional VNA Pilot Team evaluated care coordination documents for hospice patients including Consents, Care Plan documentation, Visits, and Level of Care reports.

With the numerous documents that were being sent from Concord Regional VNA, the IT group worked with the EHR vendor to create customized reports and sorting capabilities of the hospice patient information. Concord Regional VNA was then able to separate and send the documentation over to Genesis, by patient name, on an automated daily schedule. Genesis then uploads the PDF files sent from Concord Regional VNA into its EHR. The files are placed in the corresponding patient’s chart based on administrative and/or clinical content.

Over a six-month period, the Pilot Team conducted a side-by-side analysis of documentation sent via traditional methods, such as fax, mail and courier, and compared it to the information received via the health information exchange. The Pilot Team concluded that “it was very clear that the electronic process was more complete and current” than the paper process. The Pilot Team continued to examine the timeliness of sending electronic documentation, refine workflows to minimize paper handling and distribution and maintain a strong commitment in leveraging the HIE opportunities available to them.

The organization and collection of hospice documentation designed by the Pilot Team has assisted in real-time access of health information for unit nurses and hospice providers during collaboration efforts. “Switching to an electronic process has saved Concord Regional VNA administrative time. Previously, five different staff members were responsible for sending notes to the facility. Now one person is able to perform this task in very little time and we are more confident all documentation has been sent,” Mullen says.

The combined effort of the Genesis and Concord Regional VNA Pilot Team demonstrated the ability to assemble, exchange and share consistent healthcare documentation amongst separate healthcare organizations for more efficient care coordination using Health Information Technology. The project took a great deal of time and effort for the Pilot Team to schedule and hold meetings, analyze hospice documentation and workflows, and consult and collect feedback from additional staff. The result was a more complete and entirely paperless process for coordinating hospice patient care.
“The collaboration between Genesis, Concord Regional VNA and NHHIO to incorporate HIE into our patients’ care transformed an originally fragmented process into streamlined practice,” says Kristen Dubois, Project Coordinator for Genesis Healthcare. “We have increased our efficiencies by receiving timely and accurate patient healthcare documentation as well as reducing the time each organization took to manage the documentation for patients receiving hospice care.” Dubois continues, “This pilot program is so exciting because it prepared us for the many HIE opportunities that are coming our way. There are many other organizations with whom we need to exchange patient health information. This successful pilot demonstrated our shared efforts to improve increased efficiencies and processes to achieve higher quality clinical outcomes and better coordinated patient care.”

The collaboration on the pilot created a productive and mutually beneficial relationship amongst care providers at both healthcare organizations. All mutual hospice patient healthcare information needed amongst the two organizations is now being shared via Direct secure messaging and is readily available for the interdisciplinary team at one place, in the computer, in the patient’s chart. The two organizations are using the foundations and tools that they developed together to expand their health information exchange opportunities with hospitals and ambulatory providers in Transition of Care scenarios throughout New Hampshire.

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