Oracle Healthcare Master Person Index provides a single point of reference to information about a patient, clinician, payer, or other healthcare entity within and across healthcare organizations. It ensures the availability of unified, trusted data for healthcare entities from many systems that reference the entity with different identifiers or names. Oracle Healthcare Master Person Index is a part of the Oracle Health Information Exchange Solution – a suite of products built to enable patient-centric exchange of healthcare documents.

Flexible, Extensible, Configurable Enterprise Master Person Index

As healthcare organizations grow, merge and form affiliations, having complete and accurate information becomes more challenging. Information assets become fragmented across database instances managed by a variety of sources. Mergers and acquisitions bring information assets that must be quickly and efficiently integrated into the parent organization. Global operations require enterprises to meet compliance regulations in multiple countries.

Oracle Healthcare Master Person Index provides healthcare organizations a variety of configurable, single-view solutions with a service-enabled approach. Users can specify the entity records to manage, the local systems that contain those records, the standardization and matching rules to de-duplicate the data, and the survivorship rules to manage single best records. It’s a customizable open standards-based solution tightly integrated with products in Oracle’s complete HIE solution and technology stack and interoperates easily with third-party products.

Standards-Driven Provider Index

Oracle Healthcare Master Person Index includes a solution for Provider Index covering individual and organizational providers. This Provider Index solution combines best practice usage from a variety of standards including the U.S. National Provider Identifier, Australian standard for Healthcare Provider Identification and IHE's Healthcare Provider Directory. The solution enhances healthcare organizations' ability identify healthcare providers and locate their details to efficiently deliver comprehensive, safe, and timely healthcare services.

Easy to Implement, Highly Scalable and Reliable

The Oracle Healthcare Master Person Index is lightweight, fast, and easy to install in less than 30 minutes. To further simplify and reduce your cost of implementation, Oracle offers support and consulting services with specialized
expertise in data profiling, cleansing, bulk-loading, and match engine configuration. Deployed in some of the largest healthcare settings in the world it supports initial projects as well as massive, cross-enterprise implementations. It is the trusted platform to develop, deploy and manage single-view applications.

**Real-Time, Automated Data Cleansing Standardizes, Matches, and Cross-Indexes Records**

When consolidating data from various sources, assumptions cannot be made about the quality of the data sets. Profiling tools are required to inspect and understand the data. Oracle Healthcare Master Person Index provides a variety of frequency analyses to deliver frequency distribution tables that can be used to define and refine matching and standardization rules.

The product uses a powerful, extensible, configurable, high-performance probabilistic match engine. The match engine compares complex data records containing a multitude of data types to calculate a global composite weight that reflects how closely the records match. A comprehensive weighting mechanism is then applied to automatically merge records that qualify to be merged. Data filters are also available to completely exclude common default occurrences. As records are matched across multiple systems, Oracle Healthcare Master Person Index builds a cross-index which can provide a single view to consuming applications and synchronize source systems in real time.

![Figure 1. Using matching logic Oracle Healthcare Master Person Index determines which records to merge.](image-url)
**Potential Duplicate Detection and Handling**

The Oracle Healthcare Master Person Index can match records and identify possible duplicates. Using the match engine it identifies records that don’t meet the threshold for automatic merge but carry a good possibility of being duplicates. The thresholds for automatic merge and identification of potential duplicates are configurable by the user. The system then allows users to either merge the records in question or treat them as unique records.

**Probabilistic Matching**

*How it Works (simplified)*

<table>
<thead>
<tr>
<th>First</th>
<th>Last</th>
<th>ID</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Record #1</td>
<td>Ed</td>
<td>Lee</td>
<td>55228998</td>
</tr>
<tr>
<td>Record #2</td>
<td>Edward</td>
<td>Lee</td>
<td>55228989</td>
</tr>
</tbody>
</table>

\[
\text{Weight (0 to 1)} = 0.9 + 1 + 0.8 + 0.9 = 3.6 \text{ Total}
\]

**Figure 2.** The match engine has configurable thresholds, identifies duplicate records and allows automatic merge or manual review.

**Easy to Use Graphical Data Stewardship**

Oracle Healthcare Master Person Index includes a rich, non-programmatic, browser-based data stewardship interface for business users to manage master entity data. Business users and stewards can resolve potential duplicates, review automatic matches and merge or unmerge enterprise data. An intuitive side-by-side comparison enables easy resolution of data. The product supports extensive transaction logging and a variety of activity reports for audit and governance compliance.

**Interoperability Using Integrating the Healthcare Enterprise (IHE) Profiles**

Oracle Healthcare Master Person Index supports Integrating the Healthcare Enterprise (IHE) Profiles to achieve the IHE objectives of placing timely, accurate, and trusted medical information in the hands of healthcare professionals. To assure compatibility with other vendors and healthcare organizations in the context of patient identity cross referencing and making available reliable patient demographics information, Oracle Healthcare Master Person Index implements the following IHE profiles: Patient Identifier Cross Referencing (PIX), Patient Demographics Query (PDQ), Patient Administration Management (PAM), Audit Trail and Node Authentication (ATNA), and Consistent Time (CT).
Consistent Time (CT). OHMPI employs a specialized implementation of HL7 messaging to natively support HL7 v2 and HL7 v3 messages to facilitate information sharing in a health information exchange environment.

Availability
Oracle Healthcare Master Person Index is available as a standalone product offering or as a component of Oracle Health Information Exchange. Oracle Health Information Exchange facilitates the movement of data within privacy and regulatory guidelines to ensure patient trust. This enables organizations to improve their governance and compliance related to Internet communications and makes this data available for Meaningful Use while extending the power of personalized healthcare to the consumer. Oracle Healthcare Master Person Index is fully integrated with Oracle Health Information Exchange solution to empower healthcare entities globally to reduce costs, enhance revenues, and most importantly, improve patient care.

Contact Us
For more information about Oracle Healthcare Master Person Index, visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.

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Hardware and Software, Engineered to Work Together