Welch Allyn®

Connex® Vitals Management Software Helps Meadville Medical Center Improve Patient Safety

Overview

Customer
Meadville Medical Center

Location
Meadville, PA

EMR Partner
MEDITECH

Workflow
Wireless Welch Allyn
Spot Vital Signs LXi

Customer Profile
Meadville Medical Center is a 277-bed community hospital in northwestern Pennsylvania.

Meadville Medical Center allows physicians to view vital signs data four to eight hours sooner in their MEDITECH MAGIC electronic medical record (EMR) system using Welch Allyn Connex software. Clinicians use Welch Allyn Spot Vital Signs® LXi devices to capture patient vital signs and then wirelessly send the data to the EMR, giving hospital staff on-demand access to accurate and timely patient assessments.

The Challenge

Before the introduction of Connex Vitals Management Software to Meadville Medical Center, clinicians were taking vital signs every four hours and handwriting the results on clipboards. Then a secretary would transcribe the 250 to 450 sets of data each day into the MEDITECH MAGIC health care information system, which took four to eight hours or sometimes even longer after the readings—introducing the risk of transcription and data latency errors.

"It was a potential patient safety issue. Physicians were basing clinical decisions such as blood pressure medications, what labs to order and things like that on outdated vital signs," said Kimberlie Bovard, BSN, RN, Nursing Informatics Specialist. "Nurses were administering medications without access to the most recent patient vitals. There was a potential for medications not being given appropriately, or inappropriate medications being ordered based on inaccurate vital signs," she added. And both doctors and nurses were wasting time running around looking for the clipboards.

The Solution

After reviewing the competitive options, the Meadville team selected Welch Allyn Connex vitals management software for its ability to provide an efficient link between their existing Spot Vital Signs LXi devices and the MEDITECH MAGIC health care information system. With the new workflow—one of six available with Connex—nurses use the optional barcode reader on the Spot Vital Signs LXi to scan their ID, then they scan the patient's ID bracelet, take the vital signs automatically, enter pain, weight or respiration rate as needed, then press "send." Minutes later, the vitals signs data become available in the MEDITECH patient record, easily accessible to all clinicians. The system is being used in Meadville's three med-surg units, as well as the Pediatrics, Transitional Care, Rehab, Inpatient Mental Health, and Drug & Alcohol Recovery departments.

Once the system was installed, training took less than a week. "The installation support team from Welch Allyn was wonderful to work with," reports Bovard. "They were very accommodating and they gave excellent training sessions. I knew everyone got the same information and had a competency checklist. So now on those rare occasions when someone on staff tells me, 'They didn't teach me that,' I say, 'Do you want me to get the checklist?'" she laughs.

"Having the vital signs go directly into the patient record so they're readily accessible and there is really no chance of a transcription error is an enormous benefit."

The Benefits

Automated vital signs documentation with Spot Vital Signs LXi and Connex software has dramatically streamlined the process and resulted in better patient care. "Now the nurses aren't running around looking for clipboards—that was significant," says Bovard. "The latest set of vital signs is always right there in front of them whenever they're looking at their patient information in the EMR."

The Connex system also saves time at the point of care, since the nurses no longer have to manually transcribe vital signs readings onto a clipboard. The time savings add up to at least 30 minutes per nurse per shift for up to 20 nurses every day, Bovard estimates. That's more time nurses can spend with their patients.

The new workflow is also helping Meadville's doctors save time and provide better patient care, since now they can quickly find up-to-date data for each patient and make more informed decisions. Having all the data for each patient in one place also makes it easier to spot trends and see how blood pressure and other vitals have changed over time.

For Bovard, one benefit stands above all others: "Patient safety. Absolutely. Having the vital signs go directly into the patient record so they're readily accessible and there is really no chance of a transcription error is an enormous benefit," she said. "Overall, it's been easy, and the nurses love it."