



Editor's Notes...

Our September newsletter offers details on the final regulation associated with “meaningful use” of electronic health records (EHRs), which took effect the end of September. This regulation extends the information from the May newsletter on CMS (Medicare and Medicaid) incentive payments, through the HITECH Act, for eligible providers (i.e. individual physicians, clinics, and hospitals) who adopt electronic data capture and sharing, incorporate the electronic data in advanced clinical processes, and show improved patient care and outcome measurements. The refined “meaningful use” objectives and measures are applicable within the 2011 and 2012 window of opportunity. The article also provides references for further background and details.

Bob Folden, our SIGHealth Resource Chair, continues his call to the SIGHealth membership for help in identifying SIGHealth resources. Growing and enhancing our SIGHealth knowledge-base benefits our SIG, our members, and our students.

Our officers would like to remind the membership of a planned informal meeting to be held during ICIS on December 13 at 6:30 PM. When plans are finalized, specific meeting details will be posted on our Website and reposted in the newsletter. In the meantime, ICIS registration is underway and early registration ends November 2. Also, please remember to re-designate your membership in SIGHealth when you renew your AIS membership.

This month's newsletter also highlights upcoming networking and publishing opportunities for regional and international workshops and conferences. Please make note of the Center for Disease Control (CDC) Post-graduate Fellowship application deadline of November 3. Interested applicants have the opportunity to attend recruitment webinars, hosted by the CDC during the month of October.

In closing, I hope you will share your practitioner and research experiences with other SIGHealth members through contributions to your newsletter. Content received by the 20th of each month will appear in that month's issue and content received after the 20th will typically appear in the next month's issue. Suggested content categories are:

- News about SIGHealth members (up to 300 words)
- We welcome SIGHealth related essays (about 900 words) from industry professionals .
- News and approaches to teaching e-health (up to 1800 words)
- “How to's” on research methods, getting papers published, reviewing papers, etc.
- Any other announcements (up to 300 words for each item).

Warmest regards,

Jim Ryan, Ph.D.
jeryan@troy.edu



Refined Meaningful Use of EHRs...

Jim Ryan

The Department of Health and Human Services (DHHS) released a final regulation for the meaningful use of electronic health records (EHRs) in the Federal Register on July 28, 2010, volume 75, number 144, pages 44314-44588. The following week, Blumenthal and Tavenner (2010) provided a perspective on the new regulation that took effect on September 27, 2010. The most important part of this regulation is what hospitals and clinicians must do with EHRs to be considered meaningful users in 2011 and 2012. In the final regulation, the initial 23 objectives were divided into a set of core objectives that constitute an essential starting point for meaningful use of EHRs and a separate menu of additional important activities from which providers will choose several to implement in the first two years. The following 15 core objectives are required by all eligible professionals, hospitals, and critical access hospitals to qualify for CMS incentive payments.

Core Objective	Measure
Record patient demographics (sex, race, ethnicity, date of birth, preferred language, and in the case of hospitals, date and preliminary cause in the event of death)	Over 50% of patients' demographic data recorded as structured data
Record vital signs and chart changes (height, weight, blood pressure, body-mass index, growth charts for children)	Over 50% of patients 2 years of age or older have height, weight, and blood pressure recorded as structured data
Maintain up-to-date problem list of current and active diagnosis	Over 80% of patients have at least one entry recorded as structured data
Maintain active medication list	Over 80% of patients have at least one entry recorded as structured data
Maintain active medication allergy list	Over 80% of patients have at least one entry recorded as structured data
Record smoking status for patients 13 years of age or older	Over 50% of patients 13 years of age or older have smoking status recorded as structured data
For individual professionals, provide patients with clinical summaries for each office visit; for hospitals, provide an electronic copy of hospital discharge instructions on request	Clinical summaries provided to patients for over 50% of all office visits within 3 business days; over 50% of all patients who are discharged from the inpatient department or emergency department of an eligible hospital or critical access hospital and who request an electronic copy of their discharge instructions are provided with it
On request, provide patients with an electronic copy of their health information (including diagnostic-test results, problem list, medication lists, medication allergies, and for hospitals, discharge summary and procedures)	Over 50% of requesting patients receive electronic copy within 3 business days
Generate and transmit permissible prescriptions electronically (does not apply to hospitals)	Over 40% are transmitted electronically using certified EHR technology
Computer provider order entry (CPOE) for medication orders	Over 30% of patients with at least one medication in their medication list have at least one medication ordered through CPOE
Implement drug–drug and drug–allergy interaction checks	Functionality is enabled for these checks for the entire reporting period
Implement capability to electronically exchange key clinical information among providers and patient-authorized entities	Perform at least one test of EHR's capacity to electronically exchange information
Implement one clinical decision support rule and ability to track compliance with the rule	One clinical decision support rule implemented
Implement systems to protect privacy and security of patient data in the EHR	Conduct or review a security risk analysis, implement security updates as necessary, and correct identified security deficiencies
Report clinical quality measures to CMS or states	For 2011, provide aggregate numerator and denominator through attestation; for 2012, electronically submit measures

In addition to the core objectives, the final regulation creates a second group of ten additional objectives, from which providers must choose any five to implement during 2011–2012.

Additional Objectives (choose five)	Measure
Implement drug formulary checks	Drug formulary check system is implemented and has access to at least one internal or external drug formulary for the entire reporting period
Incorporate clinical laboratory test results into EHRs as structured data	Over 40% of clinical laboratory test results whose results are in positive/negative or numerical format are incorporated into EHRs as structured data
Generate lists of patients by specific conditions to use for quality improvement, reduction of disparities, research, or outreach	Generate at least one listing of patients with a specific condition
Use EHR technology to identify patient-specific education resources and provide those to the patient as appropriate	Over 10% of patients are provided patient-specific education resources
Perform medication reconciliation between care settings	Medication reconciliation is performed over 50% of transitions of care
Provide summary of care record for patients referred or transitioned to another provider or setting	Summary of care record is provided for over 50% of patient transitions or referrals
Submit electronic immunization data to immunization registries or immunization information systems	Perform at least one test of data submission and follow-up submission (where registries can accept electronic submissions)
Submit electronic syndromic surveillance data to public health agencies	Perform at least one test of data submission and follow-up submission (where public health agencies can accept electronic data)
Additional choices for hospitals and critical access hospitals	
Record advance directives for patients 65 years of age or older	Over 50% of patients 65 years of age or older have an indication of an advance-directive status recorded
Submit electronic data on reportable laboratory results to public	Perform at least one test of data submission and follow-up submission (where public health agencies can accept electronic data)
Additional choices for eligible professionals	
Send reminders to patients (per patient preference) for preventive and follow-up care	Over 20% of patients 65 years of age or older or 5 years of age or younger are sent appropriate reminders
Provide patients with timely electronic access to their health information	Over 10% of patients are provided electronic access to information within 4 days of its being updated in the EHR

Reference:

Blumenthal, D. and Tavenner, M. (August 5, 2010). "The 'Meaningful Use' Regulation for Electronic Health Records", *The New England Journal of Medicine*, (363)6, pp. 501—504. ■

Networking Opportunities...

Spread the word: SIGHealth is a group on  **LinkedIn**

September 2010...Renewal of AIS Membership and Re-designating SIGHealth Interest

Please be aware that when you renew your AIS membership, you must also re-designate your interest in SIGHealth. Currently, membership in SIGHealth is \$10 USD per year. [More Details](#)

November 2010...1st ACM International Health Informatics Symposium (IHI)

When: November 11-12, 2010

Where: Washington, D.C.

[More Details](#)

Networking Opportunities...(continued)

October & November 2010...CDC Postgraduate Training Program

Cynthia LeRouge

The Centers for Disease Control and Prevention (CDC) offers a 2-year postgraduate competency-based training program in public health informatics, the systematic application of information and computer science to public health practice, research, and learning. Fellows receive training in both informatics and public health, are assigned to teams involved in CDC information systems projects, provide technical assistance to state and local health departments and international agencies, and are given the opportunity to lead one or more major projects during their fellowship. Note, this is a paid fellowship beginning July 5, 2011. Salaries are based on federal pay grades GS 11 or 12, depending on your qualifications.

The deadline to apply for the fellowship period is on November 3, 2010. All supporting documentation must be received by November 11, 2010. Additional information regarding the Public Health Informatics Fellowship Program is available at <http://www.cdc.gov/PHIFP/>.

If you are interested in attending a fellowship recruitment webinar, please contact Ms. Elsie Ogletree at 404-498-6219, 404-498-6219, or at EOgletree@cdc.gov. Please leave your name, email address, institution, and preferred webinar date from dates below. There will be limited seats available so please book early.

Oct 4, 2010, 10-11 AM EST or Oct 13, 2010, 10-11 AM EST or Oct 19, 2010 2-3 PM EST

The CDC hopes interested applicants will join them for one recruitment webinar. ■

November 2010...Doctoral Consortium on Sociotechnical Issues in Medical Informatics

When: November 13, 2010

Where: Washington, D.C. (in conjunction with the 2010 AMIA Conference, November 13-17)

[More Details](#)

December 2010...International Conference on Information Systems (ICIS)

When: December 12 - 15, 2010

Where: St. Louis, Missouri, USA | Hyatt Regency

Registration: Registration begins September 1

SIGHealth will host an informal meet-n-greet again this year on Monday, December 13 from 6:30 p.m. to 8:30 p.m..



[More Details](#)

January 2011...Hawaii International Conference on System Sciences (HICSS)

When: January 4 - 7, 2011

Where: Koloa, Kauai, Hawaii, USA | Grand Hyatt Kauai Resort & Spa

Registration: Online registration continues until December 15, 2010

[More Details](#)

Publication Opportunities...

CFP: Electronic Markets Special Issue on Mobile Health

Paper submission deadline is October 1.

[More Details](#)

CFP: IEEE Conference on Healthcare Informatics, Imaging and Systems Biology

The First IEEE International Conference on Healthcare Informatics, Imaging and Systems Biology (HISB) will be held July 27-29, 2011, San Jose, CA <http://www.ieee-hisb.org>.

The field of healthcare is undergoing a revolution with scientific and engineering advancements seen simultaneously at all informatics levels. Healthcare IT researchers are mining information from electronic patient records and clinical guidelines to better understand the relationship between symptoms/conditions, diseases, medications/treatments and outcome. Improved diagnosis of diseases and conditions is being addressed by diagnostic imaging researchers through novel techniques for imaging and analysis. Finally, advances in systems biology research is enabling personalized medicine diagnostics and therapeutics helping revolutionize treatment for major indications like cancer and heart disease. The first HISB conference is being proposed to foster an integrative approach to healthcare by the cross-fertilization of ideas among researchers in the respective areas of healthcare informatics, imaging and systems biology. The confluence of these fields is expected to not only advance the state of understanding of diseases and outcomes but also explore their relationships on a personalized biological basis. The goal of this conference is to bring together researchers in healthcare informatics, medical imaging, and systems biology to present the state-of-the-art research in their fields and to create synergies among the community to close the loop in the biological causal analysis of diseases, their detection through advanced imaging and the analysis of their relationships with treatments and outcomes. We are soliciting original, high-quality submissions that address innovative research and development along the tracks of healthcare informatics, systems biology, and diagnostic imaging.

Key Dates:

Abstract submission deadline: February 11, 2011

Paper submission deadline: February 18, 2011

Notification of acceptance: May 16, 2011

Camera-ready papers due: June 20, 2011

Conference dates: July 27-29, 2011

[More Details](#)
