Fujifilm SonoSite brings new workflow solution to point of care ultrasound

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With imaging technologies such as MR and CT, equipment manufacturers have, from the beginning, offered PACS or RIS workflow solutions in tandem with their scanners. These software solutions make it possible for clinics, hospitals, and health systems to store and share medical images and facilitate appropriate documentation and billing for work performed. A similar solution has not been available for ultrasound systems used at the point of care, a portable technology that is increasingly being used in place of MR and CT, costlier and more invasive modalities. As point-of-care applications continue to expand and clinicians turn to them more often, hospitals and health systems need a way to manage the workflow, documentation, and credentialing functions associated with their use.

As the pioneer of ultrasound systems designed and optimized for use at the point of care, Fujifilm SonoSite has responded to this need by developing the Synchronicity workflow manager for use with any point-of-care ultrasound system. Working primarily with customers in emergency departments, anesthesia units, and critical care, Fujifilm SonoSite learned that the most urgent priorities for these diverse user groups were to reduce administrative burden, improve documentation and revenue capture, and enable automatic quality assurance and credentialing. The resulting solution, Synchronicity, addresses these top priorities as well as enhanced workflow within and between hospital units.

Reducing administrative burden

The flexibility of point-of-care ultrasound is perhaps its best asset. It doesn’t face the same scheduling hurdles associated with MR or CT, it is portable, and it can be used to image parts of the body that would be difficult to image with another technology.

In this way, ultrasound machines designed for the point-of-care have made the patient side of the process (diagnosis/treatment) more efficient, but not kept up with the need to have better integration with electronic health records and computer/reporting systems and programs.

Synchronicity software addresses this need: it standardizes and streamlines exam orders and reporting; it has a DICOM viewer for accessing images immediately or calling up older images (e.g., to compare patient progress); and it creates consistency across the clinic or hospital by standardizing reports and the content needed for each patient.

What does this efficiency look like in practice? First, the software pre-loads worksheets on the ultrasound system itself, so that a physician can come up to the system and select the study he or she wants to perform. From there a bar code on the ultrasound quickly scans the patient’s ID bracelet (and the physician’s too, if applicable). That bar code is then tied directly into billing and used to code and transfer images to the associated PACS system.
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One of the advantages of this system over the current ad hoc approach is to minimize the frustration and time spent on paperwork — one of the top contributors to physician and staff burnout, a major problem for most healthcare systems. And while this advantage is likely to manifest in the “softer” area of staff morale and enhanced physician wellness, it has a direct impact on the bottom line as well.

Improving revenue capture

Currently, a large percentage of ultrasound studies in emergency departments is not billed, leaving a significant amount of important revenue on the table. This problem of uncaptured revenue is particularly prevalent in point-of-care medicine.

In the emergency department, clinicians typically do not know who their next patient will be or what they will present with. Unknowns like these — often compounded by the accelerated speed of environments like the emergency department or critical care — lead to well-known losses of revenue for the hospital. Synchronicity’s seamless documentation and billing functions can make a significant contribution in the area of revenue capture.

Compliance, credentialing, and quality improvement

Hospitals and health systems have requested a system like Synchronicity for another reason besides greater efficiency and the delivery of cost effective care: they need it for compliance, credentialing, and the overall consistency of technological use that is related to quality and patient safety.

Synchronicity establishes a way for hospitals to collect data for point-of-care ultrasound credentialing, something that is present for more traditional modalities, but which is absent in this area. Standards can be communicated to physicians and data captured by Synchronicity can be used to evaluate how they’re doing, drawing on a peer-to-peer network that allows critiques of images and evaluations. The system also automatically produces clear documentation of exams by type of study as well as by physician. This capability means the hospital or unit could archive the images for use by the hospital’s quality monitoring system.

Implications for value and population health

Synchronicity was designed by Fujifilm SonoSite to work with its own equipment, but the software also easily integrates with any point-of-care ultrasound system that has DICOM images, including hospitals with competitor systems or in a mixed ultrasound environment. With the image storage, accessibility, and documentation taken care of with Synchronicity, hospitals and health systems can achieve even more value by expanding their use of ultrasound at the point-of-care.