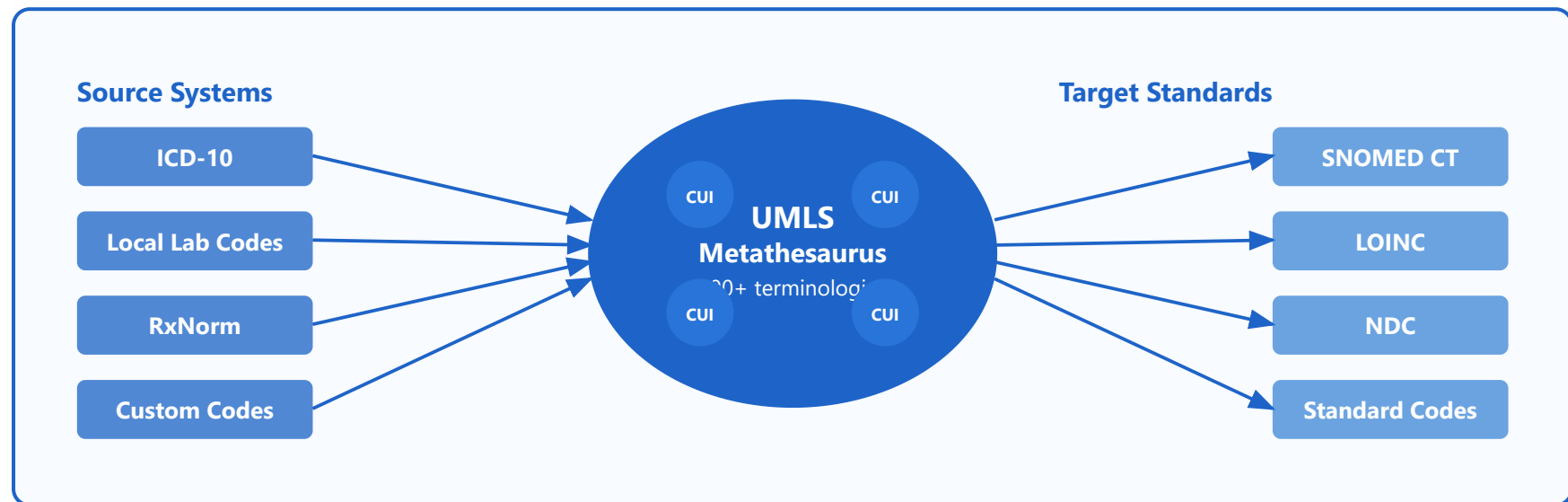


# Ontology Mapping



## Crosswalk Creation

- ICD-10 to SNOMED CT
- LOINC to local lab codes
- RxNorm to NDC
- Manual and automated approaches



## Automated Mapping

- String similarity algorithms
- Lexical matching
- Machine learning classifiers
- Natural language processing

## ✓ Validation Methods



## UMLS Metathesaurus

- Expert review
- Dual coding
- Inter-rater reliability
- Continuous quality improvement

- Unified Medical Language System
- Integrates 200+ terminologies
- Concept Unique Identifiers (CUI)
- Relationship mappings across systems