Using HIT to Facilitate Transitions of Care

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Problem: Important healthcare data can be missed or lost in translation when patients are transferred between healthcare organizations. If healthcare data are not transmitted electronically, there is little opportunity to leverage health information technology tools, such as allergy checking, medication reconciliation, and other Clinical Decision Support tools that promote patient safety. Not having timely access to lab or radiology results may also lead to unnecessary or duplicative testing. Aim of the Project: The aim of this project was to establish a method for healthcare organizations to send and receive clinical data electronically. In addition, goals included development of use cases where inter-institutional transfer notes can be transmitted point-to-point between non-affiliated healthcare organizations. Project Design & Management: The original premise and funding for this project was associated with the New York State Healthcare Efficiency and Affordability Law (HEAL) Phase 17. The HEAL 17 grant was awarded to NewYork-Presbyterian Hospital, with three Long-Term Care Facilities and a Home Care Agency as project stakeholders. In addition, the New York City Healthix Regional Health Information Network (RHIO) worked in collaboration with the project stakeholders as a vendor in the project. Execution of Health Information Exchange relied heavily upon each organization's ability to: 1) Implement an Electronic Health Record (EHR) 2) Establish connectivity to the Healthix RHIO 3) Transmit key clinical data to the Healthix RHIO. Methods: Transitions of care use cases were developed with consideration of clinical workflow. The use cases included direct health information exchange using CCDs and HL7 technical transactions: 1) Transmission of the NYP Inter-Institutional Transfer Note --> Long Term Care & Home Care stakeholders 2) CC Transfer Form (Long Term Care facilities) --> NYP All project stakeholders successfully established connectivity and started sending data to the Healthix RHIO. Patient data, including discharge summaries, medications, and results are available to RHIO members with proper patient consent. NewYork-Presbyterian Hospital developed an improved, standard inter-institutional transfer note embedded within the EHR. This note is completed by both nurses and social workers involved in the patient's discharge planning. The Long-Term Care Facility stakeholders leveraged the CC transfer form tool embedded in the RHIO. Results: The project go-live started in October 2013 and there has been success in transmitting transfer forms across organizations. HL-7 formatting updates remain in progress, and additional technical work for alerting providers when the transfer forms are received is underway. These updates will improve functionality to more effectively incorporate the use cases into clinical operations. Conclusion: One of the biggest lessons learned included the importance of understanding the workflow for each of the participating institutions, and designing project architecture that would fit seamlessly into multiple environments. Other lessons included integration challenges, given the diversity of data; and complexity validating the use cases post implementation. NewYork-Presbyterian Hospital was able to establish the foundations to HIE and also gained exposure to workflow and technical considerations surrounding transitions of care across healthcare organizations. The use cases exercised with the named facilities are extensible to other LTC and home care facilities.