



## 3M™ Enterprise Master Person Index

- Cross-references local patient identification systems to preserve the investment in legacy systems
- Uses Advanced Matching Logic (AML) to help accurately identify patients and avoid duplicate records
- Links acute and ambulatory data to provide an electronic medical record with both demographic and encounter data from across the care continuum

### Quick, consistent identification

The **3M Enterprise Master Person Index (3M EMPI)** can work in an integrated healthcare enterprise or a community-based health information exchange (HIE) to quickly and consistently identify a patient across care sites and healthcare encounters. The 3M EMPI also integrates and consolidates patient indexes from multiple registration systems into a single index, providing an accurate, centralized summary of both patient demographic and encounter information.

The 3M EMPI tracks data for:

- Patients who have seen a physician or been admitted to a hospital
- Members of health plans and wellness facilities
- Subscribers with no healthcare encounters

No matter where an individual receives care, the 3M EMPI can save registration and admissions personnel time at check-in by giving them access to that person's most current data. As patients move between care sites without having to repeat their admissions data, they perceive the enterprise as a single organization that recognizes them as individuals and understands their healthcare needs.

### Single unique identifier

When a new record is added to the 3M EMPI, a unique, system-wide identification number—called the Person Number—is generated for that individual. A key component and important first step in creating longitudinal patient records, the Person Number links external identifiers, demographic data, and encounter data records into a single data set.

Today, the Person Number is frequently used to link the patient's records from interfaced clinical systems, such as radiology, pharmacy, and laboratory. When a National Patient Identifier (NPI) comes into play, the 3M EMPI can be adapted to link to that identifier as well.

The Person Number benefits both users and information systems managers, because current registration methods don't have to be replaced or a single medical record number format enforced across diverse information systems. Users can still locate patient information with the medical record numbers or other permanent identifiers used on the organization's legacy systems. Most important of all, the 3M EMPI makes it possible for clinicians to identify and view in a single glance an entire medical record from multiple encounters across the care continuum. Besides saving clinicians both time and effort in locating records, the 3M EMPI allows for easy access to available data and the ability to share it with other colleagues and facilities, which can help improve patient care and delivery.



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### Advanced matching logic

An enterprise or HIE can begin using the 3M EMPI's **Advanced Matching Logic (AML)** to address duplicate record problems and help prevent duplicates from entering the 3M EMPI in the first place. This logic can:

- Intelligently compare a multitude of data elements
- Anticipate possible mistakes and variations in data entry
- Match records even when their individual data elements are not exactly the same
- Help overcome the inconsistencies created by variations in registration practices across multiple systems

When a unique identifier, such as an enterprise identification number or a facility ID/medical record combination, is not available for a record search, AML uses a probabilistic matching algorithm to examine and compare many different data fields within the record.

AML also applies system-modifiable aggregate weights and penalties to groups of data elements to derive a score that reflects the probability of a record match. The logic automatically identifies and logs suspected duplicates for later resolution. A client application is provided to help manage the user review of possible matches and determine whether records should be merged.

### Encounter tracking and record locator service

Whenever an encounter (any inpatient or outpatient visit with an admit date and billing number) is added to the 3M EMPI, it becomes part of the individual's long-term history. Each encounter is uniquely identified, so users always have access to the data, regardless of the facility or department in which the care was given. Additionally, this capability can be used as a record locator service to facilitate queries of disparate clinical systems to assemble a complete view of the clinical data captured for a patient.

### Active or passive interfaces

The 3M EMPI can either operate on its own or as part of a complete electronic medical record solution. A patient's data in the 3M EMPI can be accessed interactively from another compatible application, or passively transmitted over an interface from another information system. Each entity in an enterprise or HIE can select its own solution, depending on its existing systems and business goals.

### Record structure and content

Each record in the 3M EMPI contains data items that contribute to identifying the individual and make the record unique. Some items, such as social security number, passport number, and birth date, generally remain stable over the individual's lifetime, but others (last name, addresses, and phone numbers) may change frequently. The 3M EMPI is designed to accept updates to all identifying information except the Person Number.

### Audit trails

If an enterprise or HIE needs to audit the 3M EMPI's transactions, the system records each update, the transaction's date and time, and the identity of the user who performed the update.

### Service-oriented approach

The 3M EMPI is built using a service-oriented approach that supports its own web front-end as well as provides an application programming interface that allows it to readily integrate with other applications. An organization can use other vendor's products or create its own custom applications on separate hardware platforms to communicate with the 3M EMPI.

### Call today

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