Enterprise Master Person Index for a Single Source of Truth

Identifying patients, members, and health consumers should be easy, but in fact it isn’t. People are mobile and may receive care from different organizations in multiple settings. Healthcare organizations use different information systems, and identifiers often vary among them. When healthcare organizations affiliate or merge, multiple identifiers and differences between information systems complicate the process of information consolidation. And duplicate or misidentified records can be an issue even within a single information system. All it takes is a simple clerical error to result in two different, incomplete records for the same patient.

HealthShare Patient Index is an enterprise master person index (EMPI) product that provides an automated and easily integrated solution for creating a “single source of truth” for identity and demographic information. Patient Index is pre-configured to work with InterSystems HealthShare Unified Care Record to accelerate the merging of multi-source information into a single, accurate, unified care record. Patient Index use cases include:

- Automatically linking large volumes of records in accordance with your business rules to create a unified care record within a healthcare enterprise, across a health information network, or embedded within another solution
- Recognizing the creation of duplicate records in real time and triggering corrective actions
Adding Safety and Accuracy to Shared Health Information

A sophisticated matching engine using deterministic and probabilistic logic sits at the center of Patient Index. This set of software algorithms and services provides record matching and automated tuning tools to adjust the algorithms based on your data set.

Key Features

**Data Quality Framework**
Data Quality Framework (DQF) is an analysis utility that makes creation of the EMPI faster and more accurate, and the EMPI itself easier to maintain. Using DQF you can determine the cleanliness, or not, of data coming from source systems. With this knowledge you can work with source system managers to improve data quality, or establish routines to clean the data before it reaches your EMPI. DQF includes dashboards that display data-source trends over time and other intelligence, making it easier to catch potential issues early and prevent bad data from entering your EMPI.

**Dashboards**
Patient Index includes usage and detail dashboards that help you achieve the highest levels of record-matching accuracy. Overview dashboards include information like the number of logins by user and the number of imported patient records. The Linkages detail dashboard provides insight on how records are or are not linking across particular facilities or the entire environment. The Record Summary dashboard tracks usage, including counts and trends of adds, updates, and merges against records over a given time.

**Batch Import**
The Batch Import utility is used to bulk-load patient data into the system. This can be useful when onboarding a new data source, or when migrating a data source from an existing system. Batch Import provides APIs to ingest demographic data into Patient Index and export data from the patient registry.

**Whole Record Viewer**
To facilitate manual review and validation, the Whole Record Viewer lets you efficiently compare and validate patient identity and demographics across all source records on a single screen.

**Composite Record**
Patient Index automatically determines which records refer to the same individual and creates a single composite demographic record for each patient. When there are slight differences between data sources, the system uses configurable rules to choose the most trusted source. Data that is out of sync or out of date can be highlighted by the system for manual review.
Workflow Integration
Patient Index includes easy-to-use and configurable workflows to manage those cases where manual intervention is required. It also automatically notifies other systems and facilities about important changes to patient information.

Record Integrity and Configuration Evaluator
These utilities help you ensure optimal settings and operation of your EMPI before go-live and after. The utilities run on the live system, and do not need service interruptions to diagnose and repair system configuration or data integrity issues, if they exist.

Standards-Based APIs for Connectivity
Built-in secure and robust support for standards, including HL7 FHIR®, HL7®v2, IHE (PIX, PDQ, PDQm, XCPD), and Web Services, enables you to easily integrate Patient Index with the other applications in your enterprise.

Customized Rules
A built-in rules engine allows you to create and implement site-specific logic, such as customized patient matching and alerting.

Auditing and Security
A secure, role-based portal manages access to data and utilities. All record updates are audited, as are all decisions to link or unlink patient records.

Flexible Deployment Options
Patient Index is one of InterSystems HealthShare Cloud solutions. When you subscribe to Patient Index Cloud InterSystems designs, hosts, and delivers the integration platform so you do not need to purchase, operate, secure, and maintain the infrastructure yourself. Patient Index Cloud services include:

- All data center resources, including hosting, hardware, and network capacity needed to run the solution
- Ongoing maintenance of all solution components
- Customer-specific configuration and implementation services to bring the solution live, including building connections
- 24/7 support for the solution including real-time monitoring
- Seamless upgrades
- Sophisticated security and data protection programs

Patient Index is also available on premises/private cloud as container-based deployments or traditional kit-based installations.

Customer Support and Education
When you select Patient Index, you get more than technology. You also get our acclaimed customer support and extensive educational opportunities. Search for Patient Index education resources at Learning.InterSystems.com. Learn more about Patient Index and all of the products within the HealthShare suite at InterSystems.com/HealthShare.