



HITEKS

**HITEKS CDI SOFTWARE
SERVING CLINICIANS
AND RESEARCHERS
SINCE 2011**

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THE LATEST IN ARTIFICIAL INTELLIGENCE (A.I.) AND CLINICAL NATURAL LANGUAGE PROCESSING (CNLP) TECHNOLOGY

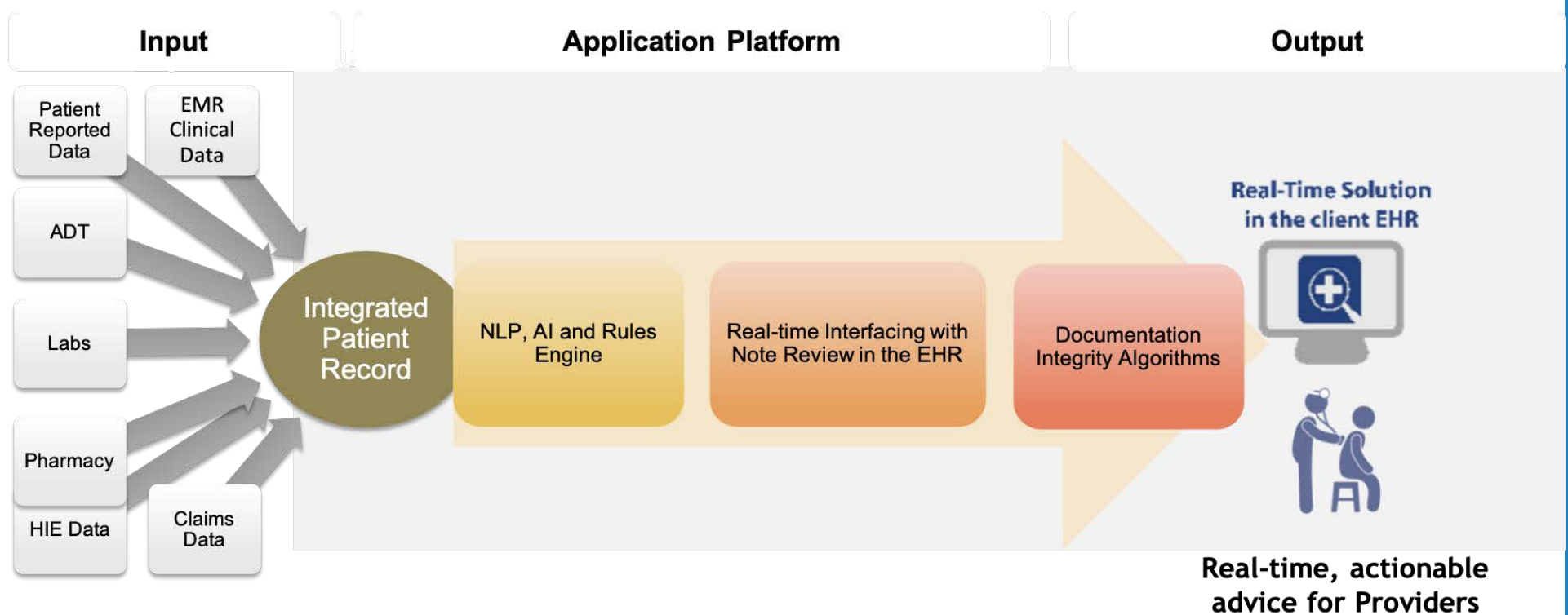
Decision support through analytics is the next frontier for mainstream medicine. The biggest problem for analyzing the data to provide the right evidence for decision-making is that the majority of the patient data is unstructured and in the form of clinical notes. This is why the goal of the shared decision-making is to support and provide providers with the necessary information to treat their patients.

At Hitek, we developed a unique approach to NLP pattern recognition, which applies an algorithm to our Lexicon and finds hits in clinical documentation in subseconds (20-200 milliseconds, depending on the size of the document), allowing us to compete more effectively by being 100 times faster than our competitors at producing physician CDI and quality suggestions along with the detailed patient evidence supporting the advice.

Clinical algorithms are built with logistic regression and neural network models that are exposed to both pre- and post-processed datasets, which are then trained, tested and enhanced over time as they learn what the ground truth is.

What clinical analysts are looking for are routes to be able to abstract the complexity of structuring clinical information to reduce the time and increase the accuracy to focus on the additional intelligence to build it into their apps. By doing this, we plan for better healthcare in the future.

The Leader in EHR-Integrated Provider Engagement



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Our Advanced CDI Software

ConcurDI For NoteReader CDI is a real-time CDI solution which provides immediate feedback to the physician and/or CDI Specialist based on tested algorithms with high positive predictive value (i.e. we don't annoy users with many false positive queries). ConcurDI For NoteReader CDI is fully integrated into Epic's CDI workflow and reporting environment, and is the only solution which contractually requires Epic to prioritize enhancement requests through the App Orchard.

ConcurDI For NoteReader CDI is part of Hitek's Insight Real-time Intelligence suite of products. Hitek supports the most advanced designer tools which allow our clients to control 100% of the CDI Query rules, and create custom libraries of CDI Queries.

Hitek recognizes that there is no "one size fits all" in CDI. The result is a robust, best-of-breed workflow solution that allows users to take advantage of their EHR environment so that a single source of truth is represented in the chart review process. Hitek has a unique, proprietary integration with Epic which includes an "Infobutton" in the physician's screen, and also links to the "Binoculars" in the CDI workflow screens to immediately highlight the evidence used for the CDI Query which supports the coding and reimbursement.

Furthermore, CDI Specialists and HIM can use Hitek's advanced A.I. algorithms to prioritize charts and manage their workflow in Epic CDI work queues for both inpatient and ambulatory charts.

Impact of CDI Software

The impact of ConcurDI For NoteReader CDI is faster query generation by CDI Specialists, faster chart review, higher compliance for physician responses, and direct querying to physicians for those query types which are shown to have high accuracy. Inpatient and ambulatory queries become more targeted, with summarized evidence to speed the response by physicians.

ConcurDI For NoteReader CDI in Epic 2018 and later versions powers simultaneous Direct and Silent Modes to automate and prioritizes real-time review by CDI Specialists of clinical documentation and structured data (labs, meds, vitals) for documentation deficiencies. Hitek powers clinical and administrative workflows with our Artificial Intelligence algorithms and patient-specific NLP Technology to improve the efficiency of the healthcare enterprise revenue cycle in many ways. This results in greater patient and physician satisfaction.



Advantages Over Other Software

Comprehensive Coding Rules

Instead of having to rely on untimely HIM feedback from manual coding review and back-end HIM systems, CDI Specialists now have a complete clinical workflow system available to them through Hitek's Insight powering ConcurDI For NoteReader CDI. Local rules and Hitek's expansive library of over 100 automated query areas at their fingertips help CDI specialists identify query opportunities as soon as physicians complete their visit note. This includes the following up-to-date insurance-specific information, which is based on Hitek's experience and proprietary reference knowledge of millions of rules: Pediatric CDI, CPT/HCPCS, NCCI Edits, ICD Rules, PQRS Rules, MIPS Rules, Specialty Bundling.

Fastest and fully integrated EHR solution

10x faster than any other NLP services currently on the market, Hitek's ConcurDI For NoteReader CDI takes advantage of modern software architecture guided by a management team of physicians. Competitors' system response times support only "Silent Mode" because they are not timely or accurate enough for Direct Mode, reducing the compliance advantage of immediate queries. With Hitek's, CDI Specialists have a true clinical, front-end tool which interacts with the EHR workflows so that CDI Specialists are in control. Other solutions rely on antiquated, back-end workflow and logic which cannot integrate with the EHR front-end system. After testing automated queries in Silent Mode workflow, CDI Specialists can decide to move some query types to Direct Mode where providers are notified that they will receive certain queries as CAPD (Computer-Assisted Physician Documentation) without manual review.

Requires no manual HIM review

Providers can simply click on one of the suggested phrases or sentences to insert into their note, and the documentation process will be complete. We, along with our customers, have tested and continuously improved the knowledge base associated with the algorithms that are finding the evidence in support of a CDI query.

Over 95% specific and sensitive, which is more than competitor solutions

ConcurDI For NoteReader CDI utilizes a library of diagnosis modifiers and has built in medical necessity knowledge, which identifies incomplete clinical terms and suggests possible specificity during documentation. It also identifies areas that lack appropriate justification for a reimbursable diagnosis or procedure, and symptom combinations which require a stated diagnosis. This leads to fewer false positives and false negatives, as well as less alert fatigue.



Employs multiple processing formats

Hitek is the only vendor to offer a CDI solution with execution in Direct and Silent modes.

1

Direct Mode

Provides immediate (<2 seconds) response time to physicians who are in the process of completing a note. This enhances claims coding capacity and compliance while reducing time spent on revenue cycle. Direct Mode in the EHR allows providers to significantly reduce the amount of time spent on returning to their patient's chart to manually review CDI Queries.

Silent Mode

Provides immediate queries to CDI and HIM Specialists with query names and prioritized numbering, which is especially useful for chart review to validate the Evidence for queries and also for determining Direct Mode candidate query types.

2





Encryption and storage of all data exchange

This ensures the protection of all patient health information (PHI). Unlike legacy vendors who use Microsoft platforms, Hitek leverages more secure Linux systems with encrypted (VPN) tunnels for HL7 and web services data exchange between Hitek and the Epic client EHR system.

Intuitive configuration customization without the need for software code adjustment

Hitek's designer tool includes a "User Customization Menu" which allows Hitek users (either directly or indirectly through Hitek support) to add their own local terms or abbreviations for their clinical specialization by searching through SNOMED terminology in the Terms section. ConcurDI is deployed as a service API for CDI Designer, which allows client personalization through custom GUI configuration without having to use "Silent Mode". Hitek also has a default configuration with a vast query library of over 100 Pediatrics and Adult queries that can be used out-of-the-box.

Pediatrics and Adult Medicine

Hitek not only leads the CDI Industry with the most number of diagnoses areas for automated CDI review, but we also lead due to our ability to use Age, Gender and other Demographics along with our clinical expertise from Specialists, Pediatricians, Nursing, CDI and Coding.

Benefits

1

Improved accuracy of clinical complexity diagnoses in clinical documentation

2

Better communication through patient-specific, instantaneous and evidence-based queries (Fewer False Positives & Negatives)

3

Significantly less chart review and evidence justification for queries: Better workflow

4

Streamlined ICD-10 coding for accurate CMI and HCC diagnosis capture and reporting



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