

Health Language®

Clinical Natural Language Processing (cNLP) Chart Review Accelerator

Identify 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

- Review more charts in less time and optimize staff efficiency
- 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 clinical indicators.

### What is cNLP?

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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.

## The Health Language cNLP Chart Review Accelerator Extracts Clinically Relevant Insights and Presents The Findings To You

#### **CURRENT METHODS:**

Where current NLP tools simply extract information and present the findings in a list to sift through.

#### THE HL METHOD:

We ask the user, "What question are you trying to answer?" and then present them the answer.



## High-Value Use Cases Optimized by Clinically Focused cNLP

#### **Risk Adjustment**

Clinical NLP can quickly locate ICD-10 diagnosis in the record and identify clinical indicators that warrant further review by Coders, CDI specialists, and clinicians. The tool can scan hundreds of pages include EHR notes, test results, and specialist reports, and highlight the key information for reviewers.

#### **Quality Measures**

cNLP Chart Review Accelerator augments the review of complex charts to quickly identify the criteria needed for Quality Measures, such as HEDIS. For example, Comprehensive Diabetes Care, it can determine if the patient has had their HbA1c tested, and an eye exam performed.

#### **Medical Review**

cNLP Chart Review Accelerator can optimize medical necessity and prior-authorization review workflows by scanning the patient's chart for relevant clinical information needed to make a determination.

#### **Predictive Analytics**

Analytics and other AI or data science initiatives require quality data to be most effective. Clinical NLP enriches the data being used to empower predictive analytics and machine learning models by extracting relevant insights from unstructured text and normalizing it to standards such as, SNOMED, ICD-10, RxNorm, and LOINC.

# 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 adjustment, quality measures reporting, medical necessity review, and predictive analytics.

#### • Higher Accuracy with Our Clinical Lexicon

Proprietary library of over 1.3M clinical synonyms, acronyms, and common misspellings, built from working with over 300,000 clinicians on how they document patient encounters. Find relevant information that other NLP engines miss.

#### • Reduced Review Time

Reduce the time it takes to review patient charts and process more charts due to an increase in staff efficiency. Quickly find key information that may otherwise be missed due to human error.

#### • Tuned to Your Use Case and Documents

In addition to world-class Data Sciences, we include our Clinical Terminologists and Informaticists to tune your usecase and unique documentation style.

#### • Clinically Focused

Our solution quickly identifies the answers to key questions rather than simply providing a list of extracted information to sift through. We focus on providing answers to the clinical question you're trying to solve for. Less Noise, fewer false positives.

#### Clinical Contextual Understanding

Our solution has the ability to extract context for clinical findings such as lab values, medication dosages, body site, laterality, temporality, and family history.

#### • Foundation of Industry's Leading Reference Data Management Platform

Our solution maintains the most up-to-date libraries of reference terminologies in order to accurately identify problems, diagnoses, drugs, and labs, and can codify local reference terminologies to standards such as, SNOMED CT°, LOINC°, RxNorm, and others.

#### • Easy Integration

Our solution can be easily integrated into your existing tools and workflows via API/JSON in run-time or batch processing modes. Our fully scalable cloud technology can handle small to enterprise-scale volumes of data.

#### • Clinician Friendly User-Interface

Cut through the noise and jump quickly to the answers in our sleek user interface. Easily navigate complicated charts by viewing patient records chronologically by encounter and section. It's fully cloud-hosted so you can get up and running quickly.

#### Not sure where to start? We can help.

The Health Language cNLP team will help you determine which of your high-value initiatives can best be optimized by cNLP. From there, our Clinical Informaticists and Terminologists will configure and clinically tune the system for your particular use case to filter out the noise. *Get started with a free evaluation*!

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#### **Health Language**

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