Interoperability helps to enhance perinatal workflow at Mountain States Health Alliance

Mountain States Health Alliance, Johnson City, TN
Formed in 1998, Mountain States Health Alliance is the region’s largest healthcare system with 14 hospitals serving parts of Tennessee, Virginia, Kentucky and North Carolina. Mountain States’ integrated healthcare delivery system includes primary/preventive care centers and numerous outpatient care sites. Five of their hospitals feature Family Birth Centers that use Centricity™ Perinatal.

The challenges of managing perinatal workflow
Complexities that exist in labor and delivery units can make managing perinatal workflow especially challenging. A specialty perinatal information system not only needs to address these complexities, but also needs to work smoothly with other systems across the enterprise and address Meaningful Use requirements.

Centricity Perinatal’s interoperability helps manage information easily
Mountain States relies on GE Healthcare’s Centricity Perinatal to help manage perinatal workflow via a wide-area network across five sites. Thanks to its interoperability with other systems, Centricity Perinatal can also help provide a virtually seamless user experience across systems.
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— Katie Rice, Centricity Perinatal Administrator at Mountain States Health Alliance

SPECIALTY-SPECIFIC DOCUMENTATION
Katie Rice, Mountain States’ Centricity Perinatal Administrator since 2006, sees the advantages. “Centricity Perinatal offers mature, robust, specialty-specific documentation. It provides fetal monitoring data links with near-to-real-time documentation. If you monitor the fetal strip in one system and document data in another, you run the risk of documenting times that don’t correlate,” said Rice.

Prior to 2006, Rice was an OB staff nurse who experienced the benefits of Centricity Perinatal firsthand as a day-to-day user. Rice said, “Obstetrics is a complex specialty area and has distinctive needs and requirements for clinical documentation. We felt some tasks such as order entry and medication administration were inherent to our hospital information system which is Siemens Soarian.® However, we felt a majority of obstetrical nursing documentation, such as documentation of vital signs, nursing assessments, patient care activities and fetal monitoring strips, were best suited to Centricity Perinatal.”

INTEROPERABILITY HELPS TO EXPAND THE REACH
Interoperability is a key to success at Mountain States. Since Centricity Perinatal interfaces with multiple devices and systems, including many major enterprise EMRs, it offers specialized benefits for L&D patients and works smoothly with other systems. “We get the best of both worlds with interoperability, such as one-time data entry,” said Rice. “Using Centricity Perinatal along with the interfaces and integration tools really helps to enhance patient care and improve access at the point of care.”

Centricity Perinatal’s interoperability allows Mountain States to tap into all of the benefits that a specialty system has to offer. “Of critical importance, the fetal monitoring data is linked with near-to-real-time clinical documentation. Documentation occurs directly on the fetal monitoring strip, and, therefore, observations and interventions can be correlated with that fetal monitoring strip activity. In addition, Centricity Perinatal captures data from physiological monitors such as vital signs and links it to the fetal monitoring strip without the need for transcription, which in turn can help reduce workflow inefficiencies and opportunities for error or omission thanks to the direct data capture,” said Rice.

Clinicians are able to document in one location and the data is automatically populated wherever it is relevant throughout the patient’s record. Rice said, “Our goals in using these tools is to help enhance patient care, provide access to the information that caregivers need at the point of care, reduce duplicate documentation, and facilitate a more seamless end-user workflow.”

STRIVING FOR A SEAMLESS USER EXPERIENCE
From start to finish, the systems work together to help provide as seamless a user experience as possible. Mountain States uses an Admission Discharge Transfer (ADT) interface from admissions which pulls admitting data, as well as height, weight and allergy information from their INVISION® & Soarian® systems into Centricity Perinatal.

And following admission, home medication reconciliation for the mother is completed in Mountain States’ hospital information system, Soarian.® A home medication list is then sent to Centricity Perinatal via interface. Following delivery, this medication list is also sent to the baby’s chart using the mother-baby link feature. “This helps pediatricians easily reference any medications the mother has taken that may impact the care of the newborn,” said Rice.

One of the workflow-enhancing features they use is a Computerized Physician Order Entry (CPOE) alert interface from Soarian® to Centricity Perinatal. Rice said, “As we transitioned to CPOE, we recognized the need to display a notification in Centricity Perinatal when a new order is entered via CPOE.”

Without an interface, nurses would need to log on to the HIS periodically solely to check for new orders. Rice explained, “This would be a workflow hindrance and could potentially result in a delayed response to new orders. So we built a CPOE notification within Centricity Perinatal to provide a visual cue that a new order has been entered in Soarian.®

Rice’s goal is to make Mountain States’ interfaces as seamless as possible for the end user. “All of our interfaces require very little of the end user. We get the added benefits without a lot of effort. It’s fairly seamless, and that’s what enables the completeness and accuracy of the documentation. If you have to enter the same information in more than one place, that’s where you introduce the opportunity for errors,” said Rice.

STREAMLINING MEANINGFUL USE
Centricity Perinatal also helps support Meaningful Use requirements. Rice said, “Our most recent interface implementation is a discrete outbound to Soarian® and pharmacy, which is primarily used for Meaningful Use purposes.” This includes smoking status, height, weight and family history on admission. On discharge, they also send patient-specific discharge instructions and discharge vital signs.

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OTHER TOOLS ENHANCE DATA AVAILABILITY
In addition to interfaces, Mountain States uses other tools to further enhance data availability between clinical systems, including a Computer Output to Laser Disk (COLD) feed to Siemens® EDM. This is a way to send a summary of data out of Centricity Perinatal that is more printer job-like than an outbound interface. COLD feed has a very readable format and can be viewed across the continuum of care or within medical records. “The cold feed was a huge workflow enhancement as it reduced the need for printing and scanning of Centricity Perinatal documents and also helped to provide a more complete record. We all know that when there are multiple steps, printing something to paper and then sending it to medical records and it getting scanned, sometimes one of those steps may be missed,” Rice said. “The COLD feed also has a validation process to help ensure that all of the documents that should be there are there.”

Rice said, “We also use URLs within Centricity Perinatal, often in conjunction with split-screen views. Split-screen views allow the user to view other systems and Centricity Perinatal on the same screen at the same time. Users can navigate to resources or to systems outside of Centricity Perinatal while keeping the selected fetal monitoring strips at the top of their screen. For example, a split-screen URL view allows the nurse to log onto Soarian® via a URL. The user can keep the fetal monitoring strips at the top of the screen, and at the bottom they can use the CPOE to navigate to Soarian® to see new orders.”

Rice also added, “We also use hyperlinks in Soarian® that link back to specific Centricity Perinatal documents, such as vital signs and I&O, in our EHR. Since our physicians primarily use Soarian® but all OB and newborn nursing documentation occurs in Centricity Perinatal, our physicians really wanted an easy way to view Centricity Perinatal documentation without toggling between the systems.”

USING CENTRICITY PERINATAL ON A WAN
More recently, Rice helped to bring the five sites into a wide-area network. “Before, each site had a standalone Centricity Perinatal system, and each site was documenting slightly differently. I was first tasked with standardizing the documentation, which was a challenge since our facilities vary in size and type. Now that we have moved to a WAN environment, you build something once in the system and we can use it at all five sites.”

“Integrating a specialty system like Centricity Perinatal can be a challenge, but it’s one that’s worth it. I really like how user-friendly Centricity Perinatal is. It helps facilitate point-of-care documentation and helps enhance our accuracy, completeness, and documentation compliance,” Rice said.

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