

the documentation, communication, and sharing of this information between and among the various inter- and intra-facility systems would be a largely manual process and highly prone to error.

The Risk

Due to the sheer scale of applying this mandate to every Medicare outpatient advanced imaging study performed, this poses a significant risk to cash flows and back-office workflows of all facilities and radiologists performing advanced imaging throughout the United States.

The Solution

The imaging industry and its support systems must automate the sharing of this information between and among the various systems involved, and do so by Jan. 1, 2017. However, expecting every facility and group practice to solve this individually is not feasible as there are too many systems, and too many combinations of systems. Instead, we need a collective solution, a standard, governing the recording and communication of this information between and among the various systems used along the information chain so each facility and each system does not have to create solutions independently. The question then becomes: Who has the skills, the standing in industry, and the expertise to write such a standard?

Integrating the Healthcare Enterprise

Shortly after PAMA was enacted, RBMA and other industry leaders (the group) who had been involved with advocating for CDS' adoption, held several conference calls to discuss PAMA's passage and to turn their collective attention to its implementation. The group quickly understood the challenge before the industry and began searching for a solution. During one of these calls, Integrating the Healthcare Enterprise (IHE) was mentioned as an organization that has the requisite experience and expertise necessary to develop a standard for the sharing of CDS information between and among disparate systems.

For those are unfamiliar with IHE, IHE is an international organization comprised of over 700 member organizations, healthcare professionals, and industry experts. It is organized by clinical and operational domains (e.g., radiology, cardiology, IT infrastructure, patient care coordination, quality and research, etc.), with each domain being comprised of users with unique skills and experience relevant to that domain. This brings the requisite experience and expertise required to develop consensus, standards-based solutions to the issue at hand.

Several group members met with IHE Radiology representatives to discuss IHE's potential involvement in developing an IHE Profile (IHE refers to standards as profiles) which would make it much easier for disparate systems to quickly develop and implement collaborative solutions facilitating the sharing of the CDS information between and among the various information platforms. RBMA members Michael Bohl and Alicia Vasquez joined IHE and became members of IHE's Radiology Planning Committee.

In August 2014, Bohl, Vasquez, and Chris Lindop (IHE), with support from several others, authored and submitted a CDS Profile Proposal to IHE Radiology Planning Committee formally asking IHE to develop a profile for the capture, sharing, and propagation of the required CDS information between and among the various systems in use today. In October 2014, three of the nine profile proposals were submitted to the IHE's Radiology Planning Committee for development in 2015, one of which was the CDS profile. Now the work began.

Recruiting Vendor Support

Development of a standard is a complex process and requires input from various people and systems along the information chain, with significant input from software engineers familiar with these systems. It was important to recruit representatives from the various systems involved in the process (e.g., CDS systems, referring physician EMR systems, hospital information systems, transcription systems, imaging center and radiology billing systems). To that end, RBMA and others scheduled several meetings with various vendors and system representatives during the RSNA Annual Meeting in November 2014, during which time they explained the issue, why vendors and system representatives should be involved, and how they could help. Interestingly, and almost without exception, most system representatives, when initially approached, were unaware of the CDS mandate and certainly did not appreciate the risk it poses to their clients. However, once the mandate and the risks were explained, the vast majority understood the issue and were interested in learning more.

After several meetings and teleconferences, including some critical support from several of the system representatives recruited during RSNA, IHE published the initial version of the CDS Profile for public comment in mid-February 2015. The IHE Radiology Technical Committee will reconvene to review the public comments before republishing the profile for Trial Implementation in May 2015.

CMS

One of the more unique conundrums facing IHE during the profile development phase was that CMS had not identified the format or makeup of the information ordering physicians have to provide the facilities performing the exams or where the performing facilities or radiologists are to place it on the claim. However, this was anticipated and did not pose an insurmountable challenge. RBMA and other concerned stakeholders are working with CMS to educate the agency on the need for CDS information interoperability and learn how CMS plans to move forward with CDS implementation.

What Can You Do?

1. Think about the scale and complexity of getting the CDS information required by CMS from the CDS system to and through your facility onto your claim for every Medicare outpatient CT, MRI, nuclear medicine, and PET study you perform and/or interpret. How will your facility obtain it from the ordering physician? Where will they store it? Will they be able to provide it to you? In what format will you receive it? Will it be correct? Is your system ready to accept it? Will this be a manual or an automated process? Odds are that your facilities, and their system vendors, have not given this much, if any, thought.

2. Start discussing CDS and its impact with your facilities and vendors, asking them how they plan to capture and transmit this data to you. Jan. 1, 2017, is not far off in terms of software development, testing, upgrades, and implementation. Our facilities and vendors need to begin planning for CDS soon.
3. Inform your vendors that IHE is developing a CDS Profile and ask them to implement it. Make, and keep, it a front burner issue with them.
4. Have conversations with your key referrers to ensure they are aware of the mandate and IHE's Profile—it will help them as much as us. They should also begin working to inform their vendors about IHE's CDS Profile and begin having conversations with them about implementing it.
5. Encourage your support systems to become active IHE members. 



MICHAEL BOHL

is the executive director of Radiology Group, PC, SC with over 15 years of executive-level experience managing radiology practices, imaging centers, and radiology billing companies. *Michael can be reached at Radiology Group, PC, SC, 1970 E. 53rd St., Davenport, IA 52807; (563) 344-5488; or mbohl@rgimaging.com.*