



Powering the
Emergency Department
with Advanced Clinical
Decision Support

Picis ED PulseCheck
Helping hospitals define
new standards in quality and
efficiency in the ED

Defining the **ED EMR for the Entire Hospital**

The emergency department (ED) is the “front door” of the hospital. Studies show that more than 50 percent of hospital admissions come through the ED and at least 45 percent of all hospital revenues come from patients admitted through the ED. In fact, ED inpatients typically comprise 72 percent of a hospital’s intensive care days, 67 percent of inpatient lab tests and 57 percent of inpatient days.


















Clearly, if hospitals can optimize ED performance, the performance of the entire hospital will be enhanced. ED operations need a robust set of clinical documentation, charge capture and interoperability capabilities to protect information, while also making that same information accessible to other parts of the hospital when a patient is admitted and to primary care physicians and clinics when the patient is discharged.

An ED information system must also provide advanced decision support tools, integrated consistent and compliant charge capture documentation for optimal reimbursements and complete clinical documentation functionality. The result will help minimize charge rejection, maximize care reimbursement and help clinicians provide outstanding patient care. An ED system must be able to help improve patient throughput and clinician productivity, while being intuitive and easy for busy clinicians to use.

It takes more than just the ED module within a hospital-wide system to provide all these capabilities. What is needed is a high-performance emergency department electronic medical record (ED EMR) – to help hospitals increase the efficiency of the ED.



Defining a High-Performance ED EMR

ED EMR Capabilities	Typical HIS ED module	Typical EDIS	High-performance ED EMR
Complete, robust clinical documentation - functionality with ease of use			
Advanced clinical decision support		Limited	
Integrated charge capture/optimal Reimbursement			
Seamless interoperability with HIS and HIEs	Proprietary	Varies	 Works with all leading vendors
Visibility into ED-dependent hospital resources		Varies	
Intuitive web-native architecture			
ONC-ATCB certified			

Picis ED PulseCheck – the High-Performance ED EMR for a High-Performance Hospital

Picis ED PulseCheck™ helps enable emergency department and hospital leadership to realize the full potential of the ED, and therefore the full quality, clinical documentation, operational and financial potential of the hospital. ED PulseCheck delivers unique capabilities that meet all of the critical requirements for a high-performance ED EMR.

Complete, Robust Clinical Documentation – Powerful Functionality with Ease of Use

To efficiently manage patients throughout their ED stay, and facilitate clinician adoption of the system, ED PulseCheck contains simple and customizable templates and screens as well as intuitive color-coded symbols. This easy-to-use system offers staff the ability to document clinical care quickly and determine which tasks have been completed as orders are placed. Users have the ability to view test results and enter them on the patient chart with a single step. ED PulseCheck also provides macro documentation, enabling clinicians to document commonly entered charts within the system and then name and save them for future use. The system helps clinicians complete documentation quickly, enabling them to spend more time on quality patient care.

Clear visibility into current patient information, both tabular and graphical, is provided by ED PulseCheck's fully integrated color-coded tracking board. Clinicians are given a view-at-a-glance of each patient's location as well as key information such as chief complaint, patient disposition and length of stay, helping improve operational efficiency, patient satisfaction and reducing disposition time.

Advanced Clinical Decision Support – More Accurate, Compliant Information

Emergency departments are consolidating, and ED care is increasingly being driven by economic and regulatory conditions, Picis Insight ED™, integrated into ED PulseCheck, consists of department rules and risk mitigation tools that have been designed to help physicians proactively identify problem areas in the ED that need correction. Notifications are sent to ED staff during the patient documentation process, helping them provide better department management and proactive patient care along with increased charge capture.

Department rules continually check the ED for operational metrics such as time-to-doctor, average length of stay (LOS) and number of patients awaiting triage. Department rules can notify the charge nurse or other staff to take action to remove bottlenecks as they occur.

Charge rules help improve patient care documentation and reimbursement for that care. Charge rules notify clinicians of patients that meet Core Measures and Physician Quality Reporting Initiative (PQRI) criteria and complete documentation on those measures. Compliance helps improve accurate charging for infusion and injection services.

Your rules can be used to build reminders for ED staff for anything from clinical protocols to consideration of a patient for a research project. Your rules are developed entirely by individual hospital ED personnel, and involve writing something unique that meets the need of that particular ED, such as a clinical or departmental metric that must be measured.

The Sullivan Group Clinical Rules Content has been integrated into ED PulseCheck, providing risk mitigation tools that enable nurses and physicians to access up-to-date evidence-based medical information and best practices, eliminating the need to search through textbooks and web sites for the latest clinical data.

Risk mitigation tools help improve documentation by reminding caregivers of important clinical documentation requirements such as reminders for re-evaluation, vital sign range checks and drug/allergy checks, which help proactively identify high risk patients.



Additional tools within ED PulseCheck documents and manages the patient's allergy information from one visit to another, allowing the clinician to both receive, validate and modify previous allergies for the patient's current visit and helping provide better communication of the patient data.

Weight-based dose range capability actively checks on the dose being ordered for a patient, rather than asking the clinician to do this manually. This functionality provides feedback ahead of the dose being given, helping alleviate the risk that incorrect or missing information is entered in the system.

Integrated Charge Capture – Optimal Reimbursement

Emergency departments lose significant amounts of potential revenue due to services being undocumented and unbilled. ED PulseCheck offers the following solutions to help hospitals better manage their outpatient charge captures and realize significant revenue for their facilities.

AutoCharge ED Facility utilizes hospital or integrated delivery network (IDN) calculation methodology to automate documentation and procedure capture based on clinical documentation. As a result, the need for manual charge entry is eliminated, facilitating the correct assignment of chargemaster codes and helping reduce lost revenue.

AutoCharge ED Professional automatically captures CPT codes and ICD-9 codes based on physician documentation in ED PulseCheck. This information is sent to a coding system along with the entire ED record for final review and coding, or sent directly to a billing system after review by a coder.

LYNX E/Point® software, fully integrated with ED PulseCheck, closes the gap between what can be billed and what is billed for facility evaluation and management (E&M score) visit levels and procedure capture – including infusions and injections. A billing interface links the facility E&M and procedures captured in ED PulseCheck with the billing system of the hospital billing group without an extra step. E/Point also features a sophisticated infusion/injection calculator that provides the automatic capture and calculation of injection and infusion charges from the standard clinical documentation created during the ordering and documentation of the administration of these procedures. The calculator then assigns the appropriate current procedural terminology (CPT) code. Calculation results are sent back to ED PulseCheck, displayed on the E/Point calculator within ED PulseCheck and posted to the Chart Coding page.

Seamless Interoperability – with HIS and HIEs

An ED EMR must interoperate with the hospital's HIS and specialty departmental systems to enable ED clinicians to fully address their clinical and medical necessity documentation needs. ED PulseCheck fits into a hospital's overall IT strategy, seamlessly providing true bi-directional interoperability and automation of workflows for each major hospital information system (HIS) including Allscripts/Eclipsys, GE, McKesson, Meditech, Siemens, Cerner and Epic. ED PulseCheck supports multiple medication databases and multiple interface feeds, helping to support separate workflows and different hospital EMRs within an IDN.

ED PulseCheck also features TouchPoint ED™, an intuitive graphical interface for viewing, configuring, testing and maintaining interfaces between third party systems and ED PulseCheck. TouchPoint ED allows IT departments to use fewer and less expensive resources to set up and maintain interfaces, and helps facilitate a faster go-live with its intuitive interface mapping, trouble shooting and data verification tools.

ED PulseCheck provides hospitals with the ability to send data to a Health Information Exchange (HIE), employing interoperability implemented by the “Integrating the Healthcare Enterprise” (IHE) process, the defacto interoperability standard specified by the HIE Work Group. This standards-based interoperability allows a hospital to maintain and connect existing disparate applications both within and outside the hospital, including specialty systems which meet unique departmental workflow needs.

Throughput Management – Visibility into ED-Dependent Hospital Resources

In the busy care environment of the ED, it is a constant challenge to maintain appropriate staffing levels and bed capacities when demand is high. ED bottlenecks are a major threat to the performance of the ED, and thus to the hospital at large. Overcrowding in the ED is primarily caused by log jams in the hospital inpatient units and puts patients at high risk of treatment delays or potentially inadequate care.

ED PulseCheck ResourceView® is a unique hospital wide communication tool that has been designed to help hospitals address these capacity issues. ResourceView displays the status of each hospital department and enables the ED and hospital administrators to see bottlenecks as they occur, helping them proactively address the situation, improve communication, increase patient throughput, decrease time on diversion and ultimately help increase hospital revenue.

Web-native Architecture – Facilitates ease-of-use and rapid deployment

Picis ED PulseCheck’s web-native technology platform offers benefits to users in terms of cost, scalability, maintenance, accessibility and ease of use, enabling rapid deployment at a significantly lower cost than non web-native applications.

The ED PulseCheck web-native application can be accessed from any computer or device with internet access or facility intranet, giving clinicians the ability to track and chart patients from any location. Remote updates and support offers clinicians the flexibility to address issues quickly, cost effectively and efficiently.



ONC-ATCB Certified – Meeting Meaningful Use Objectives












Picis leadership and commitment to meeting customer “meaningful use” objectives is the result of our dedication to lead the healthcare industry in meeting hospitals’ needs regarding regulatory compliance. ED PulseCheck is 2011/2012 compliant, and is certified as an EHR module by the Certification Commission for Health Information Technology (CCHIT®), an ONC-ATCB. Core reports for 12 different criteria are available within ED PulseCheck, enabling hospitals to easily report on their compliance with the measures identified by the ONC for hospital certification of meaningful use.

By providing an integrated and comprehensive electronic health record (EHR) for the ED, Picis delivers a wealth of information to assist clinicians in making decisions. Picis aids hospitals in improving operations, reducing costs, increasing efficiency and providing better patient care – all goals of the ARRA HITECH stimulus package.

Specifically Designed for ED workflow – Created by Clinicians for Clinicians

Picis has a large team of ED practitioners and ED PulseCheck experts with many years of experience supporting and sustaining more than 280 ED PulseCheck implementations. Picis staff listen carefully to ED clinicians and hospital administrators and as a result have an enviable record of innovation as Picis has worked to bring the necessary features and functionality for a high-performance ED EMR to the emergency department and the hospital. This is why Picis continues to be the leading provider of ED EMR solutions.

A High-performance ED EMR Meets all Key Hospital Needs

Hospital Role	Chief Concern(s)	Typical HIS ED module	Typical EDIS	High-Performance ED EMR
COOs and CFOs	Financial Performance			
CMOs/CNOs	Quality, operations and clinical work flow			
CIOs	Interoperability		Varies	
ED Clinical Leaders	Clinical functionality and medical necessity			

About Picis

Picis, an Ingenix company, is a global provider of innovative solutions that enable rapid and sustained delivery of clinical documentation, financial and operational results in the emergency departments, surgical suites and intensive care units of more than 2,200 hospitals in 19 countries. For more information about Picis, visit www.picis.com.

About Ingenix

Ingenix is a leading provider of health information, technology and consulting services. Organizations, institutions, businesses and government agencies that comprise the health care system depend on Ingenix solutions and insights to improve their performance. Visit www.ingenix.com for more information

