

Halifax Regional Medical Center Integrates Welch Allyn® and Nihon Kohden Monitors with its EHR



OBJECTIVE: Positive patient outcomes and a high level of patient satisfaction are top priorities at Halifax Regional Medical Center. Knowing that medical device integration would help accomplish both, the hospital's Nursing division requested that its Welch Allyn® and Nihon Kohden patient monitors be interfaced with Halifax Regional's MEDITECH EHR.

SITUATION: Prior to the implementation, the collection and documentation of vital signs had been a manual process, where results were written down first on paper and then keyed into the computer at a later time. This meant a high chance of transcription errors, potential delays in treatment, and less time spent with patients.

SOLUTION: Halifax Regional chose Iatric Systems Accelero Connect® solution to pass vital signs from both vendors' monitors directly into its EHR. "We learned that Welch Allyn and Nihon Kohden both had excellent working relationships with Iatric Systems, and our hospital already had positive experiences with other Iatric Systems solutions. So, we knew it was the right choice," explains Robert Gordon, Director of Information Systems at Halifax Regional Medical Center.

RESULTS: "The new process has decreased the time spent documenting vital signs and virtually eliminated the possibility of error," reports Sheryl Watson, RN, Halifax Regional's Clinical Informatics Supervisor. Real-time availability of vitals in the EHR also enables physicians to assess patients and prescribe appropriate treatments immediately to improve patient outcomes. Finally, clinicians are able to spend more time with patients, increasing patient satisfaction.

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– Sheryl Watson, RN
Clinical Informatics Supervisor
Halifax Regional Medical Center

Halifax Regional Medical Center is a 204 licensed bed, acute care hospital serving residents in six counties of North Carolina and southern Virginia. When the organization purchased new patient monitoring equipment, it decided to integrate the devices with its EHR using Iatric Systems Accelero Connect to help improve patient outcomes and increase patient satisfaction.

Clinical Informatics, Nursing, Information Systems, and Biomedical Engineering collaborated closely to choose the monitoring equipment, test the integration, and ensure that clinical workflow processes would take full advantage of the new technology. "Our organization is constantly striving to improve patient outcomes and patient satisfaction, while providing state-of-the-art equipment and implementing clinical procedures to achieve these goals," explains Sheryl.

Improving Patient Outcomes

Timely, accurate patient data is a must for positive patient outcomes. Integrating patient monitors with the EHR ensures accurate data because it removes the manual process of keying data into the computer. Sheryl reports, "The single greatest benefit of Accelero Connect has been the elimination of documentation errors."

And now, vital signs are available to physicians and other care providers in real-time, which means they can assess patients and prescribe treatments without delay. "Whether the physicians come around at 7:00 in the morning or at 12:00 in the afternoon, we want them to be able to pull up the most current vitals. With Accelero Connect, that's possible now." Sheryl adds, "We've created templates for the physicians to use that pull in the current data, so they have the right information to assess their patients and support their decisions."

Increasing Patient Satisfaction

Clinicians' workflow processes have improved dramatically. Nurses and nursing assistants verify monitor results right at the bedside on the Welch Allyn devices. "All they need to do is press the 'Get Monitor Data' button to pull vitals into a patient's assessment in the EHR," says Sheryl. "They love it. It's so much easier, and they feel a certain sense of security when using the new process because it's proven to be efficient."

End-users report being able to spend more time with patients as a result. "They get to talk with the patients more instead of looking at the computer screen." Sheryl concludes, "Evidence suggests that spending more time with patients is the very thing that improves patient satisfaction."

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– Robert Gordon, Director
Information Systems
Halifax Regional Medical Center



Halifax Regional Accelero Connect Implementation Team

Back Row: Belinda Bradley, Clinical Analyst; Robert Gordon, Director of Information Systems; Sheryl Watson, RN-Clinical Informatics Supervisor; Roger St. Louis, RN; Thomas Johnson, Biomed Engineer; Christopher Chang, Network Administrator; Daniel Bennett, Network Administrator

Front Row: Gwen Davis, BSN RN, Manager, Clinical Informatics; Donna McKibbin, Clinical Interface Analyst; Tawanna Mitchell, NAI; Kaylin White, NA; Jennifer Limer, RN, Clinical Informatics; Shalettha S Johnson, BSN RN, Clinical Informatics

Advice for Other Hospitals

It's important to make sure the integration piece is added to your capital request when budgeting for new monitoring equipment. Robert Gordon explains, "The funding for the integration was built in when we purchased the monitors. I'd say most definitely, factor in the integration because it greatly increases the usability of the monitors. It makes the nurse's job much easier."

Today at Halifax Regional Medical Center, vital sign EHR connectivity is nearly house-wide. Vital signs from Nihon Kohden and Welch Allyn monitors in the ICU pass into Halifax Regional's EHR via Accelero Connect. Welch Allyn devices and Accelero Connect integration are also used on all of Halifax Regional's inpatient units — the Birth Center, the Joint Care Center, psychiatric, post-cardiac care, and med surg units — and in the PACU, ambulatory care, and outpatient medical areas. The hospital plans to complete house-wide connectivity by the end of 2015, when it sends vital signs to its EHR via Accelero Connect from Welch Allyn and Nihon Kohden monitors in the Emergency Care Center.