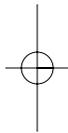
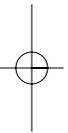
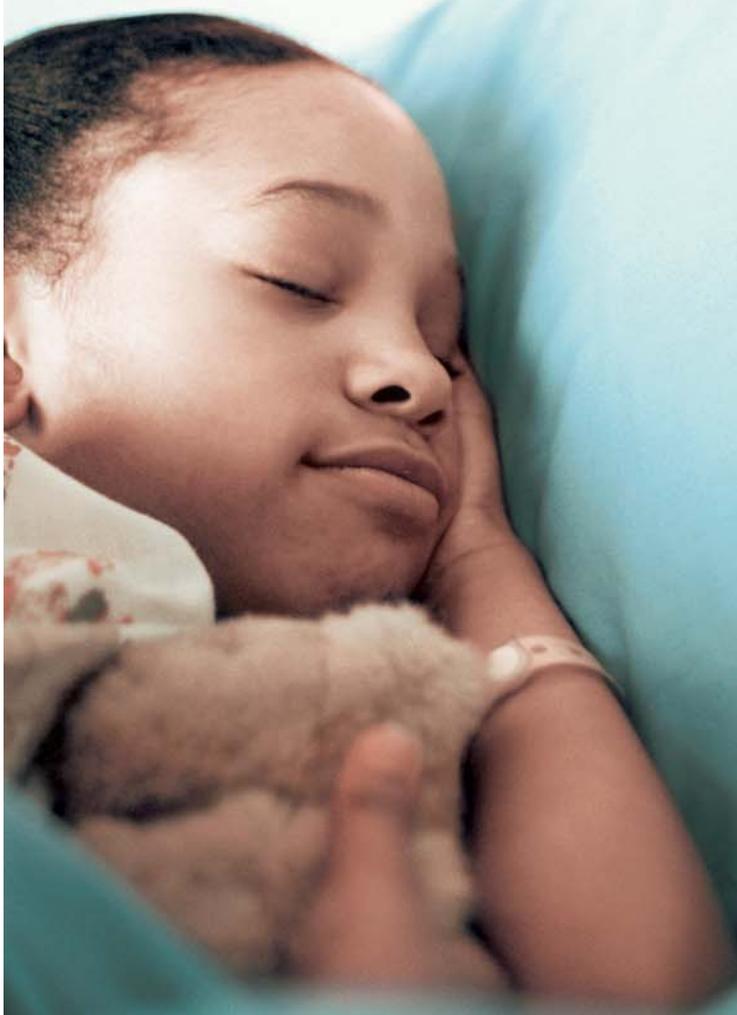




Partners in Clinical Excellence

How IDX® Carecast™ Supports the Clinical Team

Deliver safer,
more effective
patient care



Immediate, continuous access to the right information can make all the difference in patient safety, quality care and financial performance.

IDX® Carecast™ is a fully integrated clinical, financial and administrative system that supports direct patient care at leading healthcare organizations in the U.S., Canada and Europe. Spanning inpatient and outpatient care, *Carecast* enables healthcare organizations to create and maintain lifetime patient records across the continuum of care—with hospitals and physician practices sharing a single electronic health records system.

1

Carecast helps healthcare organizations achieve higher quality patient care, increase clinician productivity and accelerate the revenue cycle. The lifetime, patient-centered health record is *Carecast's* foundation, encompassing visits to the physician office and the ED, inpatient care, diagnostic test results, images, administrative and billing information, and health maintenance alerts that support improved preventive care and disease management. *Carecast* builds the patient record as it supports integrated, interdisciplinary workflow across the clinical team.

Carecast integrates core processes for orders, results, pharmacy and clinical documentation. Administrative and financial processes for scheduling, registration, admitting, charging and billing are fully integrated with clinical information on a single database. And *Carecast* is highly flexible, meaning that professionals in each clinical discipline can easily view and access crucial information for their areas of responsibility.

Carecast addresses patient safety across all aspects of medication delivery, through one integrated system—from computerized physician order entry (CPOE) through dispensing and barcode medication administration. With immediate access to both the patient's full medical history and decision support tools, clinicians are better prepared to make the best possible care decisions.

But none of this matters if you can't rely on the system. That's why *Carecast* is built on the principle of Advancing Fail-Safe Care™ — a unique combination of guaranteed 99.9 percent reliability, "Thinkspeed" (subsecond) response time and clinical comprehensiveness. Our commitment means clinicians have fast, secure access to information that makes a difference in patient care.

Improve quality across the care continuum

2

Through our long history of partnership with leading healthcare organizations, we developed *Carecast* to help clinicians strengthen patient safety, improve quality of care and collaborate more effectively.

One integrated source of patient data across the continuum of care

Healthcare professionals are knowledge workers, and the right information at the right time is crucial to patient care and clinician productivity. At every step of the patient's journey through the healthcare enterprise, *Carecast* makes a difference in patient care.



The patient's home

Improved communication with providers helps patients better manage their own health. Through IDX® Patient Online®, a secure patient portal, patients have secure access to their online medical records to view test results, receive health maintenance reminders and conduct e-consultations with their healthcare providers.

Physician office and cross-continuum access

Access to the patient's lifetime medical record enables clinicians to deliver higher quality patient care. Physicians can immediately view each patient's inpatient and outpatient medication history and electronically send orders from the clinic to the hospital. *Carecast* assists physicians and other clinicians in producing electronic clinical notes and appropriate charging for office visits.

Whether in the office, in the hospital, or at home, physicians can quickly and securely access round-the-clock updates on their patients, including new test results and other crucial information on patient progress. Physicians may access *Carecast* on wireless devices or a secure Internet site, available using a home computer. As a result, physicians are better equipped to make care decisions from remote locations, including discharging patients who are medically ready to leave the hospital.

Emergency Department

Carecast helps organizations improve ED patient flow, a major concern given increased ED volumes. Within the ED, the patient's health record is immediately available, and an electronic whiteboard tracks each patient's status and progress.

Inpatient care

Carecast provides a single electronic source for patient information during the inpatient stay, while supporting the real-time, interdisciplinary workflow of clinicians. Clinicians simply log on to *Carecast* to see every order, test result and image in real-time. Through technology from industry leader Picis, *Carecast* automates documentation and other key processes in the OR and critical care environments. CPOE, wireless barcode medication charting, integrated pharmacy capabilities and online clinical documentation support safer medication management during hospitalization.

“The *Carecast* system does an excellent job of bringing inpatient and outpatient data together to support the highest quality patient care.”

**Tom Tape, M.D., Chief of General Internal Medicine,
The Nebraska Medical Center**

Carecast's physician desktop helps doctors manage their workload by providing information "at a glance."

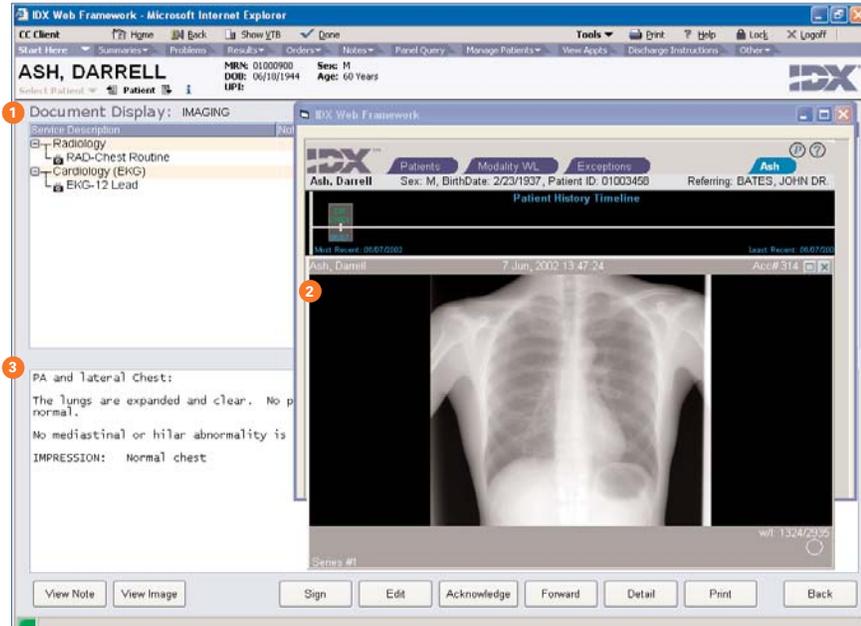
- 1 Patient list capabilities enable the physician to view lists of appointments, hospitalized patients and patients on particular medications.
- 2 Click on desktop shortcuts to access orders, chart summaries, results and other key information. With one click, the physician can access online orders and then automatically sign them.
- 3 The Inbox displays abnormal lab results and other key updates.

3

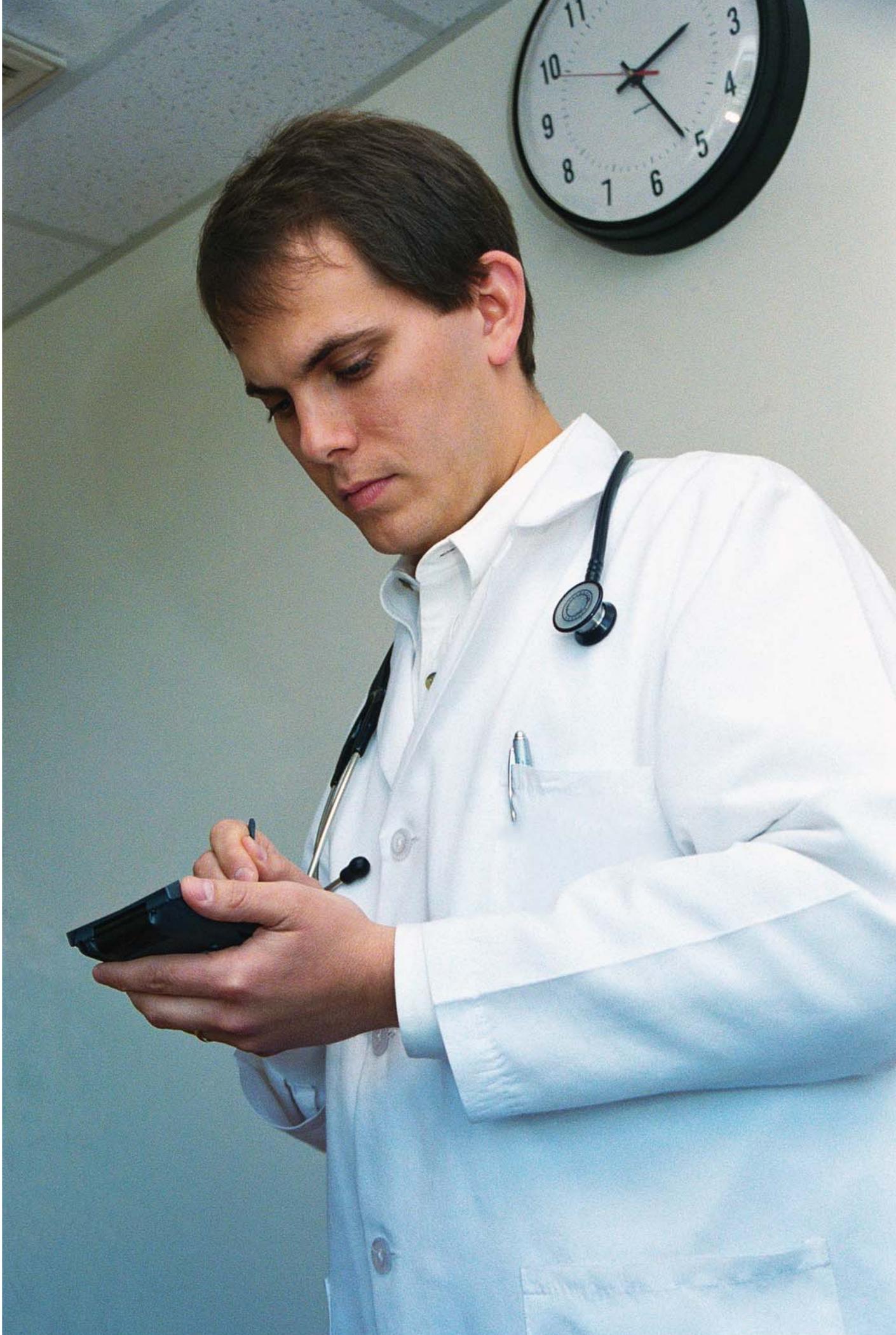
The electronic whiteboard supports smooth patient progress through the Emergency Department.

- 1 Track each patient's status, location and wait times—supporting effective use of staff time, coordination of ancillary services and better care.

- 4 Diagnostic images are captured in the electronic patient record and available enterprise-wide.
 - 1 View details on specific services.
 - 2 Rotate, move or expand the image for viewing options.
 - 3 Read the accompanying report on the diagnostic test.



Carecast and IDx® Imagecast™ work together to provide electronic images of diagnostic exams, including MRIs, CTs and other procedures, in the Carecast electronic health record. Images within Carecast are available to clinicians across the healthcare organization. Unique in the industry, this patented solution provides immediate access to diagnostic-quality (full resolution/full fidelity) images within the patient's record, as soon as the exam is complete. Both images and test results can be viewed in Carecast and are part of the patient's lifetime health record. Meanwhile, the imaging team benefits from Imagecast's department-specific capabilities and workflow.



Promote patient safety across inpatient and ambulatory care

6

Carecast's "Thinkspeed" response time and rapid delivery of comprehensive information support clinicians in making informed patient care decisions—reinforcing patient safety. *Carecast's* lifetime patient record supports safer care in a wide range of ways, including error prevention across the medication cycle, cross-continuum medication history for each patient, a detailed allergy record, and clear, online documentation tools that encompass the care continuum, including the OR and ICU. Expert rules capabilities enable healthcare organizations to promote best practices that enhance patient safety.

Interdisciplinary tools heighten medication safety across the care continuum

Carecast CPOE is designed to be user-friendly, extraordinarily reliable, and to reinforce interdisciplinary collaboration between physician, nurse and pharmacist. In the inpatient environment, completely integrated CPOE, medication management, decision support and wireless barcode medication charting help prevent errors across the complete medication cycle of ordering, dispensing and administration.

Wireless medication barcode charting supports the "Five Rights" of medication administration (right patient, drug, dose, time and route). *Carecast's* comprehensive medication knowledgebase supports safe medication practices, helping avoid drug contraindications and other threats to patient safety.

Using *Carecast's* electronic ordering capabilities, physicians easily submit orders for inpatient care from the office environment, while benefiting from medication safety alerts. Cross-continuum medication reconciliation enables physicians to easily adjust medications as patients' medication requirements change—for example, after being discharged from the hospital. In addition, *Carecast's* electronic prescribing can automatically fax physicians' electronic prescriptions to non-affiliated pharmacies that lack electronic health record access.

Automated critical care documentation helps reduce risk of errors

Manual documentation typically takes 40 percent of critical care nurses' time. *Carecast* Critical Care, powered by Picis, automates the critical care flowsheet. The Picis solution offers a seamless connection to major manufacturers' monitors, ventilators and other critical devices to automate critical care documentation. By automating manual documentation, organizations are able to reduce the risk of errors from handwritten parameters and calculations, and to free up nursing time for patient care.

"The bottom line is that we've seen a 70 percent reduction in medication errors while at the same time saving in excess of two-and-a-half million U.S. dollars per year through increased productivity by implementing IDX CPOE on HP NonStop servers."

**Matthew Berger, M.D., Director of Medical Services, Einstein Division,
Montefiore Medical Center**





Key patient safety benefits

Medication reconciliation supports safety across the continuum

- The patient's current active or inactive medication history is immediately available—in summary or detail view—with medications easily adjusted and reconciled through "drag and drop" capabilities.

User-friendly CPOE helps prevent medication errors

- *Carecast* flexibly supports creation of order sets to support the requirements of different specialties—cited by customers as crucial to physician support for CPOE.
- *Carecast* automatically checks every medication order for patient allergies, drug interactions and therapeutic duplicates—then alerts clinicians and provides actionable orders.
- Once submitted, orders are immediately available across ambulatory and acute care settings.
- Nurses, physicians and pharmacists share a common view of the order profile.
- Healthcare organizations may further enhance decision support through expert rules.

Full integration of orders, pharmacy and medication charting supports safer care every step of the way

- Conflict checking and real-time alerts further advance patient safety during dispensing.
- A single drug formulary database prevents risk of discrepancies between separate formularies and reduces system management overhead.
- Orders are communicated at the point of care, through automated medication dispensing devices and pharmacy robots.
- Wireless medication barcoding supports the "Five Rights" of medication administration (right patient, drug, dose, time and route)—with each medication automatically charted in the patient's lifetime medical record.

Customer Example: Supporting patient safety

Lehigh Valley Hospital and Health Network (LVHNN) has deployed wireless barcode medication charting to prevent errors during medication administration—in conjunction with CPOE and the electronic health record. Through wireless barcode medication charting, LVHNN has documented prevention of 50 medication errors per month on the average 30-bed medical unit.

In addition, LVHNN's patient satisfaction scores for "nurse checked my identification prior to administering medication" increased from the 87th percentile to the 99th percentile post go-live.

8 *Carecast* both automates the ordering process and alerts clinicians to potential errors.

- 1 Expert rules help to identify potential medical errors and improve the quality of care. This patient's potassium level is low—therefore the medication Digoxin may be toxic.
- 2 Take action quickly to address a potential error. The system suggests an order for a potassium supplement.
- 3 Easily view the status of other active orders for the patient.

Carecast Knowledge Base Advisory
Advice for Digoxin

Knowledge Base Information

1 Knowledge Base Advisory: You are ordering Digoxin. The last serum potassium level on this patient was 3.2 meq/l on 30NOV2004 at 0948. Hypokalemia increases the risk of digoxin toxicity including potentially serious arrhythmias. You may wish to consider a potassium supplement such as one of the ones listed in the suggested orders box on the right.

Order Suggestions

2 Orders to Consider

- POTASSIUM CHLORIDE 10MEQ CAP SA PO
- POTASSIUM CHLORIDE 20MEQ/0.1L PB IV
- POTASSIUM CHLORIDE 20MEQ TAB

Active Orders

3

Item	Current Order	Start Date	Time	Status
1	Skin Assessments every shift	30Nov2004	1543	Active
2	I&O - Intake & Output q4	30Nov2004	1543	Active
3	Vital Signs every four hours	30Nov2004	1543	Active
4	EKG-12 Lead x 1	30Nov2004	1543	Active
5				
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11				
12				

Orders Scratch Pad

- Check items to select or leave blank to submit all
- Goal: No reports of chest pain
- Goal: Verbalizes understand of trmt
- Goal: No arrhythmias noted
- Goal: Exhibit decreased level of ank
- MORPHINE SULFATE 1MG/ML DIS SYR INJ
- ASPIRIN 325MG EC PO
- DIGOXIN 0.125MG TAB PO

Fully integrated in *Carecast*, wireless barcode medication charting supports medication administration.

The clinician scans the medication or IV barcodes and the patients's ID bracelet to confirm the "five rights" of medication administration.

- 1 The expert rule identifies that the patient's heart rate is lower than the recommended rate for Digoxin administration, and that the hospital recommends holding this medication and contacting the patient's physician.
- 2 View the patient's previously charted medications. Scanning the barcode tags automatically charts the drug, dose and time of administration.

Alert

Heart Rate too LOW for Digoxin Admin
Patient MRN - 01000249
Name - BROWN, Jeffrey

You scanned the medication Digoxin.
The patient's last recorded Heart Rate 56 beats/min recorded on 30NOV2004 at 1548 is lower than the recommended 60 or higher for Digoxin administration. The hospital recommends holding this medication and contacting the physician.
A notification will be sent to the attending physician's inbox.

Medication Administration Record

Medications Due List

MS	Due At	Med Dose
	3:46pm 30No...	ASPIRIN
	3:47pm 30No...	LANOXIN
	3:47pm 30No...	POTASS MORPH

Medications Scanned

Scanned	Start	Last Chart	Status
0.125MG scanned	30Nov04 1546	30Nov04 1547	Active
	30Nov04 1547	30Nov04 1546	Active

Streamline care processes and documentation

10

Clinicians in all disciplines face severe time pressures—yet are burdened with inefficient, paperwork-driven processes that take time away from patient care. In both ambulatory and acute care environments, *Carecast* improves access to comprehensive patient information, simplifies documentation activities and streamlines care processes.

As a result, clinicians are better equipped to save time and improve quality of care. *Carecast's* direct benefits to a few of the clinical disciplines include:

Nurses

Carecast's online clinical documentation helps nurses in all patient care settings eliminate redundant charting, better prevent errors and quickly access trended information needed for safe, efficient clinical decisions. In the critical care environment—where nurses typically spend more than 40 percent of their time on manual documentation—*Carecast* offers integrated, automated documentation through industry leader Picis.

Physicians

Carecast's physician desktop provides doctors with immediate access to information as they see patients in the office, round in the hospital and conduct inpatient care. Physicians are able to easily view test results and other high priority items in the online Inbox, while *Carecast's* Clinical Notebuilder offers time-saving templates and other tools for clinical documentation during office visits.

Pharmacists

Carecast supports online verification of medication orders from anywhere in the enterprise and efficient order fulfillment, while automating dispensing functions. As a result, pharmacists are able to devote more time to clinical and patient safety responsibilities.



“After seven years of using our IDX clinical information system, most of our nurses would have a hard time going back to the old way of doing things. We are living proof that organizations can simplify documentation and streamline care processes, so nurses can spend more of their time doing what they enjoy: caring for patients.”

**Demi Rewick, R.N., Director of Clinical Applications,
Healthcare Improvement Division, PeaceHealth, Bellevue, WA**



Key workflow benefits

Documentation and reporting tools contribute to best nursing practices and best use of nurses' time

- Efficient electronic charting enables nurses to chart by exception and quickly document vital signs.
- Online assessments are easily tracked and updated.
- *Carecast's* Patient Summary View provides nurses with online overview of patient information, facilitating information exchange at shift change.
- The comprehensive flowchart viewer captures patient medical history over days, months or years.
- *Carecast* automatically creates patient flowcharts and graphs "on the fly"—clearly showing patient progress.

Critical care data automation helps reduce risk of errors, saves time

- *Carecast* Critical Care, powered by Picis, automatically captures, documents and calculates physiologic readings from patient monitoring devices, and uniquely integrates and correlates demographic, lab and medication administration data.
- Management reports and workload statistics support department staffing and management.

Interdisciplinary care plans and health management tools support proactive patient care

- In the inpatient setting, interdisciplinary care plans incorporate protocols for every member of the care team.
- In the ambulatory environment, programmable health maintenance alerts support preventive care, such as immunizations, and management of chronic conditions, such as alerts for hemoglobin A1c tests.

Carecast helps organize physician workload

- Personalized inpatient lists, patient appointments, orders and test results are readily available on the physician's desktop.
- *Carecast* Clinical Notebuilder helps electronically document patient office visits while assisting with both evaluation and management coding and charging.

Clearly organized, real-time information enhances ED safety and quality

- The electronic whiteboard tracks each patient's location, complaint, triage state, physician and up-to-the-minute test results.
- *Carecast* alerts clinicians when a patient's wait time exceeds facility standards.

Customer Example: Saving documentation time

Through the use of online charting, nurses at PeaceHealth spend 50 percent less time on clinical documentation, compared to the industry average of nursing time required for paper charting. As a result, each nurse can spend 1.5 more hours on direct patient care during a 12-hour shift.

12 Electronic charting helps clinicians benefit from reduced paperwork and improved access to patient information—through tools such as the *Carecast* Flowchart Viewer.

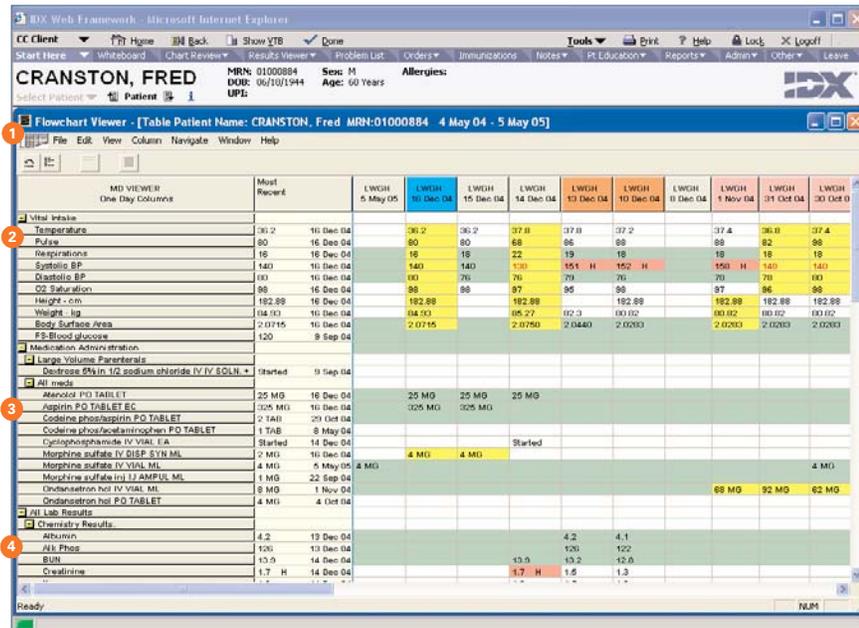
- 1 Use the graph button to instantly create trending graphs from patient data.

View key patient information over time.

- 2 See assessment and vital signs.

- 3 Medication information is easily viewed.

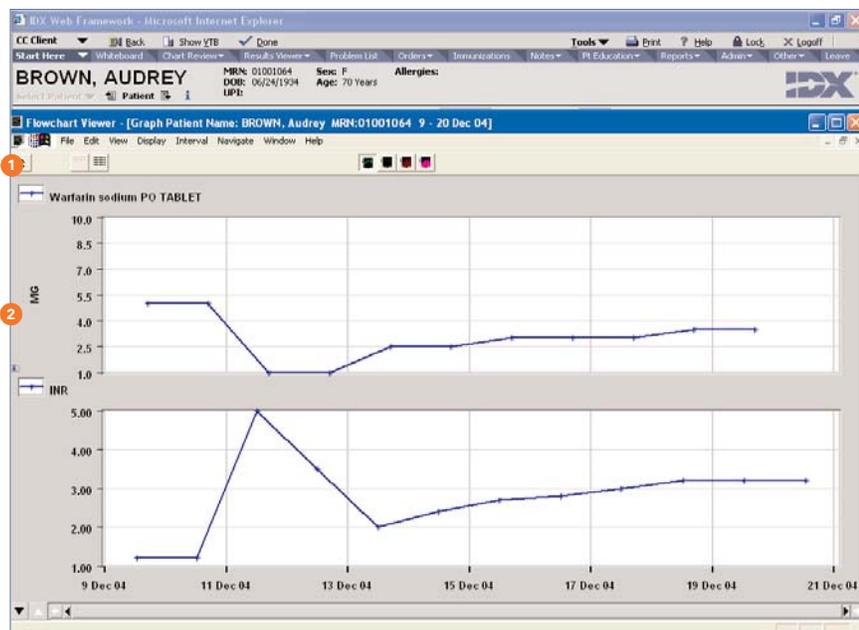
- 4 View detailed lab data.



Carecast captures a full range of patient data and creates graphs for an instant view of trending and progress information.

- 1 With a click of the mouse, *Carecast* automatically graphs any result from the patient chart—or graphs results against each other.

- 2 Assess warfarin's effect on blood clotting times.



IDX[®] Carecast[™] : Advancing Fail-Safe Care[™]

Carecast delivers on our commitment to *Advancing Fail-Safe Care* with 99.9 percent uptime, "Thinkspeed" (subsecond) response time and clinical comprehensiveness.

As your vendor, IDX is committed to long-term partnership with your organization, to supporting your success with our technology and contributing to your high quality patient care.

How Fail-Safe Care benefits your patients:

- A care team familiar with the patient's full history
- Enhanced safety
- Less redundant paperwork—fewer repetitive questions
- Efficient and accurate billing

How Fail-Safe Care guides our relationship with you:

- Dedication to helping your organization improve patient care
- Commitment to helping you set and realize measurable benefits from *Carecast*
- Partnership throughout our working relationship
- Connection with your peers for best practices

How Fail-Safe Care benefits your organization:

- Cost-effective delivery of the best and safest patient care
- 24/7/365 secure access to the patient care record across the continuum—backed by 99.9 percent uptime guarantee
- Increased collaboration across the care team

IDX Corporate Profile

IDX uses information technology to maximize value in the delivery of healthcare—by improving the quality of patient service, enhancing medical outcomes and reducing the cost of care. With over 35 years of experience, IDX is a leader in delivering software, services and technologies for healthcare organizations. IDX offers a range of proven administrative, financial and clinical solutions spanning ambulatory to acute care. Our customers represent the full care continuum and include leading integrated delivery networks, group practices, academic medical centers, management service organizations and hospitals worldwide.

IDX® Carecast™ is the next-generation solution that leverages 25+ years of development and real-world use by leading healthcare institutions. Since its inception, this solution has been guided by a core purpose: innovation that benefits the patient and makes a positive difference in the quality of healthcare. *Carecast* brings to life the principle of Advancing Fail-Safe Care™—providing unsurpassed reliability, “Thinkspeed” computing, and comprehensive, integrated clinical, financial and administrative functionality.

IDX Systems Corporation
925 Fourth Avenue, Suite 400
Seattle, WA 98104
206.622.9558
www.idx.com

For sales inquiries:
1.888.439.6584

