

A “Meaningful” Way to Mature the EHR

By Dave Dyell



There are a lot of reasons to pay attention to medical device integration (MDI). Here’s a major one: MDI is directly connected to returns on your EMR investment. Basically, the more “meaningful” the use of the hospital’s EMR, the better positioned that hospital is to receive federal stimulus dollars.

So what does MDI have to do with “meaningful use?” A lot. MDI unifies all of the digital information generated by individual devices in a hospital, automating the flow of this data directly into a patient’s electronic medical record. The result? A more robust and relevant EMR.

For this reason, hospital boards committed to meeting the federal government’s “meaningful use” requirements are paying attention to MDI. They’re paying attention for other reasons, too. Just as MDI is intimately tied to maturing the EMR, it is also tied to improvements in productivity, safety, and access to data throughout the hospital and beyond.

Picture this: a nurse scribbles a patient’s vital signs onto a scrap of paper before hustling to the next bed. The scrap of paper goes into the nurse’s pocket. Next patient, same thing. Next patient, the vital signs are scribed onto the edge of an antiseptic wipe packet. Into the pocket *it* goes. By midday, this steadfast nurse has a pocketful of miscellaneous materials covered in data that has yet to make it to the EMR.

To assess the efficiency of this process, Texas-based Wise Regional Health System (WRHS) hired a third-party consulting firm to document the amount of time their nurses spent charting patient data. The findings? Nurses were spending a staggering 25 percent of their time charting.

This scenario changes a great deal with MDI. Workflow efficiencies are dramatically improved because patient data, such as vital signs, is automatically delivered to the EMR directly from the device. Not only do nurses avoid having to

collect data at multiple intervals throughout the day, they are spared the time-consuming task of entering that data into the EMR.

After implementing an MDI solution, WRHS experienced impressive results. Time spent charting dropped to 15 percent. This equates to one hour of “found time” per nurse per shift. As a result, nurses at WRHS report that they are spending up to five percent more time delivering direct patient care.

While MDI gets nurses back to the bedside, it also reduces errors. Manually transcribing data is inherently problematic. According to a Welch Allyn presentation delivered in January of 2009, 10 to 15 percent of all transcribed test results are errant. Problems like indecipherable handwriting, data entered in the wrong chart, and lost notes are all too common. Device connectivity reduces these risks greatly through seamless data transfers.

Device integration also results in more immediate access to patient information. At the aforementioned WRHS, it used to take 12 hours for device-generated patient data to make its way into the EMR. After implementing an MDI solution, that time was reduced to two hours. This enables doctors and caregivers to make decisions – from diagnoses to prescriptions – based on comprehensive, up-to-date EMRs.

These clinical benefits make MDI an attractive offering for many hospital boards. But even after a board commits to integration efforts, there’s still a lot to learn. Naturally, some hospitals are more successful than others when it comes to an MDI implementation. Among the success stories, one general but sizeable theme emerges: get the right people onboard and invested in the project from the beginning. †

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