

The Electronic Medical Record for Home Care

MedShare is the first vendor with an Interoperable Electronic Medical Record solution designed for the Home Health Care Sector.

Background

In 2005, Elinor Caplan wrote, "Information technology can accelerate development of a quality home care system. It is imperative for service providers, particularly for nursing and therapy services, to access each client's clinical history". The Caplan Report identified the need for shared client health records and fueled MedShare's vision for an EMR for Home Care.

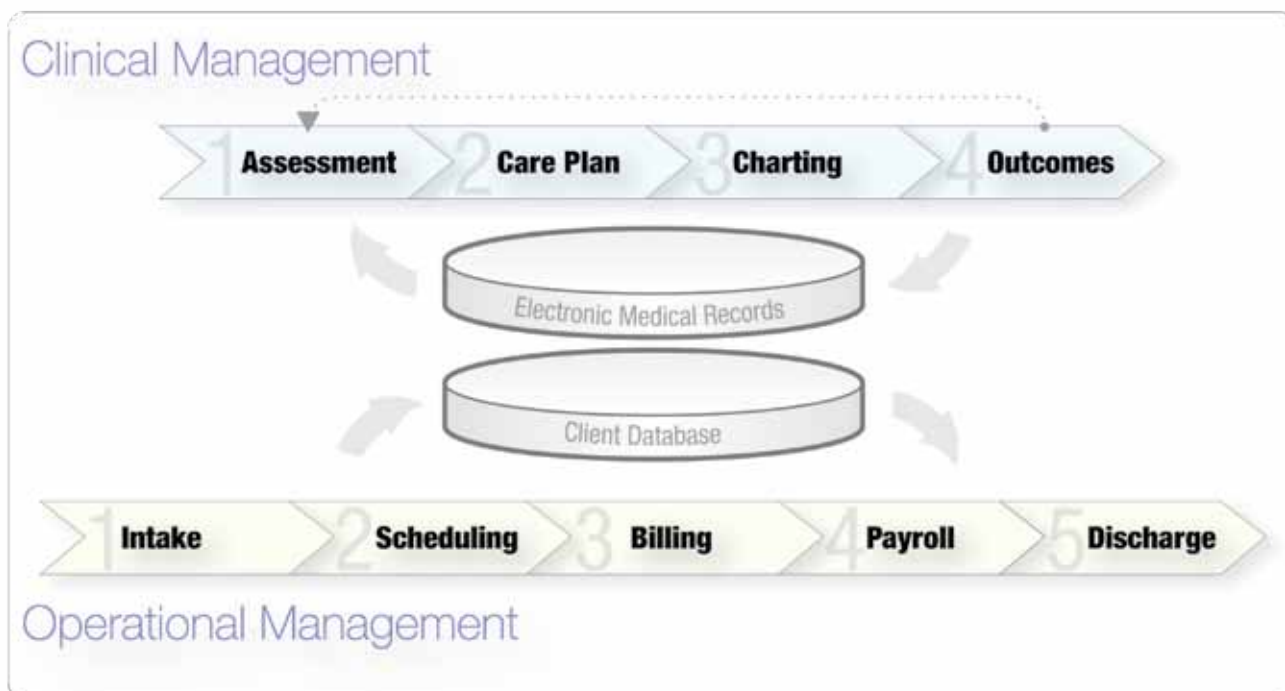
Canada's First Ministers, formed Canada Health Infoway to accelerate the development and adoption of electronic medical record (EMR) systems by providing a technology blueprint and technology standards. Infoway provided the essential roadmap which MedShare has followed to build a standards-based interoperable EMR for Home Care.

The Canadian Home Care Association reinforced the need to "invest in the implementation of an electronic clinical information system for home care that includes all elements of service delivery and is available at the point of care".

Current Situation

Many home health care organizations remain focused on operational systems that track patients, perform scheduling, payroll calculations and billing. Unlike the legacy software vendors, MedShare has focused on clinical information, workflow and process optimization for the mobile home health care worker.

We are beginning to see provider agencies investing in electronic clinical information systems to access client health information, care documentation and decision support at the point of care. These innovators of home care have replaced inefficient paper-based processes with electronic assessments, flow sheets and care plans that can be secured and shared amongst the health care team.



The Anatomy of an EMR for Home Care

An electronic medical record (EMR) system will turn rooms filled with paper into organized, easy to access, electronic files. Specific to a provider, an EMR system provides the care team, including nurses, therapists, clinical leaders and office staff, with electronic access to vital client health information. The foundation is a shared, secure database that can store all types of data (fax images, pictures, data, forms, etc.) The EMR must secure client health information and provide consent-based access to the care team compliant with PIPEDA and PHIPA rules. The Canadian vision requires the EMR to interoperate or share data with others in the community of care through a standards-based interoperability connector.

A Complete View of the Client

The EMR must provide the ability to capture all sources of client information. Often, data such as referrals, assessments and orders reside outside of the digital client record. The EMR provides a robust document repository to receive, store and share external information with the care team. Client demographic information coming from the back office system is readily available without the need to re-enter data. New information captured on-screen is stored in the EMR as structured data. This structured data provides the basis for reporting on quality, performance and health outcome indicators.

Information Access

Client health information must be available in the office and to health care workers at the point of care. This information must be available 100% of the time to ensure clinicians are fully informed for every medical episode. Light and portable computing devices like the BlackBerry, tablet and laptop computers are ideally suited to interact with health information. The form factor chosen should match the information access requirements of the health care worker.

Support Clinical Workflow

Nurses, therapists and other clinicians have well developed workflows for assessing client needs, planning and delivering care. The EMR should support and enhance existing clinical processes improving adherence to clinical documentation standards.

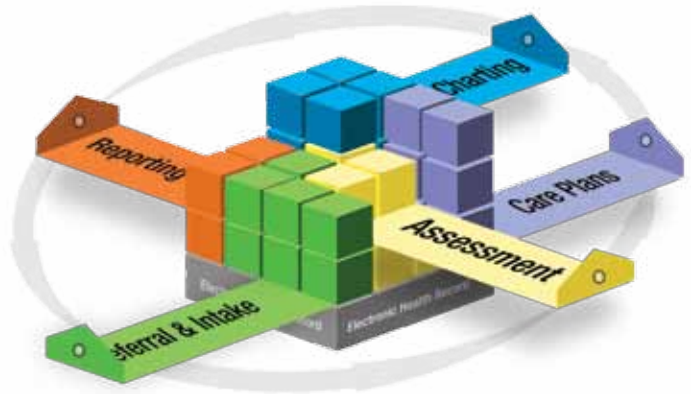
Care Planning

An EMR should support a library of care plans that provide standardized protocols based on the latest best practice treatments. Care plans are selected by the nurse or therapists in the home and refined to suit

the individual needs of the client. Care plans are stored and shared with the care team.

Electronic Charting

The EMR replaces paper-based forms with on-screen forms. The most effective forms will pre-populate with client data, validate data input, provide embedded clinical guidance and post important data to the client medical record. Forms in health care allow multiple observations, provide full audit capability and secure the data. Electronic forms are used to capture consent, assessment data, flow sheets, status, updates, discharge reports and more.



Communication Notes

The EMR should allow the clinician to add relevant information to the client record at any stage of the care delivery process. These notes must be aggregated to form an important part of the history of client care.

Team Based Care

In home health care, clinical information workflows often involve multiple staff, as clients receive care from a team of clinicians. The home care EMR must continuously merge updates being made by members of the care team.

Mobilize the Data

The health care worker will need access to client's health information at the point of care. There are many options available today including BlackBerry, laptop and tablet computers. Whichever device is chosen, 100% system availability is essential. The most robust option available is the "store and forward" design. A secure copy of the client's EMR is stored on the mobile device providing access without needing a live network or cellular data connection. Store and forward applications employ sophisticated synchronization and team merge algorithms.

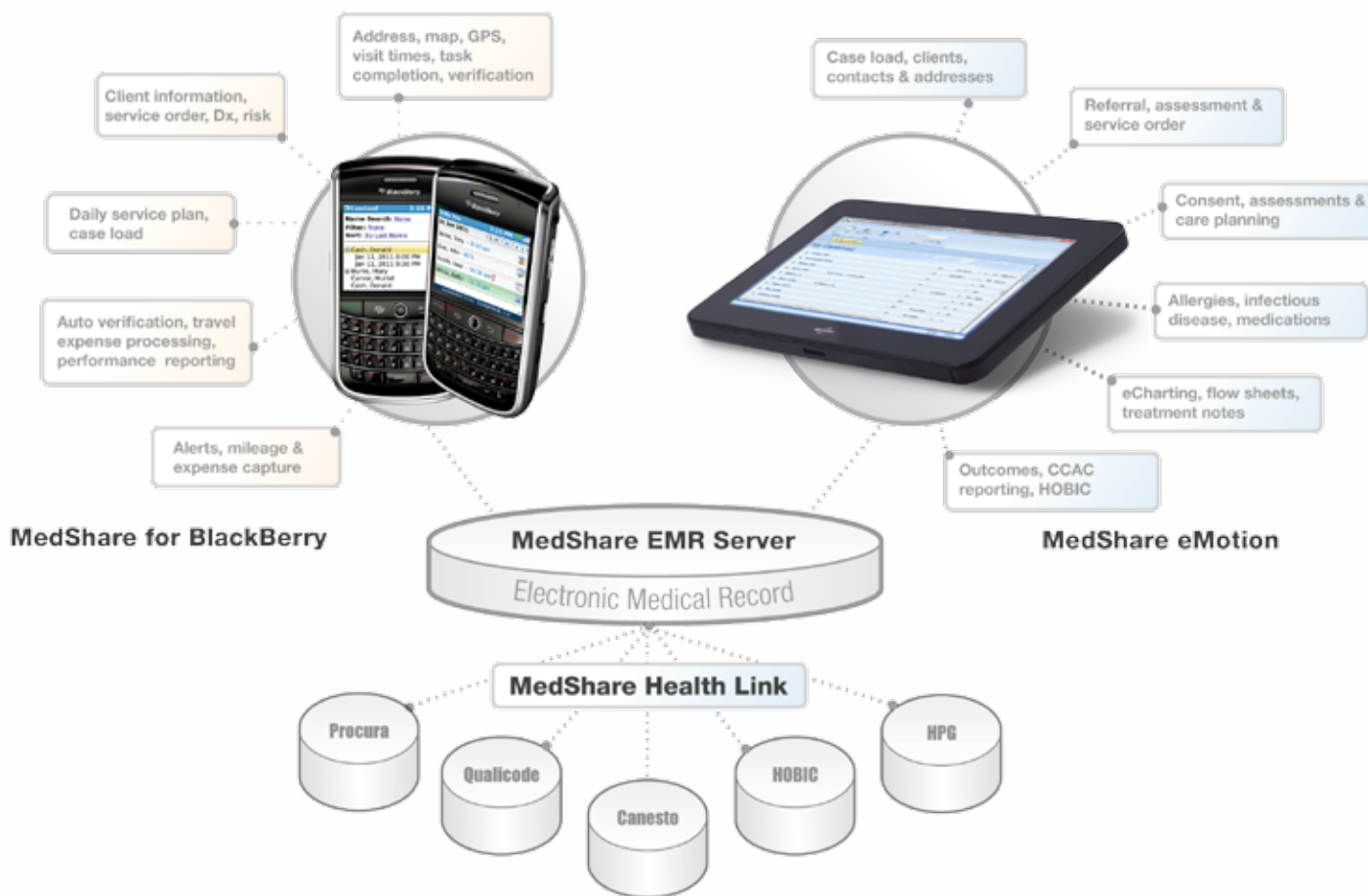
MedShare EMR for Home Care

MedShare for BlackBerry

MedShare for BlackBerry allows health care workers instant access to their schedule, client and service delivery information. The BlackBerry allows staff to capture visit duration and location verification, task completion and visit notes at the point of care. Through MedShare's integration, visits are automatically verified in the agency scheduling system.

MedShare eMotion

MedShare eMotion is the nurse's first choice for an electronic clinical documentation solution: access the full client health record; leverage care plan templates to deliver best practices; and use on-screen smart forms for clinical documentation at the point of care.



HealthLink

Health Link is the MedShare interoperable EMR connector. Using standards-based HL7 messaging, XML or web services, MedShare supports 2-way communication with other health information systems. MedShare currently provides 2-way integration with Procura, Canesto CIMS, Qualicode and and 1-way with HOBIC. Additional connectors are coming for HPG/CHRIS and other software solutions.

MedShare EMR Server (MES)

MES is the central EMR repository that provides a lifetime record of your client's interactions with your health care organization. MES integrates with your existing back office system to unlock client demographic information and extends to a full clinical record. Together with multiple point of care applications, MedShare fundamentally transforms the way your staff deliver care. Staff using a BlackBerry, laptop, tablet or other device share a single client EMR.

Better Outcomes - for clients, for care givers, for Home Health Care agencies

The new Value in Health Care model is finding its way into policy, program and reimbursement models within the health care system. Value in health care is defined as "patient health outcomes per dollar spent".

Improving Health Outcomes

With access to client health information, health care workers are able to provide informed care decisions. A complete view of the client record reduces errors, speeds diagnosis and informs health care worker of the care planning process. Standardized clinical documentation allows health care workers to quickly find the information they are looking for and document the care when it is delivered. The use of information technology to deliver evidence-based best practices at the point of care, ensures improved health outcomes.

Health Care Agencies

Information access, communication and collaboration drives efficiency in scheduling, documentation and reporting. Together these efficiencies increase direct service time for nurses and therapists by up to 8%. Automated visit verification, scheduling, alerts and communications can reduce administrative effort by 40%. Automatic travel expense calculation based on "optimal route" calculation can reduce travel expenses by 15%. Managers and executives can build performance management systems to optimize billing rates, staff utilization and cost containment.

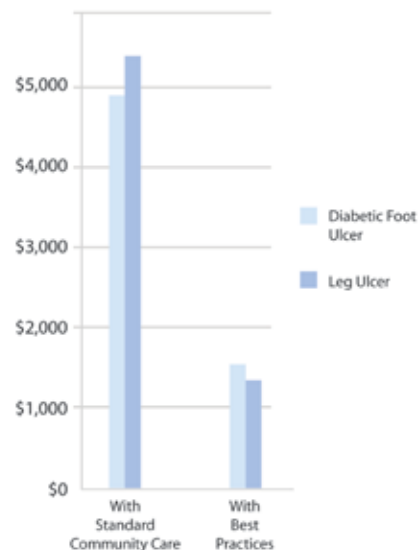
The EMR and point of service applications for mobile devices and tablets form the basis of an agency's electronic Clinical Information System (CIS). All sectors of health care are being encouraged to implement eHealth systems through reimbursement, incentives and/or preference when awarding contracts.

System Level Benefits

The use of evidence informed best-practices reduces cost. In wound care, "consistent application of best practices reduces per client costs by up to 66%", R. Shannon, 2007.

Provider EMR systems that employ universal and mandatory health outcome measures enables a move to value-based competition, rewards the top performers, reduces cost and expands health service capacity.

Cost of Wound Care per Client by Wound Type



"Utilize information technology to enable restructuring of care delivery and measuring results, rather than treat it as a solution itself",

Michael E. Porter, Redefining Health Care