Orchestrate™

Identity API

Privacy-preserving record linking
across data sources and use cases

Powered By CareEvolution™

Privacy-preserving record linking (PPRL) is a mechanism for securely matching patient data across sources.

Privacy-preserving record linking (PPRL) is a mechanism for securely matching patient data across sources. Traditionally, healthcare data interoperability implementations have used master patient indexes with a centralized source of demographic information to perform record linking. Using a PPRL instead improves upon traditional implementations.

0

False positive errors

200M+

Lives

Hashing

Before storing a record, the PPRL performs an irreversible hash operation on the demographic data. All matching processes use the hashed values, thus "blinding" the data.

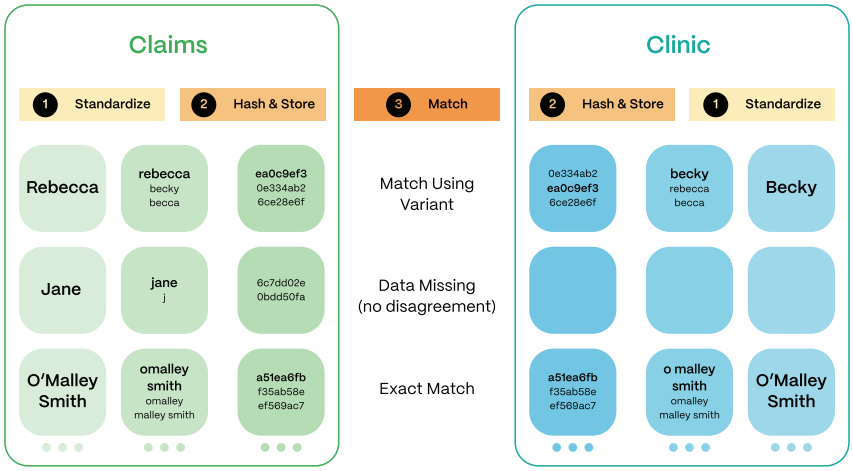
More Secure

By one-way hashing plaintext strings to long sequences of semantically meaningless numbers and letters, patient data is more secure. This strategy ensures that patient demographic data stored in a centralized index is unrecoverable.

Why use CareEvolution's Identity?

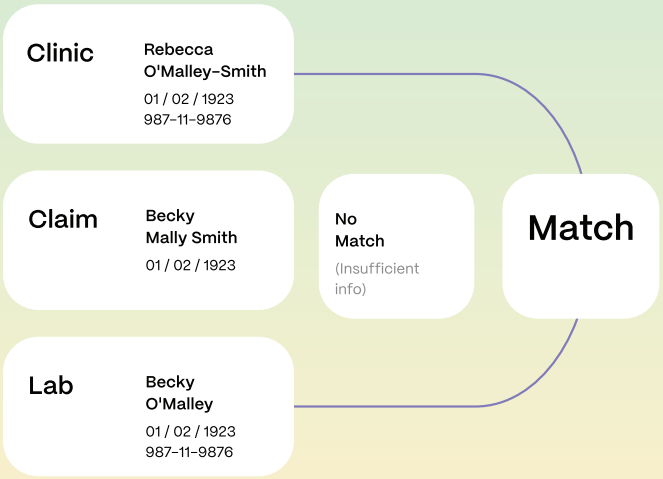
Automated, but flexible	Identity's PPRL techniques perform the vast majority of linking hands-off, but allows for manual review where appropriate.
Cloud native	The Identity API has modern, cloud native architecture.
Standardized	Demographic information is cleaned so comparing this information yields meaningful results.
Multiple linking strategies	Identity determines a final link status using multiple linking strategies, including deterministic and probabilistic record linking.
Proven	Identity is based on a mature, complex set of algorithms developed and refined by CareEvolution® over the past 15+ years.

How it works — simple matching example



Record Linking

Identity performs this matching process for all demo-graphic fields to determine which records belong to the same individual. It minimizes false positives by only linking records when there is high confidence of a match.



Hashing

Before storing a record, Identity performs an irreversible hash operation on the demographic data. The service only stores and performs match operations with the hashed values, not the original values. This makes it "blinded."

Read the white paper

Standardized		Hashed	
First	Rebecca Becky Becca	First	ea0c9eff3 0e334ab2 6ce28e6f
Last	omalley smith omalley malley smith	Last	a51ea6fb f35ab58e ef569ac7
DOB	1/2/1923 2/1/1923 1/2/1932 1/2/1933	DOB	522daa63 ac945df8 376ab8ef ee5384fa
Gender	Female	Gender	aa249180
Race	Caucasian	Race	3d9ef771
SSN	987119876 987119876	SSN	2ed723a8 e743e0af
MedicaidID	111111111	MedicaidID	e63d0a2b
Address	123 Main St. Ann Arbor, MI 48105	Address	037d2797
Phone	55551234567 55551234568 55551234576	Phone	68495b90 4ee92ee9 f3e31a86

Trusted by leading healthcare organizations

Learn more about the Identity API

Unlock the full potential of Identity as part of a flexible suite of Orchestrate technology.

CareEvolution's Orchestrate technology and APIs liberate, aggregate, standardize, enrich, and transform data to power patient-centric use cases.

Identity
Enable PPRL across data sources and use cases

Terminology
Standardize and classify healthcare codes and concepts

Convert
Transform input data from one standardized format to another

Insight
Compute hierarchical condition category (HCC) risk adjustment profiles

Learn more at **careevolution.com/orchestrate.**