



DirectTrust Direct Interoperability Success Story Use Cases

Contact Information	Use Case	Story
Christopher Mack – Sutter Health mackc@sutterhealth.org	Bi-directional Direct referrals	Sutter Health created bi-directional closed loop referral workflows allowing us to send referrals and receive information back from consultants via Direct, resulting in more efficient workflows, quicker referral turnaround times, and improved patient and staff satisfaction.
Theresa Bell - Kno2 tbell@kno2.com	Transitioning fax-based workflows to Direct exchange	Bi-directional Direct messaging pilot in which most of the exchange between a health system and a control group of community providers was converted from fax to Direct interoperability. Roll-out to all community providers is underway.
Alan Swenson - Kno2 aswenson@kno2.com	Direct interoperability closing the loop on diabetic eye exam referrals	Referrals for diabetic eye exams moved from patient self-scheduling to Direct messaging referrals with scheduling by the ophthalmologist's office. Results were sent to the patient's PCP via Direct, resulting in a change from PCP's receiving results only 35% of the time to receiving results within 48 hours, as well as eliminating faxing, reducing referral scheduling time, and leading toward the automation of health maintenance task completion within the PCPs' EHR.
Larry Garber, MD - Reliant Medical Group (RMG) Lawrence.Garber@ReliantMedicalGroup.org	Automated patient summaries to the ED via Direct to optimize patient care in the ED	RMG initially gave ER physicians access (Pull) to their Electronic Health Record (EHR) but found that they rarely looked up patient information. So Reliant created a process to automatically send a patient summary document (push) containing medications, allergies, problems, recent test results, etc. using Direct Interoperability to the ER's EHR. RMG now automatically receives registration events (ADT) from all of the ERs in Central MA when a patient says their PCP is an RMG physicians. RMG's EHR receives these ADTs and automatically sends a patient summary document (C-CDA, CCD) via Direct back to the ER along with the ER EHR's medical record number so that it instantly files into the ER's EHR. Patients are receiving higher quality, more efficient care because the ER physicians can readily see the latest medical information pushed to their own EHR.
Larry Garber, MD - Reliant Medical Group (RMG) Lawrence.Garber@ReliantMedicalGroup.org	Automated push event notifications and care plan updates to home health using Direct messages	RMG relays event notifications from their local hospitals by pushing Direct messages to the Home Health Agency whenever a shared patient is seen in the ED or admitted to hospital. This facilitates avoiding unnecessary home health visits when a patient has been admitted and allowing immediate home health to follow up when a patient returns home after an ED encounter. RMG has also automated a pushed CCD with visit note to the Home Health Agency whenever a shared patient is seen by the



		PCP or a specialist, facilitating the home health nurse to always be aware of updates to the patient’s treatment plan.
Anupam Goel, MD – Advocate Health anupam.goel@advocatehealth.com	Acute discharge information to PCP via Direct	For patients deemed, by algorithm, to be at high risk of readmission, hospital discharge information is pushed via Direct initially to a team that attaches relevant inpatient documentation to support a more thorough transitions of care encounter. That message with multiple attachments is then pushed via Direct to the Patient’s PCP’s Direct mailbox.
Arthur Lauretano, MD, MS, FACS – Circle Health Arthur.Lauretano@circlehealth.org	Hospital ADT notifications to patient’s PCP’s EHR via Direct. Upon receipt, PCPs push patient information to the hospital	Circle Health/Lowell General Hospital EHR sends real-time ADT (Admit, Discharge, Transfer) notifications using Direct messaging technology to Primary Care Physicians’ EHRs (Cerner) within our community to help them better coordinate care for their patients. Upon receipt of the ADT notification the PCP sends the patient’s latest progress note via Direct to the Hospital. This arrives in a hospital pool and is attached to the patient’s chart for the patient’s hospital caregivers to review.
Glen Crandall – Department of Veterans Affairs (VA) Glen.crandall@va.gov	Direct enabled closed loop referral with non-VA community specialists	In OH, the VA uses Direct Messaging with three large Ohio health systems for closed loop referrals. This has resulted in significant savings of time and staff resources for information exchange. Direct Messaging has improved care coordination for Veterans! A VA user in Ohio says with VA Direct Messaging, “that we get [health information] immediately from community providers- plus we can converse electronically if there is an issue with the medical records!”
Glen Crandall – Department of Veterans Affairs (VA) Glen.crandall@va.gov	Bi-directional acute-ambulatory Direct patient messages	A North Florida/South Georgia bidirectional Direct interoperability acute – ambulatory pilot between the VA and HCA organizations is now ready to be rolled out nationally. HCA sends the VA a daily census of VA admitted patients. In response the VA sends to HCA a C-CDA for these patients. On discharge HCA pushes, via Direct, a discharge C-CDA to the VA EHR to enable care management. The document also assists with VA’s payment process to community care providers, when an open consult is completed using the clinical data received via Direct Messaging. <i>A VA user in Florida exclaimed, “I have grown to love VA Direct Messaging because as soon as the patient gets discharged, I get documents. It’s wonderful! “</i>



<p>Lisa Nelson – MaxMD</p> <p>lnelson@max.md</p>	<p>Automated event notifications improve care coordination across an entire county</p>	<p>In Carlton County, MN twelve healthcare organizations with seven disparate EHR systems, or none at all, use a Direct-driven event notification service. Admission, discharge and transfer notifications from two local hospitals are processed and automatically delivered via Direct to organizations providing care for their patients. Members of a person’s care team are notified simultaneously, and better care coordination begins in real-time. Direct enables secure bi-directional communication among all participants. Care Managers get the information they need to reach out more quickly to their patients, Indian Health Services gains better insight into the care needs of their community, and communication gets easier between primary and tertiary care providers. Hospitals aiming to reduce readmissions benefit by improved patient care coordination throughout the area.</p>
<p>Lisa Nelson – MaxMD</p> <p>lnelson@max.md</p>	<p>Lower cost one-to-many connections replace point-to-point connections and improve access to information for recipients</p>	<p>Hershey Medical Center uses Direct to improve care coordination with organizations that have varied levels of HIT capabilities. Data from Hershey’s Laboratory Information System is securely transported to a Skilled Nursing Facility (SNF) and the nurse at a local prep school via Direct eliminating the need for expensive one-to-one lab interfaces and dramatically reducing costs. Lab results sent to the SNF are transformed, in transit, into a pdf to suit their workflow. Lab results sent to the school are transformed into a standard C-CDA format. The school’s health center receives the information automatically into their Centricity EMR. Nurses at the SNF get lab information more quickly which improves care for their patients. It’s easier for the school nurse to monitor student health issues because lab results flow directly into the EMR.</p>
<p>Tamer Fakhouri, MD and Wes Donohoe – One Medical</p> <p>tfakhouri@onemedical.com</p>	<p>Closed loop specialty referrals</p>	<p>To improve the quality and operational efficiency of specialist referrals within a major academic partner (UCSF), One Medical utilized the Direct protocol to handle outbound transmission of referral requests and inbound transmission of consultation reports, through a single Direct address. The EHR was updated to automatically include a C-CDA, selected insurance information, and insurance authorization status with outbound referrals. Referrals were sent to a dedicated address at the partner institution, UCSF. The One Medical clinical task management system was updated to automatically route inbound Direct messages containing consultation reports to the ordering providers’ task queue. The implementation of Direct message enabled both One Medical and UCSF to enhance practice efficiency and save a very large amount of administrative time spent processing faxed referrals and eliminated the need to manually route faxed consultation reports to patient charts.</p>



<p>Andrew Zechnich - Providence St. Joseph Health andrew.zechnich@providence.org</p>	<p>Closing the loop with Direct messaging to support an ACO</p>	<p>Teams from several organizations collaborated to implement Direct messaging to support a closed loop referral process within a newly formed ACO's Connected Care Network. Connected Care members accessed care through patient centered medical homes, employers' Health for Life Clinics, and specialists and facilities within a medical neighborhood. To support this ACO relationship across multiple organizations with multiple disparate EHRs, a scalable, standards-based method to facilitate efficient referrals management was essential. The organizations had frequent meetings and elected to deploy eHealth Exchange and Direct messaging to facilitate both pull and push modes of exchange. The project team developed workflows and set up pools to manage the messages. Referrals are initiated with a Direct message to the specialist and the closed-loop message is sent after specialty evaluation. We encounter challenges in EHR functionality to support Direct messaging, operationalizing message pools, and limitations in the usability of the CCDs. The project led to a large increase in Direct messages exchanged and a high rate of patient matches. Users were satisfied with improved communication and the improved efficiency of the referral process. The value of Direct messaging beyond the Meaningful Use/Promoting Interoperability program became quite clear. This project's success has led to an expansion of Direct messaging projects at Providence St. Joseph Health and additional use cases for Direct messaging.</p>
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