EHR: An Introduction to Electronic Health Records, Meaningful Use and Practical Implications for Physicians

By: L. Barton Peach and Nicholas G.J. Healey
of Dray, Thomson & Dyekman, P.C., Cheyenne, Wyoming

INTRODUCTION

Along with implementing new Health Information Portability and Accountability Act (HIPAA) standards regarding privacy and security, the Health Information Technology for Economic and Clinical Health Act ("HITECH Act") of 2009 was intended to stimulate and expedite the nationwide development of electronic health record ("EHR") technology. The HITECH Act was part of the larger American Reinvestment and Recovery Act of 2009 (known as "ARRA" or simply the "Stimulus Act") which was pushed into the limelight by President Barack Obama prior to its enactment. The federal government has allocated significant resources in the form of incentives and funding to medical providers who make "meaningful use" of the EHR's, starting in January of 2011. It may behoove many physicians and their practice to take advantage of these incentives now, as there will be penalties for practices that do not implement EHR's by 2015. Likewise, EHR's are one acceptable method of communicating statistical data for the now-permanent Patient Quality Reporting System ("PQRS") to the Centers for Medicare and Medicaid Services ("CMS"). Starting in 2015, physicians failing to report the required data will suffer a 2% penalty in their Physician Fee Schedule reimbursement from CMS, a drop in revenue that no physician needs. Thus, for some physicians adopting EHR and making "meaningful use" of the technology can help stave off another potential reimbursement cut.

EHR'S, "MEANINGFUL USE" AND INCENTIVES

The formal definition of an "electronic health record" used by the National Alliance for Health Information Technology is "the aggregate electronic record of health-related information on an individual that is created and gathered cumulatively across more than one health care organization and is managed and consulted by licensed clinicians and staff involved in the individual's health and care." This would seem to imply that an EHR is not simply a document containing medical history, diagnoses, etc. of a single office visit, but rather a collection of all such documents which are kept by multiple medical professionals, over time.

As stated above, incentives for "meaningful use" of EHR's will begin in January of 2011 for eligible providers and eligible hospitals. For medical professionals, the incentive is 75% of Medicare's allowable charges for covered services furnished by the eligible professional in a year, up to $18,000 in the first year.[1] The incentive payments are scaled

[1] Centers for Medicare and Medicaid Services Fact Sheet, June 16, 2009, available at: www.cms.hhs.gov/apps/media/press/factsheet.asp?Counter=3466.

down in the following years to $12,000, $8,000, $4,000, and $2,000.[2] If the first payment year is 2011 or 2012, the $18,000 incentive would start in that year.

The amount of incentive payment for a hospital varies depending on the number of discharges for each eligible hospital in a given year, the estimated percentage of inpatient bed-days for Medicare fee-for-service and/or managed care patients, and charity care provided by the hospital. The base starting payment of $2 million in the first year is then adjusted by those variables and the payments are decreased over the following four years, with no payments in the fourth year.[3]

On the flip side, for eligible medical professionals not making meaningful use of EHR's in 2015, reimbursement amounts for covered services will be reduced by an increasing percentage each year thereafter.[4] Hospitals would also see reductions in the amounts they receive.[5]

IMPLEMENTATION OF "MEANINGFUL USE" OF EHR'S

At the end of December of 2009, both CMS and the Office of the National Coordinator for Health Information Technology ("ONC") issued proposed rules and regulations intending to "lay a foundation" for improving "quality, efficiency and safety through meaningful use of certified [EHR] technology."[6] An interim final rule was also issued by ONC and subsequently published in the Code of Federal Regulations (CFR) on January, 13, 2010) which sets initial standards, implementation specifications, and certification criteria for EHR technology, and has provided a proposed set of criteria for "meaningful use." One of the many proposed requirements for "meaningful use" of EHR's is that patients must be able to obtain and view a copy of their medical records in an electronic format.

In addition to the criteria published by ONC, criteria were also proposed by CMS and the Stage 1 criteria proposed by CMS is set forth in the interim final rule and can be downloaded from the CMS website.[7] The Stage 1 criteria focus on electronically capturing health information in a coded format, using that information to track key clinical conditions, communicating that information for care coordination purposes, and initiating the reporting of clinical quality measures and public health information.[8] These few criteria are the first phase and are aimed at establishing reasonable criteria which use a provider's currently available technology and practice experience of the profession.

---

[2] *Id*.
[3] *Id*.
[4] *Id*.
[5] *Id*.
[6] U.S. Department of Health and Human Services ("DHS") News Release, CMS and ONC Issue Regulations Proposing a Definition of 'Meaningful Use' and Setting Standards for Electronic Health Record Incentive Program, available at www.hhs.gov/news/press/2009pres/12/20091230a.html (December 30, 2009).
[7] See DHS, Interim Final Rule, 42 CFR Part 170 (January 13, 2010) which can be downloaded at http://edocket.access.gpo.gov/2010/pdf/E9-31216.pdf.
[8] *Id*.

The idea, according to CMS in its news release (see footnote 6), is to gradually establish stricter and more extensive criteria for demonstrating "meaningful use" over time, as technology and providers' capabilities improve.

Under the proposed rule, cited above, the Stage 2 criteria will expand to inpatient and outpatient settings and will include transmission of orders entered using "computerized provider order entry" ("CPOE"), and electronic transmission of diagnostic test results (e.g. pathology tests, radiology, cardiac imaging, nuclear medicine tests, blood tests, etc.). The Stage 3 regulations, under the interim final rule, will not be applicable until 2015 and are very ambiguous at this point but are aimed at patient access to self management tools, access to comprehensive patient data and improving population health.

The ONC interim final rule, cited above, differs slightly from the CMS proposed requirements and focuses more specifically on the practical application for "meaningful use." An example being that a Stage 1 objective for physicians and hospitals will be to implement a system of checks for drug interactions and allergies and whether the drug is available at the hospital or at the physician facility. This system must include an automatic, electronically-generated, real-time alert for drug allergies and contraindications based on multiple things such as the patient's identified allergies, medication list and age.[9] The provider must also record any such drug alert in the patient's EHR. Presumably, this can and will be used to pinpoint whether a provider or staff member knew of any harmful interactions or contraindications which could be or ultimately *were* injurious to a patient.

Similar to the drug interaction notifications, a compliant system for Stage 1 will also have to incorporate five "clinical decision support rules" into a pop-up alert or sound alert and must also be tracked and recorded when received.[10] These rules must be designed according to specialty and clinical priorities, and make use of demographic data, specific patient diagnoses, conditions, diagnostic test results and/or patient medication lists, whichever are appropriate in the treatment context. Patient medication lists, compiled over multiple visits must also be able to be electronically reconciled (compare and merge) into a single list that is displayed in real-time and in electronic format (presumably so that a patient can print off that list for multiple uses). All of the above information must also be able to be received and transmitted by each entity to/from another facility. Included on the list to be transmitted is also the diagnostic test results, problem lists, immunizations, and prior procedures.[11] Additionally, all of this information must be protected and such protection must be established by enumerated criteria. The criteria must include a unique name or number for each person with access to the system for tracking purposes. Therefore, if the proposed requirements ultimately become final regulations, a hospital or practice will have the capability to produce a list of every person (physician or staff) that has accessed the EHR as well as all of the electronic alerts given to a care provider over the course of the treatment.

[9] See the DHHS interim final rule, at footnote 7, page 2026.
[10] *Id*. at 2027.
[11] *Id*. at 2028.

CONCLUSION

As can be seen from the above descriptions, implementation of "meaningful use" of EHR's can be confusing. Since these changes are not mandated until 2015 it is likely that many practices and hospitals will take the "wait and see" approach to the entire situation. However, with the fairly extensive and potentially lucrative incentives provided by the government, it may be advisable for physician practices and hospitals to take advantage while they can, especially given the fact that very little additional technology is needed at this point. There will eventually be a need to upgrade the technology in these practices and hospitals to keep up with the regulations as they are finalized, but those costs and the "culture shock" of these changes will be minimized if these entities begin implementation now.