

Medsphere Systems Corporation

CareVue and Behavioral Health Care

Version 2.5



Medsphere[®]

The CareVue Platform: Integrated Support for Behavioral Health Care

Designed by clinicians from all healthcare disciplines, CareVue is guided by the principle of making it easier for healthcare professionals to provide better patient care.

As an integrated solution, CareVue includes applications critical to ensuring patient safety and promoting effective communication among behavioral health clinicians. CareVue directly benefits psychiatric care clients through an array of core competencies:

- A computerized provider order entry (CPOE) module and associated alerts
- A closed-loop medication management process for both inpatient and outpatient episodes of care
- Clinical alerts and reminders
- Robust charting templates and tools that facilitate best practices and complete documentation
- Order management and results reporting, providing faster turnaround times and increased point-of-care access to vital results, e.g., toxicology lab results and abnormal or critical values

CareVue also enhances third-party reimbursement by providing ready access to clinical information (individual encounter notes, progress and discharge notes, outcome measurements, case management information, etc.), comprehensive assessments, treatment plans, suicide incident reports and documentation of administrative activities.

CareVue is currently in use at specific facilities in the West Virginia Department of Health and Human Resources network and at Silver Hill Hospital, a nationally recognized private psychiatric hospital in New Canaan, Conn (see profiles below).

"The goal is to ensure that our patients receive the highest quality of care available through the latest technological advances. **CareVue gives us a proven and affordable solution** that will equip our staff with better information for medical decisions and improve efficiency of care."

- Sigurd Ackerman, MD, president and medical director at Silver Hill Hospital, speaking with *Healthcare IT News*

CareVue Features Supporting Behavioral Health

Improves the accuracy of client identification

- Provides a Patient Summary page with demographic and registration information, comprehensive clinical encounter information and a current client photo
- Enables clinicians to confirm client identification via bar coding technology through the use of the Bar Code Medication Administration (BCMA) Module
- Coordinates patient information among the care team through the Multi-disciplinary Treatment Plan (MDTP) module (see below)

Improves communication among caregivers

- Displays in the Patient Summary view a brief index of the client's clinical database, including psychological test and interview results, reviews of systems, medical history, crisis notes, clinical client messages, progress notes, medications and statuses (pending, active, discontinued)
- Gives all members of the care team the ability to evaluate a comprehensive patient care plan presented in a single interface through the MDTP module
- Enables rapid communication among system end users through the MailMan electronic messaging system

- Requires clinicians to 'sign' and verify orders entered electronically via the CareVue Orders tab
- Makes test results and values available to clinicians immediately following the completion and evaluation of tests
- Enables clinicians to give clients psychological tests and clinical interviews at workstations, saving considerable clinician time
- Allows clinicians to flag patient record to indicate that the patient may harm himself, other patients or hospital staff, i.e., fall risk, elopement risk, history of abuse or violence. Flag appears each time clinicians access the chart
- Provides clinicians with client reports from a variety of perspectives (clinical, health summary, health data, interdisciplinary, etc.)
- Gives clinicians the ability to create various documentation templates (nursing assessment, suicide risk, restraints, treatment plans) specific to the focus and workflow of a particular facility
- Supports collaborative treatment planning through use of co-signatures and additional signers; allows clinicians to link updates to original treatment plan through parent/child templates
- Enables clinicians to request consults electronically and include additional information and questions as part of standardized request
- Enables inclusion in the record of standardized Diagnostic and Statistical Manual of Mental Disorders (DSM-5) and International Classification of Diseases (ICD-9/10) diagnoses

Improves the safety of medication use

- Provides a CPOE module, requiring clinicians to enter, review, confirm and sign orders; and enabling all care providers to review active, current, unsigned and expired prescriptions
- Checks prescribed medications against existing prescriptions and known allergies to prevent adverse reactions
- Confirms the safe administration of prescriptions and the identity of the client through bar-coding technology provided by the BCMA module
- Facilitates a closed-loop medication management process by capturing inpatient, outpatient and home medications; requires pharmacist verification prior to dispensing; promotes the five rights of medication delivery using BCMA within a single database system
- Accurately and completely reconciles medications across the continuum of care
- Displays in the Medications tab all pending, active and discontinued medications prescribed for a client in the outpatient, inpatient and home environments
- Provides key medication information to any provider in the system who views client information

Encourages active involvement by clients in their own safety strategies

- Drives client compliance with treatment programs through the incorporation of educational materials in documentation templates
- Promotes confirmation of compliance through the incorporation of required fields and standards of care for educational documentation, including patient response criteria

Identifies safety risks inherent in the client population

- Uses customizable screening and assessment templates to identify clients at risk for suicide
- Incorporates alerts and flags in the patient record to rapidly bring suicide risk to the attention of providers
- Enables clinicians to include suicide risk in list of known problems and coordinate diagnoses using ICD-9/10 and DSM-5 diagnoses
- Captures and displays client safety risks as active alerts across encounters until risk status is resolved

The CareVue Multi-Disciplinary Treatment Plan

Demonstrating the strength of the public domain development model, Medsphere worked closely with clinicians from Silver Hill Hospital, a customer partner, to produce the first built-from-the-ground-up innovation of the CareVue EHR specifically for psychiatric hospitals. The CareVue Multi-Disciplinary Treatment Plan (MDTP) coordinates behavioral health care across members of the care team and supports patient progress management, eliminating the need to scour and cross-reference a library of paper records. The new MDTP module enables better, more integrated, patient care through improved access to patient information from a variety of sources.

For individual members of the treatment team, MDTP provides an immediate high-level account of the most pressing and relevant patient care issues. The MDTP module fits seamlessly into clinical workflows and enables clinicians and other care team members to plan, coordinate, and document individual components of the care plan and track progress toward overarching goals; MDTP also uses plan update prompts and notifications to support treatment team compliance with regulatory requirements. These and other enhancements will be available to all Medsphere's psychiatric hospital customers as a standard CareVue module.

CareVue MDTP Features Supporting Behavioral Health

Gives the care team flexibility in coordinating patient care

- Create a new patient-specific plan
- Evaluate the care plan and add significant new diagnoses
- Add one or more diagnoses to the patient-specific plan
- Associate problems, discharge goals, objectives, and/or interventions with each diagnosis
- Associate one or more interventions with one or more problems
- Pull information from site-specified MDTP templates into the patient-specific plan
- Filter template information
- Pull information from a previous plan into the current patient-specific plan
- Create new items—diagnoses, problems, discharge goals, objectives, and interventions—for the current plan
- Complete the comprehensive MDTP
- Define plan frequency
- Define MDTP team members
- Update the comprehensive MDTP
- Sign a patient plan

Partner Profiles: CareVue in Behavioral Health Facilities

Medsphere's CareVue is implemented in acute, ambulatory, long-term care, critical access and behavioral health environments, demonstrating the effectiveness and flexibility of the solution as a patient care platform.

Silver Hill Hospital

Silver Hill was 80 percent paperless before implementing CareVue, according to Silver Hill President and Medical Director Sigurd Ackerman, MD. When the hospital tried to add CPOE to the mix, however, they found these legacy proprietary systems were basically "unlinkable." CareVue, on the other hand, offered a clinically comprehensive EHR solution that is fully integrated - i.e., runs on a single database - and interfaces easily with other systems.

"Physicians are famous for their handwriting, so electronic order entry, which eliminates handwritten prescriptions and other orders, is intrinsic to any patient safety initiative," said Ackerman. "Many of our physicians know VistA from their VA training rotations, making CareVue, essentially a derivative of the VA system, pretty popular. All they wanted to know was 'how soon can we make this happen?'"

Silver Hill simultaneously implemented all pertinent CareVue components, including lab and pharmacy. "We chose a 'big bang' go-live so our clinicians could enjoy easy, secure access to real-time patient information from day one," said Ackerman. "Electronic systems don't replace good medicine but they certainly help us give patients the best care possible. We were intent on reaping the greatest safety and outcomes improvements as quickly as possible."

Silver Hill Hospital is a nationally recognized, independent, not-for-profit psychiatric hospital with 129 licensed beds. Since 1931, Silver Hill has focused exclusively on providing patients the best possible treatment of psychiatric illnesses and substance abuse disorders in the best possible environment. The hospital is affiliated with the Department of Psychiatry at Yale University's School of Medicine.

West Virginia Department of Health and Human Resources

The West Virginia Department of Health and Human Resources (WV DHHR) provides acute, behavioral health (psychiatric) and long-term care at several state-run facilities now reaping the benefits of a unified electronic health record thanks to Medsphere's CareVue system.

CareVue at WV DHHR Behavioral Health Facilities

- William R. Sharpe, Jr., Hospital (150 beds)
- Mildred Mitchell Bateman Hospital (110 beds)
- Hopemont Hospital (100 beds)
- Jackie Withrow Hospital (199-bed long-term, geriatric and behavioral health care facility)
- Lakin Hospital (114-bed long-term and behavioral health care facility)

Medsphere implemented the CareVue EHR at all seven West Virginia facilities in 2008. Working with Medsphere, the state has also integrated Bar Code Medication Administration technology to create a secure and nearly paperless system uniting all state-owned healthcare facilities and outside contractors. The unique relationship with Medsphere gives West Virginia DHHR a valued sense of ownership and responsibility.

"It's uniquely ours at this point," said Craig Richards, former deputy commissioner for the department and current CEO at Mildred Mitchell Bateman Hospital, a DHHR facility. "We are definitely one of the states that have reaped the benefits. We're starting to lap other people now and thinking, how far can we take this? We're getting real-time feedback from people saying, 'What if we could do this?'"

Since 2005, WV DHHR has spent roughly \$8.4 million on implementation, training and development of CareVue, compared with \$90 million West Virginia University paid for a comparable proprietary solution.