As health care organizations grow, merge, and form affiliations, creating a single master view of critical patient data is an increasingly important task. For example, the Health Insurance Portability and Accountability Act (HIPAA) establishes the requirement to uniquely identify participants involved in the provision of health care services. Similarly, payer organizations must accurately and uniquely identify covered individuals, regardless of how they are identified in various provider systems.

**Sun eIndex™ provides a tailored enterprise master patient index**

The Sun eIndex™ Single Patient Identifier is an enterprise master patient index (EMPI) composite application built upon the Sun Java™ Composite Application Platform Suite (CAPS), the sixth suite in the Sun Java Enterprise System. eIndex creates a cross-reference of patient information that is kept current by rules to identify, match, and update data from multiple source applications. The Web-based components of eIndex Single Patient Identifier are highly configurable, allowing health care organizations to create a custom patient indexing applications suited to their specific needs.

The eIndex Single Patient Identifier allows health care customers to quickly define the EMPI’s configuration according to each organization’s requirements. Users are able to specify which patient records to manage, the local systems that contain those records, standardization and matching rules to cleanse data, and survivorship rules to manage single best records.

**Real-time, automated data cleansing standardizes, matches, and cross-indexes records**

A probabilistic matching algorithm is employed to match patients in disparate systems using data elements available in each system — for example, first and last name, social security number, date of birth, and address. This matching logic is used in conjunction with configured thresholds to determine whether an incoming record contains information for an existing or new patient. As records are matched across multiple systems, the eIndex application builds a cross index that can be used to graphically or programmatically synchronize source systems in real time.

**Potential duplicate detection and handling**

One of the most important features of the eIndex Single Patient Identifier is its ability to match records and identify possible duplicates. Using a probabilistic matching algorithm, eIndex can identify potential duplicate records and allows users to either merge the records in question or treat them as unique records.
The system can merge records at either the enterprise unique ID level or within a local system; alternatively, an end user can graphically manage the merge of information into local systems or an enterprise single best record. Additionally, the system provides a complete history of each record by recording all changes at both the local and enterprise levels.

Fully graphical, tailored application for data quality management

The eIndex Single Patient Identifier makes it easy to manage the quality of information in the master index by automatically generating a Web-based application that has all the features required for maintaining data records. It allows users to add new records, as well as view, update, deactivate, or reactivate existing records and compare records for similarities and differences. The user can view each of the source system records and the enterprise single best record. Additionally, information contained in each single best record or source system record can be obtained from the database using a variety of search criteria.

About the Sun Java™ Enterprise System

The Java Enterprise System is a radical approach that changes forever the way businesses acquire, develop, and manage software. Only Sun has the experience and the end-to-end portfolio to deliver such a unique and industry-revolutionizing strategy. With the Java Enterprise System, network services and critical business applications are up and running faster, easier, and at a lower cost than ever before, so you can focus on innovation, competition, and bottom-line results.

Serious software made simple

Sun provides a complete portfolio of affordable, interoperable, and open software systems designed to help you maximize the utilization and efficiency of your IT infrastructure. Built from the secure, highly available foundations of UNIX® and Java, these systems deliver implementations that are preintegrated and backward compatible. Sun’s portfolio consists of Solaris and Linux software for SPARC® and x86 platforms, Sun N1™ software, and the Sun Java System.