

5 important questions about the XR-29 standard

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In just over two months, the XR-29-2013 CT standard, also known as Smart Dose CT, becomes a reality. Does your equipment comply?

With the big change looming right around the corner, it's time to summarize what is known—and what remains unknown—about XR 29.



1. Refresh my memory. What is XR-29?

XR-29-2013 (Standard Attributes on CT Equipment Related to Dose Optimization and Management) was created in 2013 by the Medical Imaging and Technology Alliance (MITA), a division of the National Electrical Manufacturers Association (NEMA).

The standard consists of four primary components:

- DICOM Radiation Dose Structured Reports (DICOM RDSR) capture pre- and post-exam information in a standardized electronic format. A report must be included with each scan.
- Pre-loaded reference protocols must be included for both pediatric and adult patients. Protocols formatted as defined in NEMA's [XR-28-2013](#) standard are acceptable.
- Dose check technology alerts the user when a scan is estimated to be above dose limitations built into the system. These alerts can be overturned.
- Automatic exposure control adapts according to the part of the body being scanned.

2. 2016 is almost here! Is the industry going to be compliant in time?

Sheila Sferrella, Regent Health Resources senior vice president and a former president of AHRA, spoke with RadiologyBusiness.com over the phone about the standard and how the industry appears to be handling compliance

Sferrella has given numerous talks and presentations about XR-29, including one at the [AHRA 2015 Virtual Fall Conference](#). She explained that no conclusive numbers about overall industry-wide compliance are available, not even from MITA.

"The vendors will not say exactly how many CT machines are non-compliant, nor will they say how many are not able to be upgraded to be compliant," Sferrella said. "We've never been able to get that number from anybody."

However, Sferrella did survey the AHRA's 5,000 members in August of this year and received a response rate of 29 percent. The numbers showed that 56 percent of members were non-compliant at the time of the survey. In addition, 36 percent of members will still be non-compliant at the beginning of 2016.

3. What are the penalties for using noncompliant CT equipment, and how will CMS enforce them?

Beginning on Jan. 1, 2016, there will be a 5 percent reduction in Medicare Part B payments for CT scans performed on noncompliant equipment. The following year, that payment reduction jumps to 15 percent.

Sferrella anticipates a lot of questions and confusion surrounding these reductions and how they'll be enforced, especially when it comes to larger hospitals with more than one CT scanner.

CMS has suggested that healthcare providers label non-compliant scans with a modifier when information is being sent to billing, but Sferrella believes this may be easier said than done.

"If you have one compliant scanner and one non-compliant, it is an operational nightmare," Sferrella said. "The technologist who performs the study does not have access to the patient's insurance information to know whether that patient is a Medicare patient or not. In fact, it is not uncommon that the radiology staff do not know the patient's insurance since this information is typically collected at registration in a hospital system and is not in the radiology information system."

Sferrella said it adds to the potential confusion that this standard applies to just a certain segment of patients—those on Medicare—instead of the entire population.

"A radiology administrator would find it very difficult and time consuming to determine whether a Medicare patient's exam was performed on a compliant or a non-compliant scanner," Sferrella said. "Currently, there is no way to accurately capture the specific equipment utilized for the exam in the RIS and communicate to the billing system to appropriately apply a new modifier."

This will be less of a challenge, however, for most imaging centers where there is usually just one CT scanner. "[I]t's either compliant or non-compliant, so if it's non-compliant, every CT bill gets the modifier," Sferrella said. "No problem!"

Sferrella added that enforcing the standard could prove to be no easy task.

"How organizations will comply with external audit requests is unclear at this point," Sferrella said. "It is clear that it will be extremely onerous. Someone will have to manually pull the information of every patient CMS wants audited and go through the PACS system to determine which scanner the patient study was performed on to validate compliance."

4. What are a provider's options if equipment does not comply?

Sferrella explained that the standard leaves all CT scanners in one of three categories: those that can't be updated, those that can be updated, and those that were recently purchased and already comply. If you have any questions about whether or not your scanner is compliant, reach out to your manufacturer immediately.

All scanners delivered since July 1 of this year were required to be compliant, and while manufacturers have been directed to provide clients with certificates of compliance, it is ultimately the provider's responsibility to have that certificate.

If your equipment is all compliant, you're set. Congratulations! If it is not, you are faced with a rather big decision: upgrade or replace?

Sferrella has researched the costs of both upgrading an existing scanner and replacing it altogether. To upgrade, she found it could cost anywhere from \$20,000 to \$200,000. And while the former is obviously much easier to digest than the latter, even \$20,000 requires serious capital.

"Most of the hospitals in the country are 250 beds or less, so \$20,000 to these hospitals is a lot of money," Sferrella said. "I've been lucky working with really large systems that had an emergency fund set aside for capital, so for \$20,000, I could get that. But I've also worked at a 200-bed hospital that didn't have \$40,000 to repair a roof."

To replace a noncompliant scanner, on the other hand, Sferrella estimates that providers are looking spending approximately \$500,000.

And during her research into XR-29, Sferrella ran some numbers and determined that it would take up to three years for a 250-bed hospital to break even after purchasing a brand new scanner as opposed to doing nothing and taking the 5 percent reductions in 2016 and the 15 percent reductions going forward.

Taking the costs into account, Sferrella thinks there will be a lot of providers that just take the reductions from CMS and do nothing.

"I've heard people say, 'Look, if it's a Medicare patient, it can only be scheduled on this machine, it may be three months until we can schedule it.'" Sferrella said. "I've heard other people say, 'I'll just take the risk.'"

5. Is there any chance the date gets changed to give providers more time?

Yes, there is a chance providers receive a delay, but nothing has been made official either way at this time.

The AHRA has worked closely with the American College of Radiology, Radiology Business Management Association, American Association of Physicists in Medicine, and Healthcare Financial Management Association to push for a one-year delay before XR-29 compliance begins being enforced.

In the AHRA's official response to the 2016 Medicare Physician Fee Schedule proposed rule, the organization [made its case](#) for delaying a full year.

One of the biggest reasons why a delay makes sense, Sferrella said, is that the capital cycle at most hospitals is around 18 months. It takes time to make upgrades and purchase completely new scanners.

"It's not like you order something out of a catalog from Amazon and it gets delivered by UPS next week," Sferrella said. "By delaying a year, we anticipate that more people would be able to comply, and it gives more time for people to work out the operational issues."

Final word on whether CMS allows any sort of delay is expected in November. But whether there is a delay or not, providers who plan on complying to this standard appear to have a lot to consider.

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