

At Southwestern Vermont Medical Center, Visual FlowSheet™ Lets Caregivers Spend More Time with Patients



- OBJECTIVE:** A comprehensive Electronic Medical Record (EMR) is critical in today's healthcare environment. Southwestern Vermont Medical Center (SVMC) recognized this need well in advance of today's curve. The organization's Clinical Application Support Team (CAST) set out to find and implement a solution that would help SVMC achieve three overarching goals: support clinical practice, tell the patient's story and streamline workflow.
- SITUATION:** SVMC's previous documentation and assessment systems could not meet the unique needs of numerous inpatient and outpatient areas. Caregiver satisfaction and compliance with documentation requirements were low. Clinical data was fragmented, forcing providers to hunt through numerous screens to collect the information necessary to accurately assess a patient's condition.
- SOLUTION:** CAST studied staff workflow and conducted a comprehensive evaluation of multiple systems. Their choice was Visual Flowsheet Suite™, which consists of two components at SVMC: Visual SmartBoard for Nursing (VSNB) and Visual FlowSheet (VFS). VSNB improved patient care management by showing staff on one screen an overview of all patients currently in their care. VFS enabled easy online documentation and assessment, even in fast-paced critical care areas like the ICU.
- RESULTS:** Clinicians have access to comprehensive EMR information that best fits the workflow of the caregiver using it. Unlike the previous system, providers can assess a patient's condition from a single screen using intuitive point-and-click technology, saving time and improving patient care. Clinical documentation is now part of the EMR, eliminating handwritten notes and duplication of effort. A time-motion study in the ICU confirmed the impact – using VFS, caregivers are able to spend more time with patients.

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Located in Bennington, VT, [Southwestern Vermont Medical Center](#) (SVMC) is a 99-bed community hospital offering a wide range of outpatient and inpatient services. The state's only Magnet Hospital for Nursing Excellence, SVMC is one of only two Vermont hospitals named as Mentors by the Institute for Healthcare Improvement. SVMC is also tops in patient satisfaction, garnering two Summit Awards from Press Ganey, a nationwide independent surveyor.

To take full advantage of its EMR, SVMC needed a faster and more flexible alternative to its system previously used for clinical assessment and documentation. Information was fragmented and hard to find, requiring clicking through multiple screens—a process that took too long, especially for high-pressure environments like the ICU or Labor & Delivery. Documentation depended on handwritten notes inserted into the chart which could only be seen by one person at a time—defeating the purpose of the EMR. The system also had other limitations: it was not intuitive, could not be customized and was missing many important alerts (pain reassessment, abnormal blood pressure or blood sugar, medication doses out of range, etc.).

SVMC's Clinical Application Support Team searched for a solution that would meet three intertwined goals: support clinical practice, tell the patient's story and streamline workflow. The team selected Visual FlowSheet (VFS), providing a powerful GUI front-end to SVMC's existing clinical documentation system to enable highly efficient assessment and documentation of patient care. The new system is used throughout SVMC's inpatient and outpatient areas, with capabilities that allow users to save time and make better clinical decisions:

- Rather than fragmented clinical information, complete information about a patient is no more than two clicks away
- Rather than scribbling handwritten notes, caregivers can enter clinical documentation into the EMR as a seamless part of their workflow
- Rather than being complex and hard to use, VFS provides a familiar Windows environment, with point and click simplicity that makes finding information easy

Fast, Comprehensive Assessment

"VFS is helping to transform care at the bedside," observes Gail Balch, RN, Director of Application Support at Southwestern Vermont Medical Center. "Rather than using the computer to hunt for information, physicians and nurses can use the computer to make clinical decisions immediately." VFS pulls together all relevant elements onto one intuitive screen to allow comprehensive chart review. Along with standard EMR information such as lab results, vital signs and medications, SVMC caregivers have instant access to the full range of clinical documentation—including nurses' notes, assessment notes, notes from Nutrition, Rehab and Social Services, and notes from office visits.

"The ability to pull information from all clinical applications onto one tab and trend the fluctuations is invaluable," Gail adds. Caregivers can see the improvement or decline of a patient's clinical status at a glance by scrolling to the right or left to track status and interventions over time and in different shifts. Information is presented as the clinician needs to see it, with views tailored to the workflows of specialty units and clinician types. Intuitive GUI components save time and make life easier for caregivers while presenting critical information from the EMR. For example, caregivers can hover over a value and see any associated notes. The system also includes a full range of alerts for abnormal values missing from the previous system.

VFS also provided a quick and easy method for displaying documented interventions during a Joint Commission visit. The Joint Commission surveyor complimented SVMC's clinical documentation and the overall care provided to patients after watching staff use VFS to relay the details of each patient's story.

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Documenting Directly into the Electronic Record

VFS enables efficient documentation at the point of care—unlike previously, where documentation could only be done after the fact (if at all). Clinicians can document and edit with minimal keystrokes, while interacting seamlessly with patients and the existing clinical documentation system. For example, when a user clicks to document a vital sign, VFS brings the caregiver into the exact routine in the documentation system where that information is recorded. The information then appears in the clinical documentation system, transparently to the user and available immediately to other caregivers.

“There’s no more duplicate entry now that nurses are able to document during patient care rather than at the end of their shift,” says Balch. “This is a major change for us, and a definite time saver.”

Along with VFS, the system includes an optional module, Visual SmartBoard for Nursing (VSBN) that summarizes key patient data on a single screen. Nurses can see the latest test results for their patients at a glance, as well as upcoming interventions and medication administrations. Just as importantly, VSBN lists any items that are overdue and/or need to be documented. Visual Flowsheet Suite also has eMAR and bedside medication verification options, or can work smoothly with a hospital’s existing eMAR and BMV applications.

The Results are in: Visual Flowsheet on the ICU

A time-motion study conducted on the ICU by a nurse researcher demonstrates that VFS enables ICU staff to spend more time with patients. Previously, the ICU’s tri-fold paper flowsheet was only available to the individual holding the hardcopy chart. Now ICU flowsheet information such as systems assessments, vital signs and patient notes is available online to any provider with the appropriate access, saving time for physicians and nurses while helping to improve patient safety.

Single Sign-on with Biometrics

SVMC also developed a single sign-on system using biometrics that launches authorized users directly into VFS or VSBN to save even more time. When a user places a finger on a touchpad, the system automatically launches a desktop screen that’s specific for them. If the user moves to another device, the screen they were previously on follows them to that next workstation. “Users count clicks,” Gail explained. “Visual SmartBoard and Visual Flowsheet helped streamline documentation and improve our nurses’ workflow. Adding single sign-on to the process saves users about twelve additional clicks getting into the system and encourages new users to adopt.”

Foundation for Quality Care

Along with enhancing daily care, VFS is playing a key role in clinical studies and similar initiatives at SVMC. One example is the Society of Hospital Medicine’s Better Outcomes for Older adults through Safe Transitions (BOOST) program aimed at improving patient care as they transition from hospital to home. SVMC is a BOOST implementation site focusing on ways to reduce readmission rates for Congestive Heart Failure (CHF) patients. To do so, the hospital must address all transition needs before the patient goes home (making appointments with caregivers, ensuring that medical equipment is in place, etc.). A “BOOST” tab will be built into VFS to bring together all relevant information from each clinical area so a physician can safely discharge that patient and ensure transition needs are met.

“VFS was a huge win for us,” Gail concluded. “One of the most important discussions in nursing today is how technology can best support clinical practice, tell the patient’s story and streamline workflow. These tools really help us achieve our goals.”