No More Compact Discs (CDs)?

I never thought much about transporting films on a CD until one recently got lost in the mail. There’s got to be a better way.

A recent article in Radiology Today explored the pros and cons of using CDs for medical images. CDs have been the standard since replacing film in the 1990s, but now the technology is virtually becoming extinct, except in radiology departments. Most new computers don’t even offer a CD drive. The ACR Informatics Commission along with the ACR Data Science Institute and RSNA have formed a task force to #DitchTheDisk. This hashtag was the title of an article written in the March 2019 issue of the Journal of the American College of Radiology by Geraldine McGinty, MD, MBA, FACR, chair of the ACR board of chancellors. The goal of the task force is to find a secure, cloud-based file sharing system that would allow images to be shared. The task force was first formed as the result of the 21st Century Cures Act signed in December of 2016 which required a draft agreement that defined standards for interoperability of patient data.

While a large file share network would seemingly eliminate the need for CDs, others worry about security, HIPAA privacy concerns, and the cost of implementing yet another IT system. Another drawback is that many companies want to be “THE” IT solution and develop proprietary software, thus forcing others to purchase their products in order to view the files.

Recently, two organizations announced a partnership to increase healthcare intraoperability nationwide; CommonWell Health Alliance and Carequality. Essentially, they will work together to enable healthcare data exchange on behalf of member clients. Philips, Ambra Health and Life Image have all agreed to join this program. Novarad is also working on a different solution called CryptoChart that provides patients and healthcare providers a time-sensitive code to access data from cloud-based storage.

While there is work being done toward secure cloud-based solutions, don’t get rid of your CD burners yet.
Need help reducing sedation use for pediatric patients? Ask the Avengers.

10:15 AM on October 31, 2019 by Liam Frieswick and Matt Morrill. The Advisory Board is the owner and publisher of this article.

Managing pediatric imaging patients can be difficult due to sedation requirements, but one health system thinks it's found a way to ease patients’ worries while improving throughput and reducing costs. MRIs require patients to lay still for 30 to 60 minutes, enduring the loud noises of the machine, which can be challenging for children. Programs often resort to sedation to complete the scan. However, sedation creates operational problems and can also expose patients to anesthesia risks. Patients getting sedation both take longer and cost more than non-sedated patients.

A caped solution: WCINYP's 'MRI-am-a-Hero' program

To reduce sedation rates, programs have implemented costly solutions, such as rehearsals using mock MRI machines. Weill Cornell Imaging at New York Presbyterian (WCINYP) set out to find a more cost-effective, generalizable strategy and formed a partnership with Siemens Healthineers and Marvel Custom Solutions. With the help of a child life specialist, they created the "MRI-am-a-Hero" program, which uses educational material, comic books, and a superhero cape to educate patients ahead of an MRI. The program includes a custom comic book about when Captain America injured his shoulder during a clash with some villains. After receiving guidance from Iron Man, Cap decides to get an MRI. The program also offers an educational DVD about a girl explaining her MRI experience for further education. Traditional gowns are subbed out for a pair of shorts and a superhero t-shirt, and patients are offered a plush toy of either Captain America or Iron Man to take into the MRI with them. Upon completing the scan, they are given a superhero cape along with their toy and comic book to take home. Researchers found that the MRI-am-a-Hero program decreased sedation rates from 22.9% to 17.3%. When controlling for variables like patient age, neurological MRI, number of examinations in case, and use of intravenous contrast, sedation rates decreased by 40%. Critical to this program’s success was the availability of the child life specialist, who provided support before and throughout the MRI appointment. WCINYP believes this program is a cost-effective way to educate and engage patients while reducing sedation rates.

Limit sedation through protocol adherence with real-time management:

While WCINYP offers a creative opportunity to reduce the need for sedation, there are still situations when sedation is necessary. Often when a patient is sedated, radiologists need to review the exam while the patient is still on the table. This allows radiologists to add sequences in the moment, at times unnecessarily, pushing the scan to exceed slot time.

At Children’s Mercy Hospital, however, radiologists are required to submit sequence addition requests via PACs. Those are immediately reviewed by the technologist, patient flow technologist, and anesthesiologist. Factors considered include clinical need, urgency, current capacity, upcoming schedule, sequence length, patient preferences, and acuity of patient. The radiologist still makes the ultimate decision but this structured management prevents protocol creep. Protocols are reviewed annually, and radiologists can offer input during this process to ensure sequences can be added when needed. Through this process, Children’s Mercy now completes 70% of exams within standard scan time.

Benefits of reduced sedation

When looking to reduce and limit sedation for pediatric patients, your organization may benefit from the following best practices:

1. Involve pediatric specialists and educational material that resonates with children to ease anxiety.
2. Use multidisciplinary approach to ensure comprehensive and timely sequence decisions.

Regardless of your strategy, a deepened focus on sedation use can reduce costs, improve throughput, and reduce unnecessary anesthesia risks.

Interested in learning more about MBMS? Please contact Matt at mostrum@mbms.net