Reformatting Healthcare through Standards: AHIMA Building a Standards Strategy to Improve Interoperability and Healthcare

By Mary Butler

Since the turn of the century, Hollywood has provided Americans with a reliable form of escapism that allows individuals to enter darkened theaters and feel as if they are being transported to a different world.

Over time, the movie-going experience has remained remarkably the same. The foundational components needed to make a movie—actors, directors, screenwriters, and cinematographers—play the same roles today as they did 100 years ago. If you stepped into a theater today to see *Gone with the Wind*, the biggest differences from its debut in 1939 would be that the theater is air conditioned and you can munch on chicken fingers during the show.

While most cineastes agree that seeing a film on the big screen is the best way to appreciate it—for the first viewing at least—there's no doubt that technology has changed the way movies can be enjoyed. Where once there were just brick-and-mortar theaters, you can now reach into your pocket to see a movie on YouTube or through a streaming service on your cellphone. Hollywood will never stop innovating to reach consumers and heighten their enjoyment, using different format standards to allow films to play on a variety of devices.

Healthcare delivery has functioned the same way, essentially, for centuries. For as long as a person has been sick and able to convey their symptoms to a professional caregiver, there's been a process in place for seeking and receiving care. There always has been—and likely always will be—a doctor-patient relationship, whether the patient is sitting in front of a telehealth computer screen talking to a physician or they are interacting with a Watson-like supercomputer specializing in healthcare.

The other part of healthcare delivery that will always exist is health information, and it will always require health information managers (HIM professionals) to make sure it is managed, stored, and used correctly. For the most part, health information is now being exchanged and used electronically via electronic health records (EHRs). The biggest problem, however, is that EHRs can't currently achieve the nation's goal of improving care and lowering costs because they aren't interoperable.

In a truly interoperable environment, if system A works with system B, and system B works with system C, then system A should work with system C, "but we're not there yet," says Michael Glickman, MSE, president of Computer Networks Architects.

What is missing is widely accepted and used health IT standards—which if implemented would create interoperability and radically improve healthcare. This is why organizations like AHIMA have begun to invest large amounts of time and resources to help solve the health IT standards challenge facing the world. The first step to interoperability is not necessarily more standards, but coming to a consensus and fostering awareness and use of effective and current standards.

AHIMA's Standards Mission

Indeed, Anna Orlova, PhD, AHIMA's senior director of standards, says there are hundreds of standards that exist in health IT—standards that could improve interoperability—but most people outside of the standards development community don't know they exist, let alone put them to use.

In order to get "there" and attain true interoperability in EHRs and in health information as a whole, the healthcare industry—including AHIMA, providers, public and private entities, standards development organizations, and vendors—must come together to develop and implement technical standards to keep data in a unified format. Just like the film industry eventually agreed, uniformly, to shoot movies on 35mm film, and then eventually agreed that Blu-ray would supersede DVDs for home

viewing, AHIMA is endeavoring to work with standards groups and health IT stakeholders to move the needle on interoperability and attain buy-in from providers.

The booming, yet disparate, use of EHR systems and other health IT in recent years has led to the need for more formalized HIM and health IT standards in the healthcare industry to help calm the chaos. AHIMA and other organizations, such as Health Level Seven (HL7), the International Organization for Standardization (ISO), and the American National Standards Institute, have been taking the lead on developing these standards—with the goal of improving interoperability of health information regardless of the EHR system involved, and making it easier for healthcare providers to use information to improve treatment and outcomes.

HIM and health IT standards are essential in healthcare, but are typically utilized behind the scenes and out of sight for many HIM professionals. This can make grasping the importance of standards, and exactly how they are used each day, difficult for some HIM professionals.

To help guide the discussion of standards within the HIM community as well as in the healthcare industry as a whole, AHIMA submitted comments to the Office of the National Coordinator for Health IT (ONC) following the January release of the agency's Interoperability Roadmap. Since then, AHIMA has worked with Integrating the Healthcare Enterprise (IHE)—an international initiative to promote the use of standards to achieve interoperability among health information technology (HIT) systems and effective use of EHRs—to recently release their joint white paper "Health IT Standards for Health Information Management Practices."

AHIMA has used both of these avenues to promote what it believes are the four essential components of an interoperability framework: functional interoperability (which supports AHIMA's information governance initiatives); technical interoperability (supporting interoperable health IT infrastructure); semantic interoperability (clinical documentation improvement via standards); and workforce development (building a global workforce with the necessary eHealth skills).

AHIMA's current mission, Orlova says, is to take this framework and socialize it—that is, get it in front of AHIMA's membership and familiarize them with the concepts. Additionally, AHIMA will present these ideas to the ISO Technical Committee 215. Orlova has presented this framework at AHIMA's Assembly on Education meeting and at this year's CDI Summit, while AHIMA CEO Lynne Thomas Gordon, MBA, RHIA, FACHE, CAE, FAHIMA, presented the framework at the 2015 Leadership Symposium.

HIM professionals need to be familiar with standards—what they are, how they are implemented, and which ones should be used—so they can eventually demand proper standardization from their EHR vendors.

"I really do think that HIM has the skill set to participate in standards-setting discussions," says Beth Acker Moodhard, RHIA, HIM specialist for the Veterans Health Administration. "Although there is a very technical aspect to all discussions, it takes the 'business' or 'user' perspective for any software, any standard, to be successful and implementable. So even if it is outside of our comfort zone to be in such technical discussions, it is very important for HIM to jump in and represent our interests and be at the table when decisions are made and standards are developed."

Standards Framework Under Development

The following offers practical examples of the AHIMA standards framework—semantic, technical, functional, and workforce development standards—that apply to HIM.

Functional

- Information security management in health using ISO/IEC 27002 ISO 27799:2008

Technical

- EHR communication Parts 1-5—ISO 13606

  - EHR communication — Part 1: Reference model ISO 13606-1:2009

- EHR communication — Part 2: Archetype interchange specifications ISO 13606-2:2008
- EHR communication — Part 3: Archetypes and term list interchange specifications ISO 13606-3:2008
- EHR communication — Part 4: Security ISO/TS 13606-1.561805556
- EHR communication — Part 5: Interface specification ISO 13606-5:2010

Semantic

- Harmonized data types for information interchange (name change 2007) ISO 21090:2011

Workforce Development

- This section isn't specifically for standards, but instead refers to the objective to educate the workforce about standards

Barriers to Interoperability

Glickman, who worked with AHIMA on the IHE white paper, compared health IT's struggle to achieve interoperability to the experience of the American Society of Radiologists and other radiology stakeholder groups that wanted CT scans and MRI machines to be compatible with all work stations. To achieve their goal, it took radiology stakeholders over 10 years to get manufacturers to agree to make CT scanners and MRI machines that can plug-and-play with any work station. And to do this, radiology stakeholders had to unite as an industry, not just as individual hospitals, to appeal to manufacturers.

He says the "meaningful use" EHR Incentive Program has gone a long way in trying to push interoperability in EHRs forward, but the program is still being thwarted at every turn by providers who say they're consumed with other initiatives, such as ICD-10-CM/PCS implementation, and vendors who say meaningful use requirements are being pushed forward too quickly. But Glickman contends if providers start demanding more from their vendors, the vendors will step up. A good analogy for standards exists in the automobile industry, he says.

"If I go out and buy a car, you expect to be able to buy any kind of tire for it. If I buy a Ford or a GM car or a Jaguar, I can buy tires from anywhere, right? But can I expect to buy a transmission from anyone? So right now, we only have a small number of interoperable elements in the healthcare car. And we need more," Glickman says.

Another motivator for standards development is the healthcare industry's transition from fee-for-service to pay-for-performance. The industry has moved from looking at data from one patient to analyzing data across all patients, Glickman says. If an integrated delivery network is looking to improve diabetes management system-wide, that might mean looking at data from seven different EHR systems, a task made infinitely harder without standardized data. Glickman compares the task to using a phone book to find a plumber.

"If you think about the yellow pages and the white pages, it's two ways of presenting the same data. You can find all the plumbers in the white pages, it's just going to take a while," Glickman says.

Todd Cooper, executive vice president of the Interoperability Trust, agrees that the biggest barrier to interoperability right now is the lack of a unified voice regarding what they need from their vendors.

"Once that happens [having a unified voice] and once they align their procurement policy behind that, then all of a sudden a lot of other things will align. Technical development, standardization will align," Cooper says. "Vendors will then have a clear target and an ROI calculation… today, they don't have that… I don't think we need a large influx of money. We need alignment, especially on the care provider side that would then enable the industry to say, 'Yes, this is the direction we're heading in,' and to spend that money accordingly."

To compare this back to the movie industry—for a period in the late 2000s movie studios released films in both the Blu-ray and High Definition DVD (HD DVD) format. These two competing high definition formats entered into a years-long war to

become the successor to the DVD. But tired of producing films and other content in both formats, several entertainment production studios and distributors banded together and decided to produce content strictly on Blu-ray disc in 2008, essentially ending the format war in Blu-ray's favor. Similar action is needed in the healthcare industry to decide upon universally accepted and implemented standards for health IT and data exchange.

Sorting through the Technical Standards

As AHIMA's Director of HIM Practice Excellence Diana Warner, MS, RHIA, CHPS, FAHIMA, explains, "It is not that there are no HIM standards, we just have to review and figure out what standards do exist, work, and support HIM practices. We also have to determine what is missing and what needs to be developed."

AHIMA is doing this, in part, with the release of the "Health IT Standards for Health Information Management Practices" white paper completed with IHE. The white paper "describes the need for, value and an approach for aligning HIM business practices (HIM practices) with capabilities of standards-based health IT products to support information governance in healthcare," the paper's authors wrote. Additionally, the white paper aims to inform health IT standards developers about HIM practices and to outline a methodology for aligning HIM practices with the capabilities of health IT products through standards.

Using this white paper and ONC's Interoperability Framework—with its pillars of functional, semantic, and technical interoperability—AHIMA plans to develop its official standards strategy in 2016, when it will be socialized and brought before AHIMA's Board of Directors for approval. AHIMA hopes to lead the way in encouraging HIM professionals to speak up and agree on standards, and eventually push vendors to adopt existing ones.

Some Turn to DIY Standards

In the absence of formalized technical standards from Health Level Seven (HL7) and ISO, some providers and consultants have developed formal policies so that practices are standardized internally, at least. To be clear, these are not standards in the technical sense. Rather, they are more like best practices that organizations are encouraged to follow because they are either not aware of existing standards, or need a workflow to follow to meet their business needs.

Beth Just, MBA, RHIA, FAHIMA, CEO of Just Associates, is a consultant who specializes in helping healthcare facilities organize their master patient index. In her business, Just uses best practices or "standards of practice" to help her clients. She says ONC has been working on patient identity and patient matching standards that are written from the standpoint of a best practice. ONC promulgates standards that might be put in meaningful use criteria; for example, telling eligible providers they need to capture certain data points such as a patient's mother's maiden name, Just says. And when she works with a client, she gives them a report with suggestions for standardizing their patient matching process. There are HL7 technical standards that govern patient matching. "The problem with the technical standards is that they don't get followed consistently," Just says.

She adds that even when organizations follow HL7 standards there's no consensus around which versions to follow. "Even if they're on the same version of HL7, they still might be doing some custom things, and so they're not following the standard as it's intended to be used. They might be using different versions or customizing features."

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