HITEKS

HITEKS' REAL-TIME SOLUTIONS
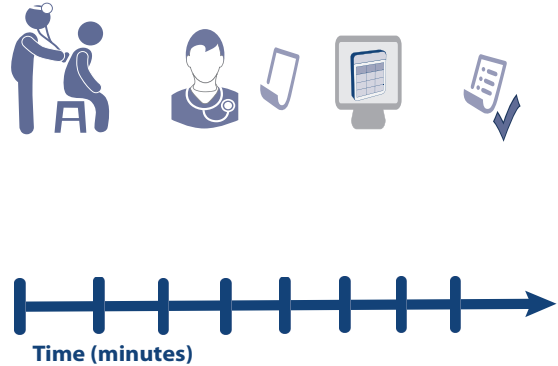
FOR REAL-LIFE PROBLEMS

Health systems invest extremely large amounts of financial and human capital collecting clinical encounter data. The process begins with the physician laboriously entering data into the EHR at the point of care. Often this data is incomplete, not meeting the complex requirements of the third party reporting and adjudication process. Many human resources analyze this generated data for financial and quality reporting. The end result of this intensive process is often poorly documented claims submissions and quality reports that consume many personnel and many months.

To address the inadequacies and inefficiencies of this crucial workflow, Hiteks offers an integrated solution from point of care straight through to the generation of claims and quality reports. In this process, Hiteks enables the physician to quickly enter appropriate documentation through our real-time documentation advice. This improved data is then automatically uploaded into the quality reporting and billing modules. Not only is the cycle shortened for these processes but the improved data leads to higher claims capture and better quality scores.
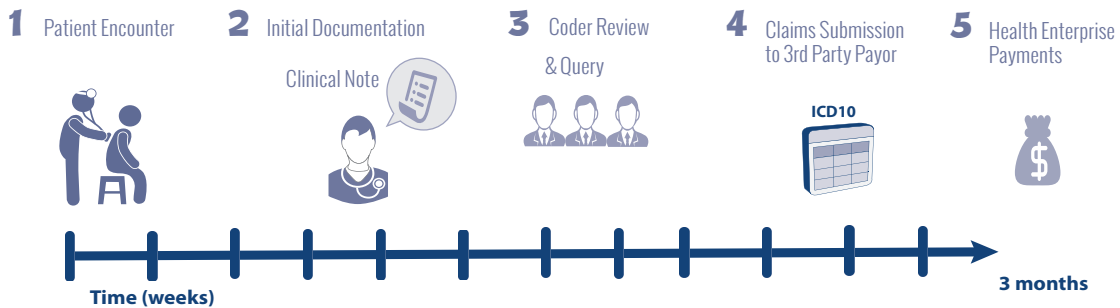
Current Processes

Physician documentation at point of care requires laborious entry of data from a dropdown menu, a pick-list or double entry; entering data in free-text and then populating structured fields individually. Entering the appropriate data required for ICD-10 coding and quality reporting of core values necessitates sophisticated knowledge of requirements or manual look up at the point of care. Obviously physicians are clinicians not documentarians so coding and quality specialists need to have the appropriate data added-in later.

Physician Data-entry:

Time (minutes)

Coding:

1 Patient Encounter **2** Initial Documentation **3** Coder Review & Query **4** Claims Submission to 3rd Party Payor **5** Health Enterprise Payments
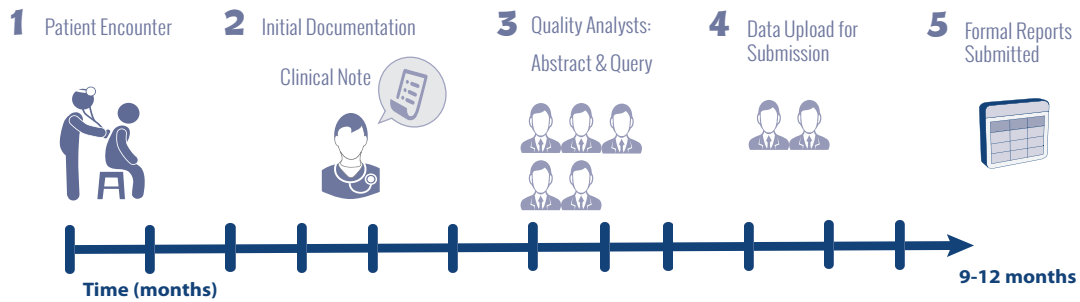
Clinical Note

ICD10

Time (weeks) **3 months**

This process is cumbersome and time-consuming for the physician and the administrative staff. Studies show that physicians spend 5 hours a month interacting with coding specialists in an effort, often unsuccessful, to improve documentation for claims submission. With the advent of ICD-10, the interaction is expected to increase to 10 hours monthly. Because of legal issues, the technique to add appropriate documentation to the clinical note requires a carefully communicated process. The result is less than optimum claims capture and quality reports that may not fully reflect physician performance.

H I T E K S

Quality Reporting:

1 Patient Encounter 2 Initial Documentation Clinical Note 3 Quality Analysts: Abstract & Query 4 Data Upload for Submission 5 Formal Reports Submitted

**Time (months)** **9-12 months**

Real-Time Solutions

The basis of Hiteks' solutions to physician data-entry and documentation improvement is our proprietary Natural Language Processing (NLP) engine. This software process utilizes state of the art NLP featuring sub-second processing of free text delivered as a hosted service. The extracted data is then returned and placed in the appropriate structured fields in the EHR. This processing not only includes structured data extraction but also analysis of the data for appropriate reconciliation, coding and quality

abstraction. Using algorithms clinically proven in millions of records, a clarification is sent instantaneously to the physician at the point of care in real-time. This enables the physician to correct documentation in real-time.

Our Technology

Relying on a commercial-grade, enterprise NLP platform, Hiteks builds its Real-Time Solutions so that they can scale and interact with thousands of physicians and health administration at the point of care.

Real-Time Solution in the client EHR

Clinical User

Quality & Coding Specialists
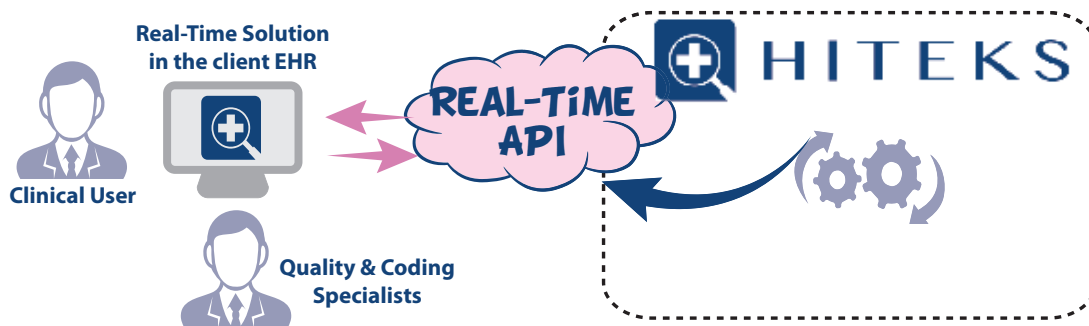
REAL-TIME API

H I T E K S

HITEKS

Hiteks drives mission-critical applications through its innovative platform which integrates into the EHR, works in real-time, and can be user-configured, thus supplying large health systems with the power they need to automate the entire clinical documentation-to-reimbursement workflow:

EHR Integration	Epic is largest EHR collaborator with Meditech second
Real-Time	High speed processing in subseconds at point of care making real-time intervention possible
User Configured	Health systems can control their content, or they can also integrate 3rd party evidence

Hiteks Physician Data Entry

Hiteks technology enables the physician to enter data in free text fields with typing or dictation. Hiteks NLP then extracts the data and automatically enters the data into the main structured fields of Meaningful Use: Problems, Medications and Allergies. Every time any physician enters data relevant to these fields, these lists are automatically updated and reconciled. In time flow studies of approximately 100 physicians across several practice settings, data entry of the clinical encounter was reduced by 50%. In a subset (50) of these physicians, physician satisfaction was improved 20% from before the use of the technology and patient satisfaction with their physician's use of the EHR during the clinical encounter was improved 35%.

447 Broadway, 2nd Floor, New York, NY 10013

Hiteks Coding

The EHR works closely with Revenue Cycle management (RCM) systems that rely on the documentation within the EHR to justify claims codes produced and sent to payers. The seamless integration of a real-time NLP and Analytics layer optimizes the EHR's ability to document appropriate terms and facilitates easier communication between the RCM and the EHR interface due to the linking and audit trail of queries directly to the documentation.

Using Hiteks technology, the interaction of physicians and coding experts is reduced to minutes each week instead of hours. Occasionally the coding specialist will need to communicate with the physician where algorithms do not apply, and can perform this function within the interface with an auditable link to the area in the documentation to which they refer. In some institutions, during the phase-in period, the coding specialist will continue to contact physicians through traditional channels for documentation improvement within the legal and recommended windows, until the physician becomes comfortable with real-time intervention.

Using Hiteks Coding CDI, either in real-time by the physician or within the legal window by the coding specialist, has resulted in a shortened claims cycle by 70% and decreased claims denial by 15-25%, depending on the care setting (inpatient versus ambulatory).
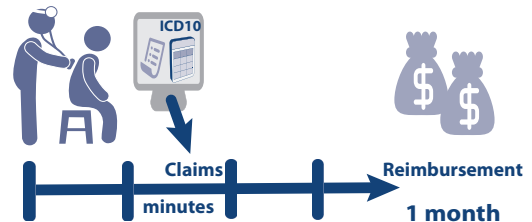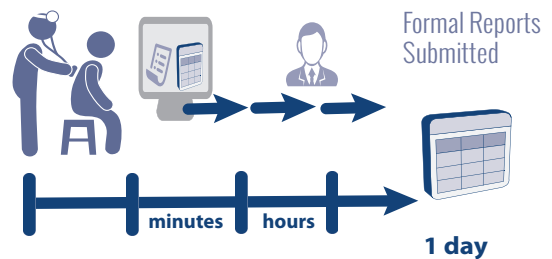
HITEKS

Quality Documentation/Reporting with Hiteks

Hiteks real-time queries at the point of care for quality compliance and documentation have improved reporting in the following areas:

Meaningful Use (MU)

Core Values Reporting

Medicare Risk Scoring

Results in clinical trials are pending but automation of the MU reporting can result in as much as $8000/physician annually. In addition, because Hiteks indexes quality-related clinical notes in

real-time, immediate quality reporting is easily available to the Quality Dept. This permits corrective intervention early in the cycle rather than as late as 12 months after-the-fact, with enormous benefits for patient care, physician satisfaction and patient satisfaction.

Formal Reports Submitted

minutes   hours

1 day

Implementation Ability

Hiteks' technology is configured to work within the Epic EHR to support NoteReader and soon-to-come Computer-Assisted Physician Documentation within Epic. It is currently implemented in 15 health systems nation-wide. The installations vary from large integrated health systems, to smaller community hospitals and standalone medical groups. In addition, Hiteks technology is compatible with Meditech's EHR and is currently

utilized by 40 hospitals to support real-time Quality Improvement and Reporting.

Sample Customers	# of Hospitals/ Facilities	# of Physicians
National Community Hospital Group	3 Hospitals*	300 Physicians
Ambulatory Clinic	5 Facilities*	120 Physicians
National Community Hospital Group	15 Hospitals**	1400 Physicians
Midwest Academic Medical Center	3 Hospitals*	600 Physicians
Tertiary Care Center in Northeast	6 Hospitals**	1700 Physicians
Clinical Research Center	2 Facilities	200 Physicians

* Fully Integrated into Epic
** Compatible with Meditech

447 Broadway, 2nd Floor, New York, NY 10013

HITEKS

Real-time Solutions for Real-life Problems

Hiteks offers state of the art natural language processing technology to address real-life problems for the health system, like physician workflow and satisfaction, inadequate coding documentation in the new era of ICD-10, and increasingly complex and rigorous quality demands. It interfaces at the point of care in real-time, where the clinical data is entered. From there it improves documentation and uploads this data automatically into existing workflow for reimbursement submission and quality reporting. The goal of this technology is to improve physician workflow, revenue capture and quality documentation and reporting. Clinical experience to date indicates success in achieving these improvements.

Workflow	Clinical Operations	Quality Impact
• Cost-effective digital communication mechanism • Shortens CDI cycle from weeks to minutes • Local HIM or Performance queries user-customizable	• Intervene at the point of care with constant monitoring of EHR data • Monitor financial performance via Case mix, DRG Denials, CMS & JCAHO audits	Measure and Intervene for: • Core Measures • Patient Safety Indicators • HCC/Acuity Risk Scoring • Working DRG

For more information on our Real-Time Solutions please contact one of our sales associates at info@hiteks.com, or visit our website (www.hiteks.com) to schedule a live demo. We look forward to working with you to help you achieve your goals in a cost-effective and responsible manner. We care about your work as much as you do.