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## **Electronic Health Records Momentum And the Role of Document Imaging**

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**Patty:** This month, let's spend some time revisiting the topic of document imaging and the role it plays in the electronic health record (EHR). Document imaging continues to gain in popularity.

**Leslie:** That sounds like a good idea, but before we talk about document imaging, do you mind if we take a few minutes to talk about current national events related to the EHR?

**Patty:** That's a good idea Leslie. Quite a bit has happened since the spring when the president announced his vision for most Americans to have access to an electronic record in 10 years. It can sometimes get confusing to track all the events and groups working on national health care technology initiatives.

**Leslie:** Isn't that the truth! Thank goodness the American Health Information Management Association (AHIMA) provides timely updates that are easy to follow. The e-HIM™ Communities of Practice (CoP) has all the latest reports and news. What do you think of the new presidential appointment related to health care technology?

**Patty:** The appointment of David Brailer, MD, PhD, in May to the Office of the National Coordinator for Health Information Technology demonstrates that there continues to be national commitment toward building a national interoperable health information infrastructure. The appointment is exciting and unprecedented! This new office will support efforts across the government and in the private sector to develop and agree upon standards and health care informational technology infrastructure.

**Leslie:** This appointment is good news. In addition, as part of the e-Gov Initiatives, The Consolidated Health Informatics Initiative (CHI) has adopted more than 15 standards and growing, to allow for electronic exchange of clinical information across the federal health information infrastructure. This includes standards such as several Health Level 7 (HL7) vocabulary standards for demographic information, units of measure, immunizations and clinical encounters, as well as clinical document architecture for text based reports. These standards and others will enable the federal health enterprise to speak the same language.

**Patty:** And I also understand that HL7's EHR functional model received a favorable vote in May. This is a positive step toward nationwide guidance on minimum EHR functionality.

**Leslie:** Other news includes what occurred last month at the Secretarial Summit on health information technology. Tommy Thompson, secretary of the Department of Health and Human Services (HHS) and Dr. Brailer reviewed HHS's Framework for Strategic Action. The Framework outlines a 10-year plan to transform health care delivery by building a national electronic health information infrastructure in the United States. The plan spells out the broad steps needed to achieve an "always-current, always-available" EHR for most Americans within a decade. The plan is consumer-centric and promotes the deployment of secure personal

health records (PHR), which would be maintained by the patient and his or her physician, insurer or family member. This is the kind of transformation that is critical for consumers. Our discussion last month titled “Consumer Health Information Advocate: New Role for HIM Professionals” describes the kinds of changes to expect as consumers become an integral part of the EHR.

**Patty:** I noticed that the e-HIM CoP has a link to the report that lays out the 10-year plan. The plan is called “The Decade of Health Information Technology: Delivering Consumer-Centric and Information-rich Health Care.” Good reading for summertime. Our readers can also find it on [www.hhs.gov/onchit/framework/](http://www.hhs.gov/onchit/framework/).

**Leslie:** It’s definitely a must read. Well that was a little more than a few minutes on this topic, but now that we have brought each other and our readers up to date, let’s talk about document imaging.

**Patty:** I find it interesting that as the momentum toward the EHR picks up, so has the implementation of document imaging. I am noticing more and more organizations implementing document imaging as a part of their EHR or in some cases it is considered the organization’s EHR. With the push toward clinical systems, I wonder how the role of document imaging will change.

**Leslie:** That’s a good question. I think it will always be a critical component technology that is required for organizations to achieve a paperless record. At least there are general document imaging standards. Most systems utilize standards such as portable document format (PDF) and tagged image file format (TIFF).

**Patty:** That’s true, Leslie. We also need to think of document imaging systems as part of an electronic document management system (EDMS) that manages not only paper but also computerized documents. This means that the goal is not only to eliminate paper but to have a good way to deal with paper documents and documents generated by a computer.

**Leslie:** What does that mean exactly?

**Patty:** For example, cardiac clinics typically generate electronic documents created by proprietary cardiac software. These electronic documents are usually printed, including cardiac tracings, and are stored in the clinic record as opposed to being stored online. These electronic documents are prime for EDMS.

AHIMA’s practice brief titled “Electronic Document Management as a Component of the Electronic Health Record” defines EDMS as “any electronic system that manages documents to realize significant improvements in business work processes.” This means that documents such as forms, notes, messages, reports and letters are managed in the most efficient manner and one that is complementary to other components of the EHR.

For example, we don’t often think of COLD (Computer Output to Laser Disk) technology as an EDMS technology, but it is. This technology, more commonly called Enterprise Report Management (ERM) or COLD/ERM, is essential to the efficient management and distribution of analog and digital data. Many reports are often printed to paper and include documents such as “green bar” reports, Uniform Bills (UBs), laboratory and other ancillary reports and transcribed word reports. ERM technology can manage these and other digital documents by electronically storing the report-formatted documents. It also can distribute the documents via fax, e-mail, Web and hard copy printing processes.

**Leslie:** I see. Well that makes a lot of sense and is clearly an important component of document management within an organization. I noticed that the practice brief describes document imaging technology as the primary technology but there are several other components that are needed to fully manage analog and digital documents.

**Patty:** That's right. Unfortunately, those components are too numerous to go into today, but I think it's important that HIM professionals have an understanding of EDMS technology to maximize the most of document imaging implementations. These technologies are spelled out in the practice brief in detail. I think that implementing more EDMS components improves the value organizations derive from document imaging, and maximizes the document imaging investment now and in the future.

**Leslie:** Good point. As we move toward clinical systems, physician order entry and other clinical documentation applications, EDMS technology will still be needed to manage the storage and distribution of the created electronic documents. But what about document imaging? What will its role be in the future?

**Patty:** I believe it will compliment clinical systems but there will be less focus on document imaging as "The EHR." There is a tendency today to want to import everything into the document imaging system creating one place for documents to reside, just like the manual record. This is fine as a bridging strategy but may not be appropriate as a long-term solution.

**Leslie:** Health information management (HIM) processes will change in the future, too. For example, as clinicians document online, they will also sign their electronic documents. Record analysis tasks performed within document imaging systems today become data integrity tasks performed in clinical systems tomorrow. This is a real paradigm shift that challenges how we think about the record in the future. In some ways document imaging perpetuates current thinking of the record as we know it, doesn't it?

**Patty:** I think it does, Leslie. That is why the practice brief is a must read as it reviews all the EDMS technology that is critical today as an EHR bridging strategy. This same technology is essential to manage electronic documents created by clinical systems in the future.

**Leslie:** Interesting perspective, Patty. I can see why you are thinking about the role of document imaging within the EHR. If I understand you, it's essential to think through the vision of the EHR as one implements document imaging so that one can envision its migratory path.

**Patty:** Yes, that's exactly the point! Participating on the task force that developed this practice brief really got me thinking about EDMS and how document imaging is being implemented today in many organizations. It's a lot of work to implement document imaging for it to be more than just an archival system. How we implement it today lays the groundwork for how effective tomorrow's EHR becomes. Best practices around document imaging will assure that health care organizations maximize the value of their EHR and get the best ROI.

**Leslie:** Well that should put a smile on the faces of health care executives, and it demonstrates once again why HIM professionals must be at the EHR table

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