

Health Language®

Clinical Natural Language Processing (cNLP)

*Extract valuable
clinical information
from unstructured text*



Unlocking Patient Information: The Challenge of Unstructured Text

More than 80% of healthcare data is locked in unstructured text, including medical history and clinician notes captured in free-text fields. Too often, valuable patient insights captured in unstructured text are overlooked due to the manual review and coding processes required to make the information compatible with healthcare IT systems.

Artificial intelligence can help optimize this workflow by automating the record review process and extracting clinical insights that are medically relevant to the healthcare professional.

Apply cNLP Technology to Optimize Daily Workflow

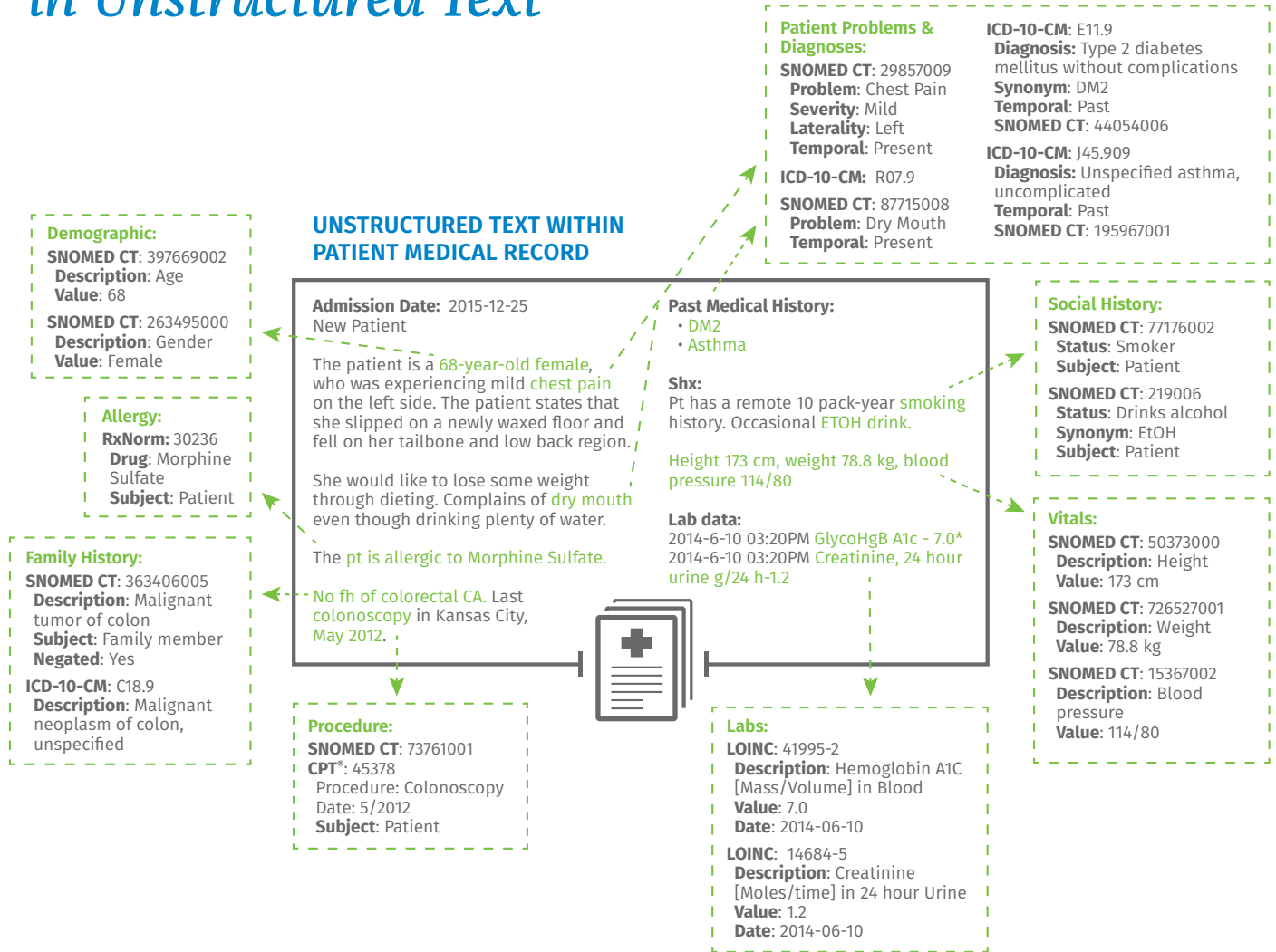
- ✓ Process a patient's complete medical record in seconds, and extract key information to answer questions such as "Did the patient have a colonoscopy in the last ten years?"
- ✓ Summarize hundreds of pages of medical records and highlight important key facts.
- ✓ Summarize patient risk, including high-risk situations as determined by organization criteria.

What is cNLP?

Clinical NLP is a specialized form of Natural Language Processing (NLP), designed specifically to analyze complex healthcare data.

Leveraging a foundation of rich, clinical ontologies and provider-specific terminologies, cNLP has the ability to interpret and extract clinical meaning from the messy, non-standardized, inconsistent data within medical records, including clinician notes, pathology reports, dictated radiology reports, and other free-text data sources.

Leverage cNLP to Extract Value Locked in Unstructured Text



High-Value Use Cases Enhanced with cNLP

Medical Necessity Review

Reviewing patient records to verify medical necessity is time-consuming and costly if done manually. Clinical NLP can automate and accelerate this process by scanning charts for relevant clinical information.

Quality Measures Reporting

Clinical NLP extracts specific information locked in clinical notes, pathology reports, and other medical records to enhance accuracy of data reported and therefore improve quality measure scores.

Risk Stratification

Healthcare professionals must manually review all available patient records, including EHR notes, test results, claims history, and others to accurately assess patient health and calculate appropriate patient risk scores. Clinical NLP can accelerate these manual workflows by highlighting clinical concepts that qualify as complicating conditions to more accurately characterize the risk of the patient.

Predictive Analytics

Predictive analytics and other AI or data science initiatives require quality data to be most effective. Clinical NLP extracts and normalizes clinical data to healthcare standards to accelerate the development of accurate models.

Differentiators of the Health Language cNLP Solution

The Health Language cNLP solution supports payers, providers, and vendors to accelerate and optimize patient medical record review by extracting clinically relevant data for use in risk stratification, quality measures reporting, medical necessity review, and predictive analytics.

- **Proprietary Library of One Million Synonyms**

The cNLP solution leverages the proprietary Health Language library of provider-friendly terms including clinical synonyms, acronyms, and common misspellings to capture the various representations of clinician notation within a patient record.

- **Clinical Contextual Awareness**

Health Language cNLP can identify the context surrounding information identified to gather a better clinical understanding (Negation/absence of findings? Which sections did it come from? Is the problem for the patient or a family member? Current or past? What is the value and date of the lab measure?).

- **Highly Configurable and Scalable**

The modular cNLP platform comprises best-of-breed tools and services, available via APIs to address your specific use cases.

- **Knowledge of Multiple Domains**

Out of the box, our cNLP solution can identify problems, diagnoses, drugs, and labs, and can codify local reference terminologies to standards such as SNOMED CT®, LOINC®, RxNorm, and others.

- **Supported by Clinical Informaticists and Data Scientists**

Health Language clinical informaticists can rapidly assess your needs and recommend optimal configuration for immediate results, leveraging the Wolters Kluwer dedicated data sciences team for the most advanced AI and machine learning configurations.

- **Built on the Industry's Leading Reference Data Management Platform**

Health Language maintains the most up-to-date library of reference terminologies. Customers leverage our powerful Reference Data Management solution platform to author, group, and map local and standard content, and to streamline terminology workflow and governance.

Not sure where to start? We can help.

The Health Language cNLP team can help you determine which high-value initiatives can be optimized by cNLP. Together we will identify priorities, timelines, and use cases that will determine how your solution can be tuned to optimize staff efficiency and augment existing workflows.

Health Language

Terminology management solutions from Health Language can unlock your healthcare data to help you maximize reimbursement, meet regulatory compliance, improve operational efficiencies, and enhance patient care. Health Language provides powerful data solutions that can be customized to your organization's needs.

Health Language solutions are designed to support health IT vendors, payers, health systems, HIEs, research, and government organizations to improve search and documentation, support reference data management, enable interoperability and data normalization, improve quality measure reporting, maximize revenue cycle management, meet regulatory requirements, and enhance analytics.

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CPT® is a registered trademark of the American Medical Association.

Health Language

4600 S. Syracuse Street
Suite 1200
Denver, CO 80237

For more information, please call **720.940.2900**
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