SIGHealth Newsletter

Editor's Notes...

Our May newsletter offers an article that summarizes the current status and opportunities associated with "meaningful use" in respect to electronic health records (EHRs) and the HITECH Act within the American Recovery and Reinvestment Act, better known as the stimulus bill. CMS (Medicare and Medicaid), through the HITECH Act, offers incentive payments 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. Between 2011 and 2015, the window of opportunity decreases and by the end of 2015 the opportunity ends. The article also provides online resources 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 the annual SIGHealth meeting to be held during AMCIS on August 13 at 6:00 PM. When plans are finalized, specific meeting details will be posted on our Website and reposted in the newsletter. In the meantime, AMCIS registration began in May and an author of each accepted paper must register by June 1 to have the paper included. Also, please remember to re-designate your membership in SIGHealth when you renew your AIS membership.

This month's newsletter also highlights upcoming opportunities for regional and international workshops and conferences. Please make note of the Doctoral Consortium on Sociotechnical Issues in Medical Informatics that is offered in conjunction with the 2010 AMIA Conference, which has an application and paper submission deadline of June 30th.

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

Health IT Perspectives on Meaningful Use...   Barbara Doster & Jim Ryan

When the 111th Congress passed the American Recovery and Reinvestment Act (ARRA) in February 2009, the legislation earmarked $147 billion of the $787 billion (18.7%) for healthcare. More specifically, ARRA directly allocated $19 billion for health information technology through the Health Information Technology for Economic and Clinical Health (HITECH) Act to be administered by the Department of Health and Human Services (DHHS). This article highlights "meaningful use" with respect to HITECH within the ARRA.

Meaningful Use Framework

Between August and December 2009, through the DHHS, the Office of the National Coordinator for Health Information Technology (ONC) announced approximately $2 billion of funding for new programs from the $19M HITECH allocations to 1) help healthcare providers become meaningful users of electronic health records (EHRs) and 2) lay the groundwork for an advanced electronic health information system. The associated funding and new programs were identified by the ONC as:

Funding	HITECH New Program
$643M	70 Regional Extension Centers to support small practices
$564M	Health Information Exchange state program support
$118M	Workforce Training Programs to support HIT education
$235M	Beacon Communities – 15 demonstration projects of EHR value
$60M	SHARP Research Projects – 4 HIT adoption breakthrough advances
$64M	NHIN common platform for health information exchange along with Standards & Certification interoperability specifications

Dr. David Blumenthal, the DHHS National Coordinator for Health Information Technology, published the following framework for the meaningful use of EHRs that highlights the new programs' relationships.
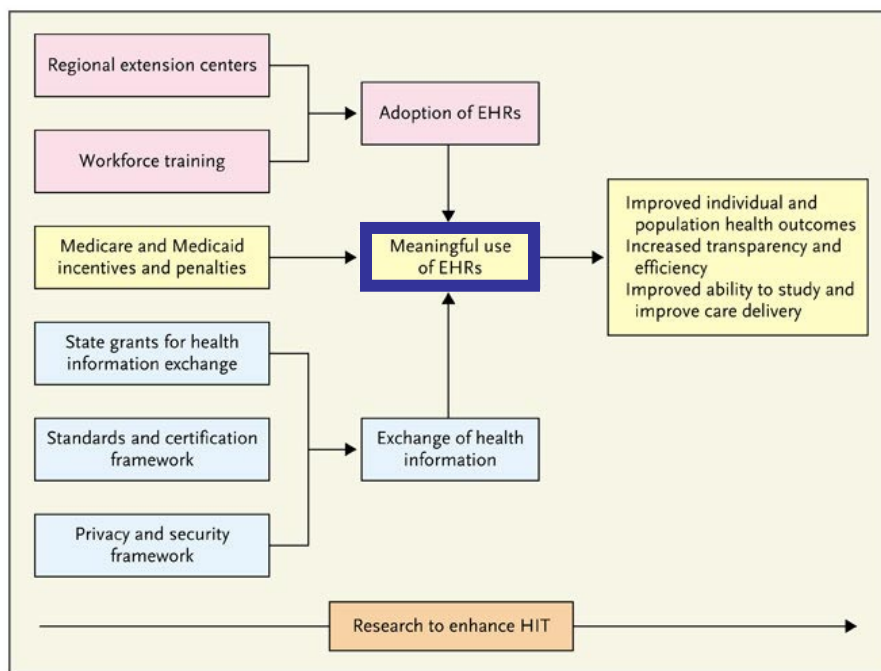
Meaningful Use Goals

The vision for "meaningful use" is to enable significant and measurable improvements in population health through a transformed health care delivery system. The five overarching goals associated with meaningful use are:
1. Improve quality, safety, and efficiency.
2. Engage patients and their families.
3. Improve care coordination.
4. Improve the population's public health and reduce disparities in care.
5. Ensure privacy and security protections.

Meaningful EHRs User

An eligible provider and/or an eligible hospital are considered a "meaningful EHR user" for an EHR reporting period within a payment year if they meet the following three requirements:

1. Use certified EHR in a meaningful manner (ex. CPOE, e-prescribing, barcode med admin, etc.)
2. Utilize certified EHR technology that is connected in a manner that provides for the electronic exchange of health information to improve the quality of healthcare such as promoting care coordination
3. Submit clinical quality information and other measures in form / manner specified by the DHHS Secretary

Transforming Healthcare through Meaningful Use

In December 2009, DHHS released several proposed regulations affecting the remaining $17 billion in heath information technology funding from the HITECH Act (www.healthit.hhs.gov). The first, a notice of proposed rule-making (NPRM), identifies how hospitals and healthcare providers can qualify for approximately $17 billion of incentive Medicare and Medicaid payments through the meaningful use of EHRs. The second, an interim final regulation (IFR), describes the standards and certification criteria that EHRs must meet for the incentive Medicare and Medicaid payments. The actual certification process for EHRs is still forthcoming.

CMS Rule Highlights from 12-30-10 NPRM
- Focused on provider requirements for incentives
- CPOE – 10% for hospitals, 80% for eligible providers
- 25 measures for targets (eight electronic by 2011and all electronic by 2012)
- Eligible provider definitions
- Definition of stages (I - 2011, capture and share data; II - 2013, advanced clinical process with decision support; and III - 2015, measurements of improved outcomes)
- Definition of payment years
- Clarified or dropped criteria on the meaningful use matrix
  (31 same or reworded; 3 significantly modified; 2 removed, and 1 added)
- Recommends keeping Medicare/Medicaid requirements the same

Four Year CMS Health IT Incentive Payment Scenarios

The CMS incentive payments do reflect a first mover advantage, where early adopters have the potential funding advantage. Year one requires 90 consecutive days of measurement. To maximize the CMS incentive funding, hospitals may start no earlier than October 1, 2010; may start as late as July 3, 2011; and must end no later than September 30, 2011. Eligible providers may start no earlier than January 1, 2011; may start as late as October 3, 2011; and must end no later than December 11, 2011. Years two through five requires the full year of measurement, where the hospital's reporting year is October 1 to September 30 and the eligible provider's reporting year is January 1 to December 31.

The meaningful use criteria will phase through three definition stages from 2011 to 2015. Stage 1 is the 2011 criteria definition, stage 2 is the 2013 criteria definition, and stage 3 is the 2015 criteria definition. The maturation model is compressed for adopters whose stage 1 criteria are achieved after 2011. By 2015, all adopters have to meet the 2015 criteria definition regardless of stage progression. The following table illustrates the first mover advantage for CMS incentive payment funding.

Year starting		2011	2012	2013	2014	2015	2016
Maximum CMS incentive payment for each year	**2011**	$20M					
	2012	$15M	$20M				
	2013	$10M	$15M	$20M			
	2014	$5M	$10M	$15M	$15M		
	2015		$5M	$10M	$10M	$10M	
	2016			$5M	$5M	$5M	
Total max over all years *% Maximum*		**$50M** **100%**	**$50M** **100%**	**$50M** **100%**	**$30M** **60%**	**$15M** **30%**	**Penalties Begin**

DHHS Rule Highlights from 12-30-10 IFR

- Defines certification requirements for EHRs.
- Follows the recommendations from the Federal Advisory Committees.
- Calls for the inbound support of CCD and CCR, where outbound support only requires CCD.
- Calls for the use of cross-enterprise user authentication.
- Requires the use of NCPDP formulary plan and benefit standard for externally communicated medication orders.

References

US Dept of Health & Human Services' (DHHS) Press Release 12-30-09

CMS Notice of Proposed Rulemaking (NPRM) regarding the Medicare & Medicaid Incentive Programs 12-30-09

Proposed Interim Final Rule (IFR) for the Medicare & Medicaid EHR Incentive Program 12-30-09

Proposed Requirements for the Medicare EHR Incentive Program Fact Sheet 12-30-09

Proposed Requirements for the Medicaid EHR Incentive Program Fact Sheet 12-30-09

CMS Definition of Meaningful Use Fact Sheet 12-30-09

DHHS Health IT website info re: the NPRM and Meaningful Use

DHHS Notice of Interim Final Rule (IFR) on an initial set of Standards, Implementation Specifications, and Certification Criteria 12-30-09:

DHHS Proposed Interim Final Rule (IFR) for the Standards, Implementation Specifications, and Certification Criteria for EHR Technology

Blumenthal, D. "Launching HITECH," posted by the *New England Journal of Medicine* on 12-30-2009

HIMSS "Meaningful Use, Certification Criteria and Standards, and HHS Certification Process

Murphy, J., (Fall 2009). "This is our Time – How ARRA Changed the Face of Health IT," Nursing Informatics Commentary, *Journal of Healthcare Information Management*, (24)1, pp. 8-9 .

Networking Opportunities…

Spread the word: SIGHealth is a group on **Linked** **in** ®

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

AIS membership renewal fees are often accessed during an AIS conference registration process, and AMCIS registration opened in May. 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

August 2010...AMCIS 2010 and Annual SIGHealth Meeting

When: August 12 - 15, 2010

  SIGHealth Annual Meeting scheduled for August 13, 6:00 P.M.

Where: Lima, Peru

Registration: Began May 1st

Accepted papers: One author must complete the AIS author registration policy by June 1.   **More Details**

Networking Opportunities...

September 2010...Mediterranean Conference on Information Systems (MCIS)

When: September 12 - 14, 2010

Where: Tel-Aviv-Yafo, Israel

Health Informatics Track Chairs: Moshe Leshno, Tel-Aviv University, Israel

Elena Karahanna, University of Georgia, USA

More Details

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

When: November 11-12, 2010

Where: Washington, D.C.

IHI 2010 is ACM's premier community forum concerned with the application of computer and information science principles as well as information and communication technology to problems in healthcare, public health, the delivery of healthcare services and consumer health informatics aspects. IHI 2010 is primarily interested in serving as a venue for the discussion of technical contributions highlighting end-to-end applications, systems, and technologies, even if available only in prototype form. Therefore, we strongly encourage authors to submit their original contributions describing their algorithmic and methodological contributions providing an application-oriented context. The IHI demo track is an exciting and highly interactive way to demonstrate your health informatics system or application. The demo program will be featured prominently in the conference program and should be seen as a vehicle to showcase innovative new technologies or applications in health informatics.   **More Details**

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)

Submission Deadline: June 30, 2010

The American Medical Informatics Association's (AMIA) People and Organizational Working Group along with the International Medical Informatics Association's (IMIA) Organizational and Social Issues Working Group with support from the National Science Foundation is proud to sponsor the 2010 Doctoral Consortium on Sociotechnical Issues in Medical Informatics (http://faculty.ist.psu.edu/reddy/amia/).   The Doctoral Consortium is a forum in which doctoral students can meet and discuss their work with each other and with a panel of experienced researchers. Applicants should be past the candidacy stage and near their thesis proposal defense. If you would like to apply but do not meet this criteria, please contact the Consortium Chair, Dr. Madhu Reddy (mreddy@ist.psu.edu). The Consortium committee will select approximately 10-12 participants who will be expected to give short, informal presentations of their work during the Consortium.   **More Details**

Publication Opportunities...

CFP: 1st ACM International Health Informatics Symposium (IHI)

Abstracts are due June 2, 2010; Papers are due June 4, 2010.   **More Details**

CFP: 44th Hawaii International Conference on System Sciences (HICSS)

Papers are due June 15, 2010.   **More Details**

CFP: Doctoral Consortium on Sociotechnical Issues in Medical Informatics

Papers are due June 30, 2010.   **More Details**