

Physician Data Exchange Patient Identification

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Care Coordination can be Difficult

- On paper, care coordination looks simple: primary care physicians and specialists collaborating to provide the best treatment for patients.
- Policymakers say care coordination can cut costs and improve patient outcomes, but to realize its promise, primary care doctors will have to overcome a number of obstacles to implementation, such as incompatible electronic health records (EHRs), poor communication with specialists, egos, a lack of resources and polypharmacy.

Five major obstacles regarding care coordination for primary care physicians

EHRs and coordination

- Sharing medical records among providers is essential to coordinated care, but the promise of seamless digital exchanges is still far from reality.

Dealing with specialists

- One of the greatest challenges to care coordination, primary care physicians say, is working with specialists.

Getting paid

- Besides getting better results, primary care physicians hope care coordination will lead to better reimbursements from payers.

The polypharmacy problem

- An additional challenge of care coordination is the risk of harmful polypharmacy—adverse interactions caused by drugs prescribed by different doctors.

Coordinating with patients

- With all the emphasis on collaboration among primary care physicians, specialists, and other caregivers, the role of the patient is sometimes overlooked. But without the patient's cooperation, coordination does not work.

Data from Outside Sources

- In a recent survey from healthcare research firm Black Book, 41% of hospital medical record administrators report difficulties exchanging records with other healthcare providers and 25% say they are unable to integrate into their EHRs any patient information received electronically from outside sources.
- The problem is particularly acute for independent primary care doctors, who are less likely to be tied into larger integrated networks. “Physician groups continue to lack the financial and technical expertise to adopt complex EHRs, which are compulsory to attain higher reimbursements by public and private payers,” according to Black Book.

New Opportunities

- May 23, 2016 - SSM Health, a St. Louis-based healthcare system, has launched the National Record Locator Service in efforts to improve care coordination through more comprehensive EHR interoperability measures.
- Following the launch, 10,000 SSM Health clinicians in Illinois, Missouri, and Oklahoma have gained access to the National Record Locator Service's healthcare information network, which includes 2 billion patient interactions for approximately 140 million patients.
- "When a patient arrives in one of our emergency departments, urgent care clinics or physician's offices, Surescripts National Record Locator Service enables the care team to access valuable clinical information from other providers who have previously treated the patient, regardless of where they received care or the electronic health record software used," said Richard Vaughn, MD, Chief Medical Information Officer for SSM Health.



Same Old Challenges – Here's Just One

- Throughout the health care industry, the failure to correctly **identify patients** continues to lead to major **patient** safety events. Wrong-**patient** errors can occur in virtually all stages of diagnosis and treatment.
- Many industry leaders agree that achieving interoperability is one reason why it is time to move to a **national patient identifier**
- To make exchanges of healthcare information today, we have to rely on an imprecise method of matching multiple demographic elements in a patient's profile in the hopes of getting an overall match.
- Even if we ignore the very real possibility of misspelling a patient's name, there are many permutations:
 - Full names vs. nicknames – Pat Smith vs Patricia Smith
 - Middle names and initials – Patricia Smith vs. Patricia A Smith vs. Patricia Ann Smith
 - Hyphenated names and names with apostrophes – There are entirely too many permutations of Patricia Smith-O'Malley's last name!



Big Problem

- According to a recent [AHIMA survey](#), more than half of [health IT](#) management professionals regularly work on fixing problems with patient matching and duplicate patient records
- Kaiser Permanente, an organization with a strong managed data quality program, reported that when it attempted to match up records from within the same region (each of their 17 regions have separately implemented the same EHR) they have a success rate of 90%. When they attempted the same match with records from one of the other regions the match rate fell to 50%. If an institution with the same data policies and systems can only match patients 50% of the time, imagine the challenge that a regional health information exchange would face, trying to make matches between EHRs of different vendors, from organizations with different data management policies.

Traditional Enterprise Master Patient Index

- An Enterprise Master Patient Index (EMPI) is a patient identity management database and software suite that allows patients from many systems to be related to each other under a single identity. They facilitate two key factors that are critical for successful patient care:
 - Accurate identification and reconciliation of duplicated patient accounts
 - Managing a crosswalk of patients from multiple systems
- As records are added to the EMPI a complex matching algorithm is used to determine if this patient already exists in the database.

Our Problem

- The level of patient duplication in our system databases is growing rapidly with our expansion.
 - Over the past few months, patient merge requests have become our number one help desk request. The clinical data migrations into the enterprise patient data base have caused an explosion of duplicate medical records. This is due to patient crossover in the many practices in our region.
 - AnalysisThe diagnostic testing centers
 - Mistakes will be made using a manual patient merging process. These mistakes would not only be costly from a time/revenue perspective but could also be catastrophic if they lead to malpractice.

How Could this Happen

- Growing Ambulatory Health Organization
- Merger and Acquisition growth with a practice integration strategy that includes a single EMR platform – Data Migrations
- Fast and wide spread growth has weakened some of the critical schedule and registration processes leading to more duplication of patient records

Case Study

- Company X is a growing provider in multiple states with limited or no existing medical records function. Care is delivered through a network of Labs, Patient Care Centers, Perinatal testing and imaging centers. Company X has aggressive timelines that require solutions that can quickly be deployed to help them overcome the existing MPI integrity issues with limited sophistication to correctly identify and resolve duplicate patient records. Company X expects to double in size over the next 18 months, further straining the existing costly and manual effort required to identify and resolve duplicate patient records.

As a result:

1. Duplicate patient records affect patient safety, patient service, and the financial revenue cycle across the delivery network.
 - Company X wants to recognize patients at all points of service.
 2. Care centers refer patients to internal labs which represent an easy entry point for duplication.
 - Company X wants to improve quality of care by accurately locating and linking demographic information
 3. The business case and return on acquisition could be under reported without timely onboarding and validated patient index.
 - Company X wants to build a foundation for growth with a highly scalable solution
- Company X has identified Verato to provide match and link services to help detect and merge all duplicate patient records within the EMR.

Why Referential Matching?

- Up to 98% match precision without tuning or governance
 - Referential Matching delivers up to 98% match rates without any tuning and despite low quality data
- 2.4x lower Total Cost of Ownership
 - Cloud based. No tuning. Less data governance, data stewardship, and data cleansing
 - Simpler operation, no maintenance and continually upgraded
 - No hardware, additional software or costly consulting projects.
- Modern Design Built from the Ground Up
 - Plug in using modern API architecture
 - Big Data & Cloud supported
 - Works with Biometric partners like, RightPatient



Supporting Use Cases

Data Migration

- Provides a clean identity dimension to all transactional and clinical systems.
- Identity data quality gaps and new business rules for agile transformations
- Develop a repeatable approach with existing technology

Mergers & Acquisitions

- Establish agile pre-merger analysis and efficient post merger integration
Support data collection, migration and consolidation
- Overcome rigid technology operations
- Quickly discover patient overlap

Schedule & Registration

- Accurately ID and maintain unique patient records using verified demographics
- Improve efficiency and accuracy in submitting claims and bills.
- Reduce medical ID fraud

Analytics

- Identify and close care gaps, KPIs and other dashboard metrics
- Improve performance measures, wellness and overall patient outcomes
- Reduce “lost to follow-up” and support drive predictive population health

Supporting Use Cases

Integrated Delivery

- Positive Patient ID on all applications such as lab, radiology imaging and fertility EMR
- Plan for interoperability and health information exchange

Patient Safety & Security

- Improved Patient experience with reduced likelihood that patient portal access will be granted to the wrong patient record
 - Improved Patient experience across transactional & clinical systems.
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What is Verato?

CLOUD-BASED – Quick deployments and no application maintenance required.

Company X Women's Health can quickly "plug in" to leverage Verato to invoke identity with technology Company X WH already uses. Verato manages the cloud service with development and innovation "sprints" that releases regular enhancements that are immediately available without the need to download, recompile, tune, patch or upgrade. Our modern APIs allow for quick integration with any IT solution from any vendor including your Integration Engine (Corepoint) and EHR (eClinicalWorks).

Pre-populated - Demographic data supports existing and future markets served by Company X

Nationwide coverage up to 98% of the adult population with as much as 30 years of historical demographic attributes. Company X can grow and still link patient identities to the extensive identities contained within Verato to overcome geographic boundaries and newly acquired practices.

PRE-TUNED - A totally new matching approach that doesn't need tuning or **stewardship as you load new data sources.**

No Workbench configuration console or User Interface required so Company X can leverage the continuously updated demographic data without adding costly and manual records management to incorporate the onboarding of new sources as Company X engages in new business relationships.

PROVEN – WIDELY USED PLATFORM TO IDENTITY PATIENTS

Customers like **CRISP, Northwell Health, Healthix, New York eHealth Collaborative and San Diego Health Connect** have deployed Verato to reduce costs, improve data quality and improve match accuracy within complex heterogeneous environments.

SECURE - Completely protected. Cloud-powered security.

Verato is HITRUST certified and HIPAA compliant. Verato has met the rigorous administrative, physical, and technical security standards of our premier healthcare clients such as **Intermountain Health, UPMC, Mission Health, VA and UHC**. Verato never comingles your data. You simply provide demographic identity data for your patients—strictly for matching purposes—which is kept in a secure, private client environment.

Where Are We Now?

- Initial load and analysis found more than 110,000 unique patients that had been duplicated
- The duplicate records involved more than 450,000 patient records
- Rules/workflows for determining things like survivorship are being developed
- Data is being validated to confirm appropriate duplication identification
- Live implementation is scheduled for end of month

