



The EHR System that Knows Oncology



Clinical Information Solutions



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US Oncology has worked with its national network of community-based oncology practices to deliver the ideal system for harnessing medical information that provides maximum benefit to patients, oncology practices, and payers. That system is called iKnowMed,[™] an Electronic Health Record (EHR) developed for oncologists by oncologists.

With a focus on reinforcing clinical excellence and cost effectiveness in cancer care, iKnowMed is an oncology-specific EHR that leverages the power of technology to go beyond delivering standard EHR features. iKnowMed also facilitates access to powerful new solutions such as Innovent Oncology and US Oncology Research to help practices achieve optimum success in today's marketplace.

iKnowMed is used by oncologists and their staff, both within and outside of the US Oncology network. The iKnowMed team at US Oncology, who is committed to the continuous improvement of the application, works together with a physician led Product Development Committee that helps review, prioritize and guide the enhancements of the system.

Benefits

- Point-of-care Decision Support
- Increase Charge Capture
- Reduce Costs
- Decrease Errors
- Enhance Quality
- Improve Patient Satisfaction
- Maximize Practice Efficiencies
- Expedite Clinical Trials Screening and Enrollment

Features

- Detailed Cancer Diagnosis and Staging Content
- Extensive Up-to-date Cancer Regimen Library
- Comprehensive Patient History
- Outcomes Reporting
- Dictation and Transcription Facilitation
- Toxicity Management
- Lab Results
- Diagnostic Materials
- Clinical Trial and Protocol Support

Compliant

- HIPAA
- 21 CFR Part 11

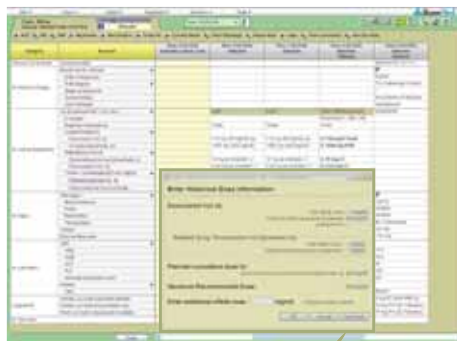
Technical or Supported Standards

- Windows Based
- HL7 Compliant
- Internet Explorer

Improves Safety and Efficiency in the Oncology Practice

iKnowMed provides oncologists with instant access to their patients' medical records anywhere via the Web. This means oncologists can make treatment decisions wherever they are: in the office, from the hospital, at home, or traveling.

iKnowMed also enhances patient safety by eliminating handwritten notes and orders, thus minimizing misinterpretations. It automatically checks for potentially dangerous chemotherapy dosing levels or interactions with other drugs. If iKnowMed detects a possible medication conflict, it generates a "safety alert" for the attending oncologist or their staff to review.



Provides drug and lifetime max dose alerts

Increases Accuracy of Charge Capture and Coding

Charge capture functionality in iKnowMed allows staff to capture all charges associated with a patient's visit, including treatment administration. All charge codes, billable units, primary diagnosis codes, and billable drug waste for each visit is calculated by iKnowMed and displayed in an easy to read report.

Additionally, iKnowMed can automatically calculate the suggested E&M codes at the time of the patient encounter as a byproduct of the physician generating his/her progress note. This functionality provides a clear

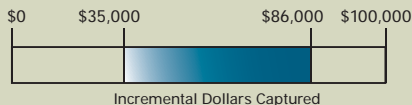
and concise audit trail, more thorough documentation and justification for appropriate charges.

With the addition of iKnowMed, practices have seen increases in their charge capture ranging from \$35,000 to \$86,000 per oncologist due to improved charge capture in the areas of E&M and chemotherapy administration services.

Also, physicians using iKnowMed have billed up to \$38,000 more per year in gross E&M fees than physicians using paper-based records. Comprehensive clinical documentation processes within iKnowMed supports providers in accurately coding E&M charges at the appropriate level. Based on a study by US Oncology, this enhanced documentation has generally resulted in increased gross E&M charges by physicians using iKnowMed as compared to paper-based records.

Chemotherapy administration charge capture integrity is also increased through an electronic review of the treatment provided which ensures accuracy and eliminates missed charges. This automatic review increased drug administration charges up to \$49,000 per physician over physicians that did not have an EHR.

E&M Fees and Drug Administration Charges



Increase in charge capture ranges from \$35,000 to \$86,000 per oncologist with iKnowMed¹

¹ Based on a US Oncology Charge Capture Study of full year 2008, consisting of approximately 200 oncologists from five practices using iKnowMed and five non-EHR practices. Charge capture increases reflect study range. Results will vary from practice to practice and no assurance is given as to any level of billing or charge capture. iKnowMed is not a billing software and the practice, not US Oncology, remains solely responsible for billing and charges.

Provides the Necessary Support Required for Oncology

According to *The Oncology Electronic Health Record Field Guide* created by ASCO in 2009, broad-based EHR systems do not accommodate the unique requirements that are key to an oncology practice. Some features that are important in an oncology-specific EHR include: tumor staging, multidisciplinary and data-intensive workflow (pathology, lab, and imaging), chemotherapy dosing and administration, toxicity assessment and management, and clinical trial and protocol management.

With the development and enhancements of iKnowMed being driven by the oncologists that use the application, iKnowMed has clinical features that make it truly customized to community cancer care. These features include:

Oncology and Hematology Diagnoses

When staging a patient in iKnowMed, the oncologist is prompted to answer questions that are relevant to the patient's particular cancer, as outlined by the American Joint Committee on Cancer (AJCC). The robust decision-support engine automatically determines the stage based on the data that has been entered. iKnowMed then uses this staging information to identify regimens relevant to this patient's disease state.

Oncology-specific Regimen Library with Over 400 Regimens

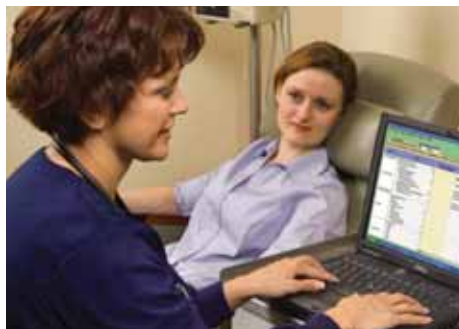
iKnowMed provides immediate access to referenced chemotherapy protocols. A multi-disciplinary committee comprised of oncologists, pharmacists and nurses regularly update the regimen library through their review of peer-reviewed literature and FDA-approved indications. All regimens are evaluated for their emetogenic and neutropenic fever potential and select supportive-care medications are included in the regimen. Drug-specific clinical alerts may also help prescribers tailor treatment and monitoring to a patient's specific needs. The result is that users always have up-to-date regimens that standardize patient care, reduce the potential for medication errors and improve the management of side effects.

Nursing Documentation is Greatly Streamlined

Nurses quickly adapt to documenting infusion visits electronically, viewing lab results in the flowsheet, documenting start and stop times for each medication, and easily entering the patient assessment details. When changes are made to the regimen schedule due to out-of-range lab values or a scheduling conflict, iKnowMed guides the clinician through the update process, creating a complete and concise audit trail.

Electronic Charting in a Single-screen View

iKnowMed provides patient information in a single-screen view. This allows for quick referencing of the patient's diagnosis, last visits, lab results trending, and prior and future treatment information.



A single-screen view allows for quick referencing of a patient's records.

Helps Patients Access Clinical Trials

Clinical trials are critical to the scientific advancement of cancer care. According to the *Journal of Clinical Oncology*, a lack of patient accruals represents a major barrier to the success of clinical trials, with only a small portion of qualified patients actually being considered for enrollment.¹

For practices participating in research, iKnowMed can help increase participation in trials. The iKnowMed team works with the practice to identify all clinical trial protocols in which the practice is participating and loads them into the iKnowMed system. Once the clinical trial protocols are loaded, the system automatically screens each patient as soon as their diagnosis is determined and immediately presents clinical trial choices. With this information, oncologists can easily assess patient eligibility for appropriate open trials.



iKnowMed is instrumental in helping identify patients that meet entry criteria for the specific trials open at a practice site.

Supports US Oncology Research by Bringing Cutting-edge Treatments to Qualified Patients

For practices affiliated with US Oncology Research, iKnowMed helps improve accruals in two ways:

1. at the point-of-care and
2. through the CARE technology.

As a standard procedure, all US Oncology Research protocols for the trials that the practice has chosen to participate in will be loaded into iKnowMed's regimen library, along with the protocols for any of the practice's other clinical trials. This helps physicians accrue new patients to each trial at the point-of-care, as the system automatically includes trial protocols in the list of suggested disease-specific regimens as soon as the new patient diagnosis is entered.

Through our Comprehensive Accrual REsource (CARE), the robust decision-support technology within iKnowMed, and its integration with US Oncology Research, iKnowMed will also alert

physicians of a potential clinical trial opportunity for their existing patients, including trials received from the US Oncology Research network, Cooperative groups, and directly from Pharmaceutical sponsors.

The CARE technology automatically searches through existing patient records to find potential matches for open trials. Without this technology, this search is often a manual process, with the responsibility falling to the practice staff.

Another effort US Oncology is currently undertaking is the development of a biomarker clearinghouse that will also fully integrate with US Oncology Research and iKnowMed, furthering physicians' ability to deliver personalized medicine to their patients.

¹ Siminoff LA, Zhang A, Colabianchi N, Sturm CM, Shen Q. Factors that predict the referral of breast cancer patients onto clinical trials by their surgeons and medical oncologists. *J Clin Oncol*. 2000;18(6):1203-11.

Brings Real Pay-for-performance Opportunities to Oncologists

As America's healthcare system moves toward a pay-for-performance (P4P) environment—in which higher-performing doctors receive higher compensation—it is essential that oncology practices accurately document how they achieve better patient outcomes and greater cost efficiency. If any piece of this documentation, such as staging, is not supplied, the physician could miss out on this key opportunity.

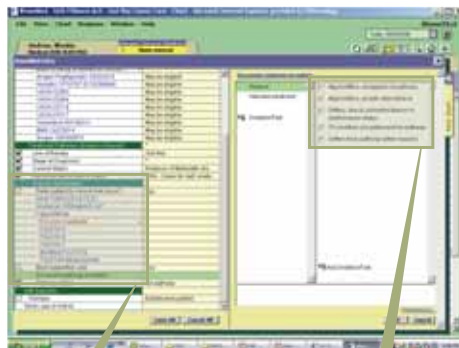
Innovent Oncology is US Oncology's innovative solution to bring real P4P opportunities to oncology practices nationwide. It integrates seamlessly with

iKnowMed to provide clinicians point-of-care tools for Innovent Oncology services, including: Level I Pathways, Patient Support Services, and Advance Care Planning. By directly integrating with iKnowMed, Innovent Oncology services are more easily and effectively delivered and the detailed clinical reporting provides the documentation required for the Innovent Oncology solution.

Supports Innovent Oncology by Delivering Level I Pathways at the Point of Care

iKnowMed fully supports Level I Pathways², which are designed by oncologists to deliver the highest quality evidence-based cancer care to patients through Innovent Oncology. Level I Pathways are based on the strongest available evidence.

iKnowMed automatically provides access to the recommended Level I Pathways at the point of care based on the patient's specific diagnosis. However, if the oncologist feels that the recommended Level I Pathways are not appropriate for the patient, they can always choose an alternative treatment.



Pathways
Choices
Presented

Ability to chart on
Exceptions plus free text
box for comments

Innovent Oncology integrates seamlessly with iKnowMed to provide Level I Pathways powerful decision support at the point of care.

² Level I Pathways is only available within iKnowMed for practices actively participating in Innovent Oncology in their market.

EHR Stimulus Opportunity

With the signing of the American Recovery and Reinvestment Act, allocating approximately \$20 billion towards electronic health record adoption, physicians who demonstrate meaningful use of certified EHRs could be eligible for up to \$44,000 in incentives over five years beginning in 2011.

Year*	Yearly incentive payments for EHR adoption based on year of first use**				Yearly Payment Penalties if not using an EHR***
2011	\$18,000				
2012	\$12,000	\$18,000			
2013	\$ 8,000	\$12,000	\$15,000		
2014	\$ 4,000	\$ 8,000	\$12,000	\$12,000	
2015	\$ 2,000	\$ 4,000	\$ 8,000	\$ 8,000	-1%
2016		\$ 2,000	\$ 4,000	\$ 4,000	-2%
2017					-3%
2018					-4%
2019					-5%
Total Payments	\$44,000	\$44,000	\$39,000	\$24,000	Variable

Implementing an EHR

If your practice is currently evaluating EHR options, the implementation process should be an important consideration.



The iKnowMed implementation team has brought more than nine hundred cancer care physicians and thousands of staff onto the iKnowMed EHR platform over the last four years. This experience has led us to develop and recommend a robust implementation process to minimize patient disruption and to increase the chance of implementation success. From data loading and training, through go-live, a dedicated iKnowMed team provides focused expertise to your practice.

The iKnowMed team provides one-on-one training for physicians as well as customized training specific to the respective staff positions. Training is structured so that the staff learns the application as it applies to their role. This streamlined training reduces time away from patient care and ensures deep understanding of iKnowMed capabilities.

To learn more about iKnowMed or any of our other US Oncology targeted physician services, please call 866-216-5053 or email us at ikm@usoncology.com.

*Incentives will be paid to eligible professionals who are or become meaningful users of a certified EHR during the incentive period (2011-2016) without regard to when the EHR system was first adopted.

**Eligible professionals must adopt meaningful use of a qualified EHR. Incentive payments for eligible professionals are based on the year of adoption and the amount of Medicare-covered professional services furnished during the year in question.

***If the professional is not a meaningful user of a qualified EHR during the previous year's reporting period, the Medicare fee schedule amount will be reduced to 99 percent in 2015, 98 percent in 2016, and 97 percent in 2017 and in each subsequent year. For 2018 and each subsequent year, optional reductions may occur as determined by Secretary of HHS.