

HIGH IMPACT PRACTICES

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AN EHEALTH EVIDENCE-BASED APPROACH TO WOUND CARE

Target, measure, report and improve equals enhanced client outcomes and cost savings



High Impact Practices, as defined by the Canadian Home Care Association (CHCA), are evidence-informed, innovative practices within the home and community care sector that enhance the quality and effectiveness of service and result in improved quality of life for clients and their families. By identifying and sharing High Impact Practices, the CHCA facilitates sharing and transferring of knowledge, expertise and experience.

This High Impact Practice describes the use of evidence to advance clinical practice in the management of wounds in the home setting. Wound management is a common reason for admission to home care for individuals of all ages. Poor client outcomes and rapidly rising care costs have made wound care a priority area of focus for home care programs across the country.

Wound healing is a complex process that can be understood and enhanced through wound assessment, identification of the cause, moist wound healing and the timely application of appropriate interventions, using a multi-disciplinary team. Although this approach to wound management is widely understood, there is significant variation in wound care practices in the home care sector; both across Canada and within provinces.

The outcome measurement solution, how2trak®, is a client information system that has been adopted by a number of home care programs across Canada, including the North Simcoe Muskoka Community Care Access Centre (NSM CCAC). The system facilitates the collection of wound management data at the point of care and supports the consistent implementation of best-practice. It has proven to be an important and effective tool to support the philosophy and application of evidence-based wound care practice.

Evidence is the mantra in health care today. While clinical judgement and experience are important, there is an increasing emphasis on evidence-based health care. One way to assure successful implementation of evidence-based wound care programs is by measuring the outcomes achieved and using that information to continuously improve care processes and outcomes.

Supporting the most effective protocols, committing to evidence-informed practice, and utilizing a means for

tracking and analyzing comparative data is critical to successful wound management. The result is significant cost savings to the health system, better collaboration amongst clinicians and, most importantly, improved clinical outcomes and quality of life for clients.

Background

Wound care management is a significant health care issue across Canada. As patient care has shifted to the home, the frequency of patients requiring care for their wounds in home care has increased. A 2007 study by Health Outcomes Worldwide (HOW) assessed 16,079 home care clients across Canada and found that 50.3% of clients had wounds. The most common wounds reported were open surgical and stage I pressure ulcers, followed by closed surgical incisions.ⁱ In the same study, the most common treatment intervention was low cost dry gauze changed at least once a day and often twice per day.

Healing chronic wounds is a complex biological process for which best practice guidelines have been developed. However, the adoption of these evidence-based practices is sporadic and slow. This has, in part, been a result of inconsistent assessment and documentation, inadequate data on prevalence and costs, unclear selection criteria for product selection, limited training, and lack of collaboration.ⁱⁱ

It is well documented that evidence-based practice improves care and cost outcomes. Evidence-based health care is the conscientious use of current best evidence in making decisions about the care of individual patients or the delivery of health services. "Current best evidence" is up-to-date information from relevant, valid research regarding the effects of different forms of health care, the potential for harm from exposure to particular agents, the accuracy of diagnostic tests, and the predictive power of prognostic factors.ⁱⁱⁱ

Thank-you to our High Impact Practices Partner...

The Canadian Home Care Association gratefully acknowledges funding from Health Outcomes Worldwide. Health Outcomes Worldwide (HOW) is a Canadian company that offers innovative and technologically advanced outcome measurement solutions to health organizations across the continuum. HOW provides innovative outcome measurement collection, reporting and evaluation services as well as educational resources that facilitate improvements in care and build greater fiscal and human resource capacity.





With the prevalence of wounds in patients receiving home care, many organizations across the country have initiated work to achieve improvements. A common approach is to use multiple strategies simultaneously to realize clinical and financial goals. A key challenge with these approaches is the lack of standardized processes to measure outcomes, and an understanding of how to interpret and analyze data that is collected. Consequently, wound care strategies often do not achieve their planned outcomes and reasons for lack of success are not well understood. The absence of a clearly articulated standardized and systematic approach to wound care in the home care sector results in inconsistent practices, less than desirable outcomes and increases in care costs. This was the challenge facing the NSM CCAC in 2009. Staff had been working to improve wound healing for those receiving home care services for over a decade. Early successes were impacted by other system wide priorities including an amalgamation of CCACs and internal restructuring.

Implementation

In 2009, the Senior Director of Performance Management and Accountability at the NSM CCAC supported a strategy to understand the increasing wound related costs. A call for proposals was issued and Health Outcomes Worldwide was retained to support the NSM CCAC to improve its wound management practices, outcomes and cost.

The NSM CCAC leveraged HOW's wound management best-practice education program that addresses all aspects of treatment and prevention. The education incorporates a holistic approach to wound management that highlights the importance of goal attribution (healable, nonhealable, and maintenance) to all wounds through the different stages and phases of care.

The NSM CCAC committed as an organization to addressing wound care practices and worked with its healthcare partners to document wound management standards and develop tools to be incorporated into practice. The focus on wound management and achievement of outcomes caused home care providers to recognize the need for standardized charting to document critical information such as: wound type, location, measurement, wound management practices, and treatment choices.

The how2trak® solution was implemented by the NSM CCAC as part of the wound management strategy introduced in 2009. The system's built-in flexibility allows organizations to generate real time reports specific to their unique needs. By maintaining a minimum data set in the system, users can compare wound management results with other similar organizations both provincially and nationally. Care (types of wounds and treatments), cost effectiveness and time on home care service are the vital indicators of a successful

wound management program that are compared in order to leverage learning's across jurisdictions. The NSM CCAC uses the data with its healthcare partners who meet monthly to assess the impact on improve wound care.

To this day, the NSM CCAC and its partners continue to identify and address targets for improvement and develop strategies to translate best practices in wound management, into day to day practice.

Better tracking and trending

Tracking and managing clinical best practice across multiple providers, clinics and individual clients is a big challenge for home care administrators. Standardized forms help to increase consistency, but analysis is time consuming as someone needs to review charts and manually compile data in order to demonstrate results on a patient population over time. While programs can gather an indication of performance through a small sampling of charts to assess practice, it is not a sustainable way in which to operate because it is labour intensive and does not provide a full analysis of the caseload. A reliable and customizable client information system that can track and accurately report on wound care clinical practices, as well as the type and cost of materials used in wound care delivery, is preferable.

The how2trak® system developed by Health Outcomes Worldwide (HOW) is an internet based outcome measurement data management tool supported by a database for wound care best practice treatment options. The outcome measurement solution converts raw data into relevant knowledge that can improve care and cost outcomes. It is an "intelligent system" (meaning that logic is built into the tool so that calculations can be made and care options prioritized) that synthesizes new care and cost data with existing information contained in the HOW database and then generates reports in real time. This allows health care organizations to immediately identify areas of opportunity with respect to wound management including:

- care costs
- client outcomes
- healing times
- supply budgets
- human resource capacity
- length of stay on service
- visits to the emergency department
- client satisfaction related to quality of life during wound treatment
- pain associated with wound healing.

The how2trak® solution implementation is straightforward. It is a web-based system providing tiered access to information as appropriate to staff needs and authority. Frontline nurses enter data directly into how2trak® at the time of treatment. Managers generate reports that provide the team with valuable information to make decisions regarding care and cost outcomes. The system is not onerous to learn and typically takes about three hours of education before staff are ready to begin loading clinical data using their mobile device or desktop computer.

Compliance rates are typically high from the outset so teams have relevant data in a very short time. Using the data and trends, team members discuss the findings and collaborate on strategies to improve care and cost outcomes. For example, working with timely, stratified patient data (subset based on specific criteria to allow for closer examination) makes it

NORTH SIMCOE MUSKOKA COMMUNITY CARE ACCESS CENTRE (NSM CCAC)

One of 14 in the province, the North Simcoe Muskoka CCAC is funded by the Ministry of Health and Long-Term Care to manage and coordinate home care, long-term care and other community services. The NSM CCAC serves a population of 453,000 and works in partnership with seven acute care sites, 26 long-term care facilities as well as home and community care providers. The NSM CCAC is directly accountable to the North Simcoe Muskoka Local Health Integration Network.

AN EVIDENCE-BASED APPROACH TO WOUND CARE = ENHANCED CLIENT OUTCOMES AND COST SAVINGS

easier for clinicians to test new approaches on a small group of patients before implementing broad system wide change. By comparing data over time, organizations can achieve better system outcomes as a result of standardizing practice and implementing efficiency interventions. The ability to measure outcomes rather than merely monitoring data facilitates improved care, allows for reallocation of limited financial and human resources and provides an opportunity for an organization to plan strategically for the future.

Outcomes

Outcome measurement is a key catalyst for change. It is a source of continuous empowerment for care providers because with evidence of the impact of their actions, they can promote new practices. It is also the cornerstone for a sustainable best practice approach to wound care because it documents areas of success as well as areas of continued concern. The immediacy of feedback through measurement helps providers to sustain their momentum for continuous improvement as they are constantly engaged in examining and improving patient care. How2trak® provides the information that is needed in order to maintain the balance between achieving standardized best practice wound care and cost containment. The NSM CCAC was able to establish objective baseline information about the prevalence, types of treatment and costs of wounds within their jurisdiction and identify targets for improvement.

Improved care and client satisfaction

The custom reports allow a review of the relevant aspects of care that may contribute to the speed and effectiveness of wound healing. By capturing care intervention data, clinicians are able to improve communication.

Improved collaboration

Wound care clients frequently suffer from diminished lower limb circulation, and the method for dressing the wound will depend on Doppler measurement of the client's ankle brachial index (ABI). Clinical best practice requires that the ABI measurement be recorded in the client documentation. Omissions of this vital care measurement were identified through the how2trak® reports. This information provided a concrete performance gap that all clinicians could undertake to correct. By using the data for learning, collaboration is enhanced and communication gaps narrowed.

Effective Case Management

Utilizing key paths for wound management that align with evidence-based care is essential for managing wound care caseloads more effectively. Client care coordinators (case managers) participated in wound management education sessions to enable them to work with nursing providers in a more informed way. An increased knowledge of wound management principles also allowed them to engage more fully with clients in achieving wound care goals. The reports generated by how2trak® provide information on variances from best practices and promote informed decision making regarding authorization of nursing visits and medical supplies.

Adoption of best practice

The long-term care sector in North Simcoe Muskoka greatly improved their utilization of off-loading devices for the at risk resident. The prevalence of Stage II and greater pressure ulcers decreased by 3% in long-term care and by 6% in acute care.

Provider satisfaction

In addition to quantitative results related to wound care, a

substantial impact on the level of nursing satisfaction has been observed. Nurses report improvements in their confidence, wound care knowledge and efficiency.

“For many years we have had a long waiting list of clients waiting to access our personal support line. Sometimes the wait time was upwards of 300 days. By reallocating resources to this important component of care management, our team has been able to reduce the number of personal support line clients waiting from 850 to 300 – a 65% reduction! We have also seen more dialogue between nurses and client care coordinators, and important collaboration in care delivery.”

**—Debbie Roberts, Senior Director of
Performance Management and Accountability
North Simcoe Muskoka Community Care Access Centre**

Cost savings

In 2011 the acute care hospitals in North Simcoe Muskoka recorded fewer deep tissue injury compared to 2010 with an estimated positive impact to the local health care system of \$760,000.

The CCAC was able to identify and implement dressing change practices which reduced the prevalence of daily dressing changes from 25% of the wound caseload to 14%. This reduction in dressing change frequency resulted in the more efficient and effective use of nursing resources and a decreased length of time for wound clients on the community caseload. Ultimately the savings allowed the CCAC to reallocate approximately \$800,000 over a one year period to support additional pressing initiatives.

Key Success Factors

The NSM CCAC believes that outcome measurement in home care generally, and in wound care specifically, requires:

- A leadership team that cares about outcomes and sustainability and have a vision to improve outcomes
- Effective communication – internally and externally across system partners in order to establish trust and facilitate change
- Collaboration – engagement of all health partners through education and improved tools to aid in documentation and communication and to establish joint ownership of the data and the patient outcomes
- Standardization of wound descriptions and terminology
- Community care teams – to champion the work and support continuous improvement
- Partnering with industry



Outcome measurement facilitates organizational evolution to new ways of practice through objective analysis. The process allows agencies to track the improvement in health and economic outcomes and provides a solid foundation on which to build sustainable best practices including wound care. Moreover, the objective measurement of indicators can empower organizations to lead the change in practice on their own terms and in ways that best serve the needs of their clients and their organization, as opposed to being directed by external authorities.

Lessons Learned

The NSM CCAC has witnessed the importance of a concentrated and focussed effort on change. Their experience has taught them not to overestimate readiness for change. Providers have not been accustomed to working with data and the health system is still largely organized around on-demand fragmented service.

Providers, across sectors, do not all have point of care technology which calls to question the accuracy and completeness of data that is submitted 'after the fact' and often by a data entry person who may not understand the complexities of the data submitted and make errors.

Data and system integration would also help those with electronic systems enabling the relevant information to be pulled seamlessly through the cloud in order to have timely access to care metrics.

Next Steps

To support full integration into all sectors of care, HOW is in the process of implementing several enhancements to the how2trak® system including: the development of a dashboard feature so that key information can be monitored at a glance, a report that will generate information on variances, an intelligent wound care assistant that can provide information on wound types and treatments, and an anonymous customer feedback mechanism for system users. This will be helpful to the NSM CCAC and LHIN as a public reporting on wound management is launched in 2012.

The how2trak® system can shape clinical practice across other patient populations and accordingly work is underway to incorporate outcome measurement for a number of conditions, including diabetes and palliative care. The NSM CCAC envisions using the system to allow the health care team to highlight deviations from best practice across a number of conditions and use the data to educate and correct those practices.

Conclusion

There are many factors that contribute to the success of an effective wound care program. Outcome measurement is an integral factor for sustainability because it offers meaningful evidence to inform and illuminate all other key aspects of the wound care program.

The growing interest in outcome measurement in health care can be attributed to the increased importance assigned to demonstrating accountability in all aspects of care delivery. Outcome measurement has enabled health care practitioners/managers across the country to document their concerted efforts to improve client care and increase organizational effectiveness. The outcome measurement process clearly demonstrates areas of improvement and highlights areas of practice that are not consistent with best practice based on a meaningful set of indicators. It forces an examination of objective evidence that does not allow for anecdotal interpretations of efficacy and efficiency with respect to wound care.

Implementing and maintaining an evidence-based wound care program is a complex process that presents considerable challenges for all stakeholders. However, outcome measurement offers compelling evidence for increasing organizational efforts to improve wound care outcomes. Moreover, it is a key intervention that can help healthcare organizations close the gap between best practice and current human behaviour.

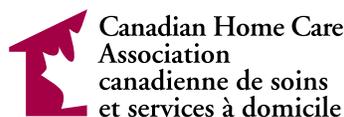
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The Canadian Home Care Association (CHCA), as a national voice, promotes excellence in home care through leadership, awareness and knowledge to shape strategic directions. The Association is committed to facilitating continuous learning and development throughout the home care sector to support and promote innovative and effective practices across Canada.

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