

Clinical NLP Task Taxonomy

Named Entity Recognition EXTRACTION

Identify diseases, medications, symptoms, procedures from clinical text



EXAMPLE
Patient has diabetes and takes metformin 500mg daily 94% F1

Relation Extraction RELATION

Find relationships between medical entities (drug-disease, symptom-cause)



EXAMPLE
Aspirin →treats→ Headache 91% F1

Temporal Expression TEMPORAL

Normalize time expressions and sequence medical events chronologically



EXAMPLE
"2 weeks ago" → 2024-01-01
"after surgery" → T+1d 88% Acc

Negation Detection LOGIC

Identify negated medical concepts and uncertainty modifiers



EXAMPLE
"No signs of infection" ✓
"Possible pneumonia" ? 92% Prec

Medical Code Mapping MAPPING

Map clinical text to ICD-10, CPT, SNOMED-CT codes



EXAMPLE
"Hypertension" → ICD-10: T10 87% MAP

Clinical Text Summarization GENERATION

Generate concise summaries from lengthy clinical notes



EXAMPLE
5-page note → 2-line summary
Compression: 95% ROUGE 0.82