Automating HIM through Health Information Exchange: An Informatics Approach

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Editor's Note: This article is the first installment of the new Working Smart department titled "Illuminating Informatics." This department will explore all aspects of informatics and provide guidance to health information management professionals in the practical application of the various processes and systems that manage and communicate health information.

This article presents an informatics approach to health data collection in health information management (HIM) departments. The authors introduce health information exchange (HIE) in the context of health record data collection by the Social Security Administration (SSA), explain the benefits of HIE, and conclude with a discussion of the challenges of HIE for electronic health data collection.

In addition to disease coding for proper and complete reimbursement, HIM departments have spent much of their resources fulfilling requests for records and scouring records for quality reporting. Hospitals are decentralized and labor-intensive organizations, where information creation and dissemination that is predictable and repeatable lends itself to the efficiencies created by health information technology in general—and HIE in particular.

HIE, the system-to-system exchange of health data by and between multiple organizations, holds potential to change the manner in which HIM departments respond to requests for data held in electronic health records (EHRs).[1]

According to the National Alliance for Health Information Technology (NAHIT), HIE is defined as the "electronic movement of health-related information among organizations according to nationally recognized standards."[2] It is important and essential to understand how HIE can be used to increase revenue and decrease resources for requests for medical records and quality reporting, respectively.

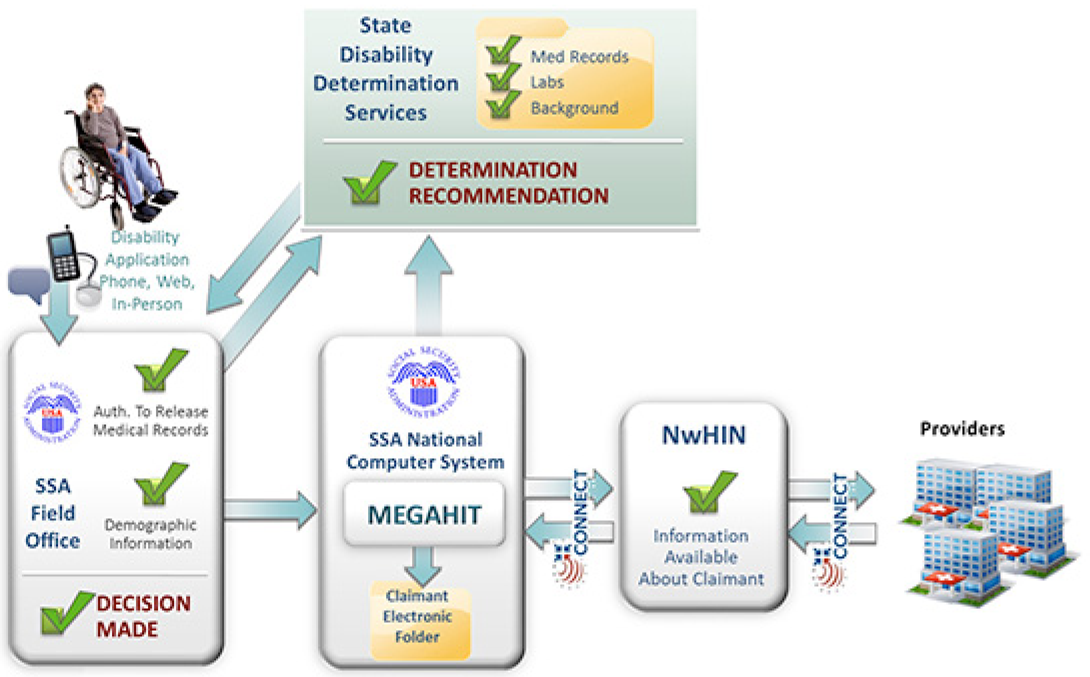
Figure 1: SSA Disability Determination Process (Paper)

Process of Medical Record Requests at SSA

Fulfilling requests for medical records, either in a paper format or electronically, is often overlooked as a revenue source for HIM departments, especially for federal agencies such as SSA. As shown in Figure 1 above, the traditional paper process begins when someone registers with SSA for disability benefits. Through the field offices and then through disability determination services, SSA sends a request for medical records to all providers, including hospitals, for that person. As illustrated in step three in Figure 1, this process can require multiple re-requests (i.e., serial requests for the same exact information from the same provider).

By way of background, eHealth Exchange, a nationwide health information exchange platform, was originally started in 2009 as the Nationwide Health Information Network (NwHIN) by the Office of the National Coordinator for Health IT (ONC). In 2012, as part of a public-private initiative, ONC transitioned to Healtheway, later renamed to The Sequoia Project, and the NwHIN was rebranded as eHealth Exchange. When a hospital participates with eHealth Exchange, the requests for those records are both generated and responded to electronically without any human intervention (see Figure 2 below). A process that typically can take months and even years is reduced to minutes.[3] Additionally, since SSA pays $15 per usable record, health systems that are currently participating with SSA through eHealth Exchange see this as a source of revenue. For example, for the 2015 annualized year, SSA received 307,884 usable documents totaling over $4.6 million in payments to hospitals and HIE organizations.[4]

Figure 2: Disability Determination Process (Electronic)



Benefits of HIE

HIE provides a safe and secure mechanism for sharing health information with participating organizations and individuals. Exchanging protected health information (PHI) requires having substantial protections in place. Those protections—whether they are related to contracts, are around data, or are technical in nature—require a considerable amount of legal counsel review to ensure that best practices, legislative regulations, and common sense are employed.

Many health organizations may not want to participate in HIE due to the perceived high legal counsel costs. However, when participating with eHealth Exchange specifically for SSA disability determination, the Data Use and Reciprocal Support Agreement (DURSA) put in place by ONC and carried forward by The Sequoia Project can save organizations human and fiscal resources. The DURSA is a comprehensive, multi-party trust agreement that all eHealth Exchange participants enter into. The DURSA lays out the “rules of the road” for health data exchange across the eHealth Exchange and provides a certain level of understanding and confidence that “we are all playing by the same rules.”

Decreased costs and increased care quality have been suggested as intrinsic motivators for HIE participation.[5] Likewise, payer mandates and quality reporting have been suggested as extrinsic motivators for HIE participation.[6] Data abstraction from an EHR for quality reporting may be accomplished with very little effort when data are needed from within one organization. However, quality reporting typically spans across the care continuum—requiring data from multiple organizations—to provide complete quality measures reporting.

For example, if a group of community physicians have formed an accountable care organization (ACO) and are participating in a Centers for Medicare and Medicaid Services (CMS) Medicare Shared Savings Program (MSSP), those clinics will need to collect data from the primary care provider, who may also be a specialist (i.e., someone with diabetes who uses the endocrinologist as the primary source of care). This may work well if they are all under the same provider organization, but in the scenario where each are independent practices or when the specialist is outside of the ACO data abstraction, this becomes exponentially more complex and in some cases impossible.

Then consider if that same patient were hospitalized within the quality reporting period, data to satisfy MSSP quality measures reporting may lie in the hospital EHR. When there is no communication between providers who are not under the same organization, the risk to underreport clinical quality measures is high. Instead, if (in the above example) the community provider, the specialist, and the hospital were all participating in some form of HIE (perhaps a state or regional initiative), data abstraction could be accomplished electronically, measures would be accurate and reported more quickly, efficiency and productivity of labor could improve, and the quality of care and patient satisfaction would increase.

Challenges of HIE

Multiple literature sources discuss interoperability as a challenge to HIE participation.[7,8,9] Many agree that the barriers are not in terms of technical challenges, but rather political assertiveness. Furthermore, HIMSS suggests that more needs to be done to show the business value of HIE and suggests value in terms of creating a healthcare data economy.[10] This includes:

- People are willing to pay for and to sell data
- Stakeholders could control data and exchange with others
- HIE has an ecosystem surrounding it with measures of interoperability that are meaningful to patients and providers

Broadly speaking, informatics involves information and data processing. More specifically, health informatics is, according to AHIMA, “a scientific discipline that is concerned with the cognitive, information-processing, and communication tasks of healthcare practice, education, and research, including the information science and technology to support these tasks.”[11] Given this definition and others similar to it, health informatics lies within the scope of HIM, and HIE is the vehicle to facilitate such information processing and communication. HIM professionals are the drivers which enable, expedite, and promote HIE in HIM practice.

Notes

[1] Karl, Ellen Shakespeare. “What’s in a Name? Breaking Down Health Information Exchange, One Definition at a Time.” *Journal of AHIMA* 83, no. 6 (June 2012): 62-63.

[2] Healthcare Information and Management Systems Society. “A HIMSS Guide to Participating in a Health Information Exchange.” November 2009.

[3] Feldman, Sue S., Horan, Thomas A., and David Drew. “Understanding the value proposition of health information exchange: the case of uncompensated care cost recovery.” *Health System* 2, no. 2 (July 2013): 143-146.

[4] Feldman, Sue S. “eHealth Exchange: A Case Study on Value Propositions of Health Information Exchange.” 2016.

[5] Fontaine, P. et al. “Health information exchange: participation by Minnesota primary care practices.” *Archives of Internal Medicine* 170, no. 7 (April 12, 2010): 622.

[6] Ibid.

[7] Feldman, Sue S., Schooley, Benjamin L., and Grishma P. Bhavsar. “Health Information Exchange Implementation: Lessons Learned and Critical Success Factors From a Case Study.” *JMIR Medical Informatics* 2, no. 2 (July-December 2014): e19.

[8] Fontaine, P. et al. “Health information exchange: participation by Minnesota primary care practices.”

[9] O’Malley, Ann S. “Testimony to the Interoperability Task Force of the Health IT Policy Committee, ONC.” 2015.

[10] Healthcare Information and Management Systems Society. “The Business Case for Interoperability and Health Information Exchange.” September 1, 2014.

[11] American Health Information Management Association. *Pocket Glossary of Health Information Management and Technology.* Chicago, IL: AHIMA Press, 2005.

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