

**CUSTOMER**

Hunterdon Healthcare

CHALLENGES

Unify inpatient and outpatient data despite different patient identifiers

SOLUTION

InterSystem EMPI, a next-generation master person index

OUTCOME

Matching inpatient and outpatient records for a single view of patient data

At Hunterdon Healthcare, InterSystems EMPI Helps Deliver a Unified View of Patient

Like other healthcare organizations running on best-of-breed IT systems, Hunterdon Healthcare, a 178-bed teaching hospital in central New Jersey, ran into some issues. The IT systems include an electronic medical record (EMR) and about 100 other applications. Hunterdon uses an integration engine and a unique patient identifier from the hospital registration application to enable data sharing among inpatient systems, and to keep them synchronized. However, the health system's 60-plus owned and affiliated ambulatory facilities use a different clinical EMR with different patient identifiers.

Through time, changes in contact information, missing information, spelling errors, or other data mishaps, it can be difficult to match inpatient and outpatient records to the same patient. It's a challenge that can have a costly impact on care and IT staff. At Hunterdon, Robin Deal, manager of data integration, and Jagdish Patel, manager, HIE and connectivity, turned to InterSystems for a solution.

InterSystems EMPI Speeds Progress on Key Initiatives

The patient identifier mismatch was slowing Hunterdon's progress on several fronts, including:

- Providing a complete view of inpatient and outpatient data with a single login
- Establishing a radiology imaging center with another healthcare system
- Ensuring that emergency department (ED) and inpatient clinicians are alerted to outpatient pain management history

Hunterdon chose InterSystems Master Person Index solution, InterSystems EMPI, to make these and other initiatives possible.

One hospital found duplicates in **22%** of all patient records. The cost of corrections was **\$96 per duplicate**.¹

Automated Patient Matching and a Single View of Patient Data

Hunterdon clinicians and other staff were satisfied with the EMR and other IT systems they already used. There was no push, or funding, to replace these systems with a single "do it all" EHR for inpatient and outpatient care. Instead, Hunterdon used InterSystems EMPI to automate the process of identifying the same patient in inpatient and outpatient records. Once matched, the records could become part of Hunterdon's longitudinal HealthShare Unified Care Record. Now, when a clinician using the inpatient EMR needs to see patient data from the ambulatory systems, or outpatient clinicians need inpatient data, a single click displays a carefully organized display of the complete record. "Physicians in the hospital welcomed the change," said Patel. "When a patient from our ambulatory Center for Advanced Pain Management is admitted, for example, it's easier for hospital physicians to get the complete picture of the patient's medication history."

Smoothing the Path for Joint Ventures

When Hunterdon's senior management team established a joint venture to create a shared radiology imaging center with another healthcare system, Hunterdon again turned to InterSystems EMPI as the enabler. "We had to pass orders and scheduling messages back and forth between their EMR and our scheduling and ambulatory systems," said Deal. "Handling the different patient identifiers and matching patients wouldn't have been possible for us without InterSystems EMPI." Hunterdon patients now take advantage of the center's radiology services with images and results data flowing smoothly between the two organizations and into their respective patient records.

¹Hidden Costs of Duplicate Patient Records. Healthcare Financial Management Association, <https://www.hfma.org/topics/article/60322.html>.

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*Robin Deal, Manager
of Data Integration,
Hunterdon Healthcare*

Better Patient Information Flow Through Alerts

Hunterdon leverages InterSystems EMPI and HealthShare Unified Care Record, to deliver risk alerts between NextGen – the ambulatory EMR – and inpatient systems. For example, a patient’s participation in a pain management program at Hunterdon’s outpatient Center for Advanced Pain Management is documented in NextGen. InterSystems EMPI monitors NextGen for this indicator. When it’s created, InterSystems EMPI determines whether the same patient exists in the inpatient EMR. If so, a pain management alert is sent to the inpatient EMR, ready for use when the patient is next admitted. This alert also is passed to the ED system, so ED clinicians are aware of the patient’s status. ED clinicians can then use HealthShare Unified Care Record to document current medications, opioid use, or pain management program enrollment. “What we’ve done here gives patients more confidence in their providers and ensures that pain is managed inside and outside the hospital in the best way for each individual,” said Patel.

A Community Healthcare System with Major Medical Center Capabilities

“As a community healthcare system and teaching hospital, our need for IT services is high,” said Deal. Relying on InterSystems EMPI and other InterSystems connected health solutions has enabled Hunterdon to meet these needs and deliver a big medical center level of care that patients expect, without the big medical center levels of staff and spending. “We have so much to do, and limited resources to do it,” noted Patel. “InterSystems EMPI has played a critical role in unifying our patient information, without us having to rip out and replace multiple IT systems.”

For More Information

To learn how InterSystems can help your organization overcome identity resolution challenges, visit our [EMPI](#) page.

