Closing the Gap Between Evidence and Action: How Outcome Measurement Informs the Implementation of Evidence-based Wound Care Practice in Home Care

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Abstract: Measured outcomes can help assure successful implementation of evidence-based wound care programs by informing patients, professionals, and payors that a health care system is both efficient and effective. *Objective*. Illustrate how clinical and economic outcome measurement was important to ensure sustainability of standardized evidence-based wound care programs implemented in Canadian community care. *Methods*. Client assessments, dressing change frequency, wound healing, and economic outcomes were measured on 16,079 Canadian home care clients, including 8089 with a total of 11,160 chronic or acute wounds during standardized evidence-based protocol implementation that involved education, knowledge transfer, strategic planning, management accountability/receptivity, communication, and either prospective client assessment-based data or retrospective chart audit data to measure outcomes. *Results*. Results from 3 regions illustrate how evidence-based protocol use decreased length of service, dressing change frequency, wound care costs, and wound closure time. Client and staff empowerment and management involvement were among key factors for success. *Conclusion*. Objectively measuring and reporting outcomes provided a concrete context for increasing organizational efforts to improve wound care practices and provided a solid foundation for sustained evidence-based protocol usage as it allowed agencies to track improvement in health and economic outcomes.

In an overburdened healthcare system, the end results inevitably justify or undermine the means employed to improve patient care. Many health care organizations have articulated the need to achieve more positive outcomes in wound care. However, an increased focus on the practical application of outcome measurement processes is required to ensure that specific actions undertaken to improve patient care ultimately achieve systemic success. Currently, numerous programs in place in home care facilities across the country use multiple strategies simultaneously to improve clinical and financial outcomes with respect to wound care. However, many of these programs do not include a standardized process for outcome measurement. "The need for clearly articulated expectations, measurable outcomes, consequences and incentives for performance has become the 'new norm' and

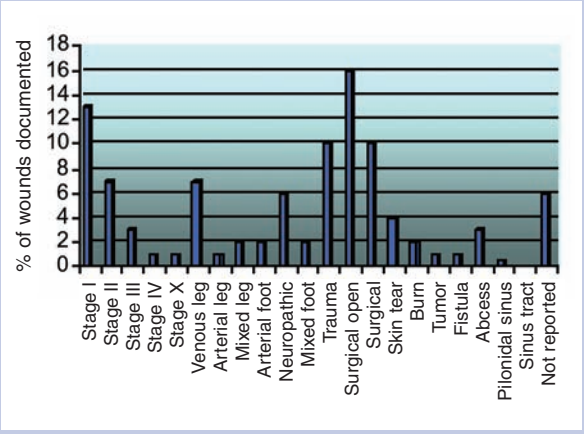

Figure 1a. Types of wounds in Canada in the home care setting.

Clients assessed:	16,079
Average age:	68
Men:	6742 (42%)
Women:	9229 (57%)
Gender not reported:	108 (1%)
Diabetic (yes):	4092 (25%)
Diabetic (not reported):	593 (4%)
Clients with wounds:	8089
Total wounds:	**11,160**

Figure 1b. Client demographics.

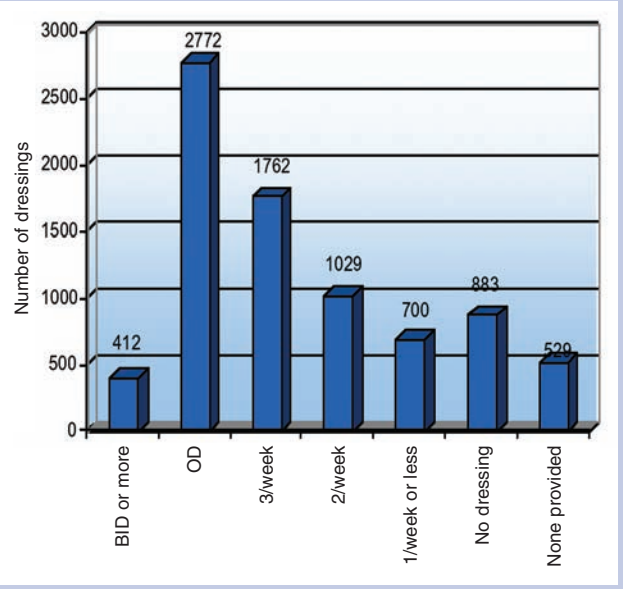

Figure 1c. Frequency of dressing changes in this Canadian sample.

consumers have come to expect the 'evidence' that the health care system is both efficient and effective."[1] Data collected by the author on more than 16,000 Canadian home care clients described in Figure 1a and 1b reveals that in community practice, wound care can consume up to 50% of care being delivered at any one time. Among those clients, 2772 received daily dressing changes, and 412 received twice daily dressing changes (Figure 1c) that cost tax payers more than $65 million (Canadian) in labor costs in a 1-year period. Implementing a method for outcome measurement is vital to the sustainability of a wound care program as it offers evidence to assess whether or not operational efforts to improve care are consistent with program expectations and objectives.

The implementation process can be a complicated puzzle to piece together for all stakeholders. A kind of operational myopia can occur as each individual or team inevitably focuses on their piece of the implementation process without a clear vision of how each piece of the process is either advanced or undermined by the efficacy of other pieces of the process. A consistent and sustained vision is necessary among all stakeholders to ensure an accurate understanding of the ways in which the success or failure of one aspect of the program can have a profound impact, either positively or negatively, on other aspects of the program. Implementing an outcome measurement process simultaneously illustrates success and illuminates inconsistencies in efforts to improve clinical and economic outcomes. Moreover, it is necessary to ensure that the clinical, financial, and human resources involved in the implementation process are managed effectively. The aim of this article is to demonstrate that outcome measurement is a key factor required to ensure the sustainability of a wound care program.

Translating Evidence Into Action: Evidence-Based Practice, Education, and Knowledge Transfer

The successful implementation of an evidence based wound management program can be a complex process

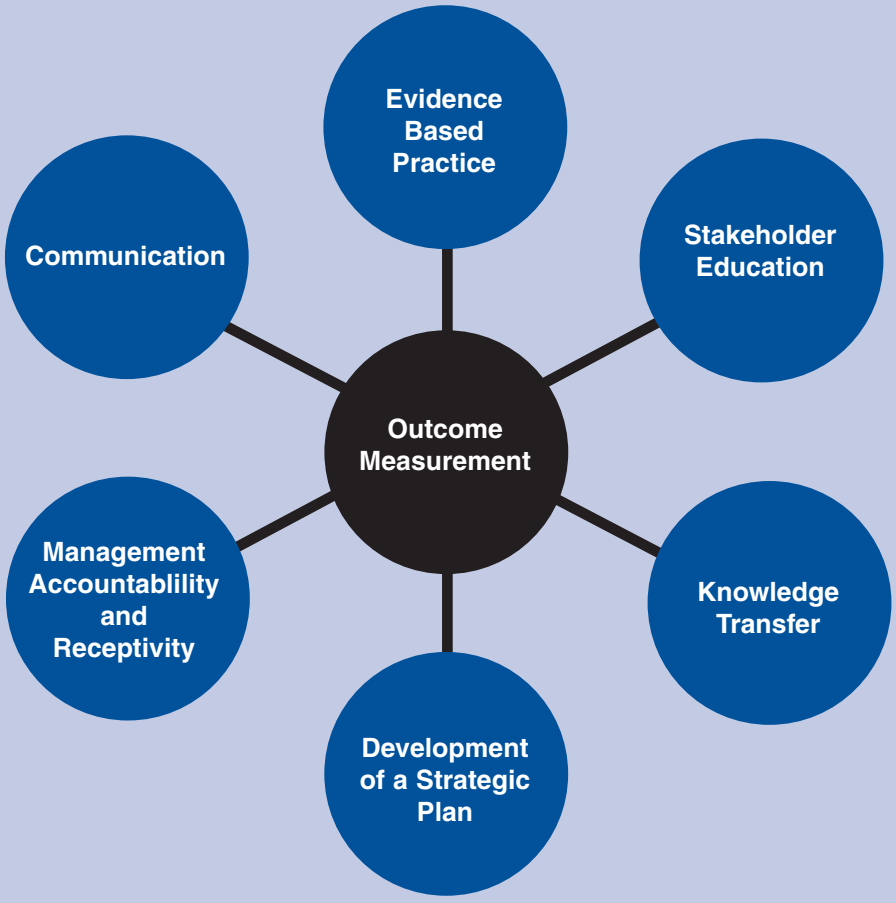

Figure 2. Key components of a best practice wound care program.

as there are many factors that inform the effective delivery of quality patient wound care. These factors are illustrated in Figure 2. Success can be achieved through the implementation of multiple clinical, educational, and operational strategies simultaneously including: a focus on patient centered care, a multidisciplinary approach to implementation, ongoing education for all stakeholders, a clearly articulated process for knowledge transfer, the creation of a comprehensive strategic plan, and a method for outcome measurement to evaluate and assess the effectiveness of the program. Below is a description of how outcome measurement is involved in each aspect of this process.

Evidence-based practice. Evidence-based Practice (EBP) is the acknowledgment of uncertainty followed by assessment, appraisal, and then implementation of the new knowledge.[2] EBP has become an established paradigm in the field of medicine. Concerted efforts have been underway during the past decade to implement and sustain an EBP approach to patient care. The focus on using available research evidence to inform practice has resulted in the development of many best practice guidelines throughout the country to assist stakeholders in their efforts to improve wound care outcomes. In fact, investigating the large body of available research knowledge available in this country is an important first step in best practice implementation as stakeholders must decide whether to develop, adapt, or adopt an existing guideline as their guiding framework for best practice. It is imperative that stakeholders avoid the urge to reinvent best practice guidelines for wound care when innovative and user-friendly tools already exist.

Although there are many quality evidence-based approaches to wound care available to stakeholders, the practical application or transfer of knowledge in everyday practice seems to be lagging behind the premise that

evidence should inform practice. The implementation of EBP guidelines remains a formidable challenge as individual practitioners, clinical teams, and health care organizations all influence the speed and scope of adoption of evidence into practice.

Evidence-based practice is much more than a mapping exercise or an academic undertaking; it is a concrete approach that will lead to tangible improvement in care if a process for evaluating outcomes is firmly in place to demonstrate modifications to practice.

Education and knowledge transfer. Education is imperative for the sustainability of evidence-based practice. It is a key factor in the change process, and both managers and care providers play a key role in facilitating organizational transformation. Education can be a complex undertaking because it must be aimed at all stakeholders, but must also be tailored to suit a wide variety of groups within an organization. In many instances, educational programs are developed with a singular focus on care providers. However, a quality wound care education program must take a much broader view of learning in order to achieve optimal knowledge dissemination. Identification and involvement of all stakeholders including the Board of Directors, the management team, physicians, case managers, patients, families, and other key stakeholders is essential. Furthermore, it is important to adequately assess the learning needs of each group as various types of educational strategies may need to be employed. Simply stated, narrowing the gap between knowledge and action can only be realized by an informed group of stakeholders who view themselves as ardent agents in the change process rather than dispassionate spectators to it.

Delivering an education program is only the first step on the path to integration of an evidence based approach to practice. Sustainability is the key measure of success for any wound management program and continuity can only be accomplished through an ongoing process of knowledge transference. The Canadian Institute for Health Research defines knowledge transfer as the "Exchange, synthesis, and ethically-sound application of knowledge—within a complex system of interactions among researchers and users—to accelerate the capture of the benefits of research for Canadians through improved health, more effective services and products, and a strengthened health care system."[3] Transferring knowledge in health care is a complex process that presents many challenges to both care providers and management as, "the mere reception of knowledge by the potential user does not imply its 'use.'"[4] People rather than policies are ultimately the catalysts of change. It is imperative that organizations provide opportunities for real interaction and engagement with existing research ideas. This can be achieved by identifying individuals or teams inside the organization who can act as brokers to facilitate the uptake of research knowledge by contextualizing and simplifying it for end users. Professional mentorship is an equally important part of the knowledge exchange process as it promotes the development of knowledge, skills, and appropriate attitude acquisition,[5] while providing a forum for promoting the ways in which research evidence can positively inform real professional experience.

Knowledge transfer, knowledge brokering, and professional mentorship are important people processes in health care because they ultimately drive efforts to improve the quality of care delivery, secure patient safety, improve patient outcomes and affect positive organizational change. Outcome measurement is a critical factor in efforts to narrow the gap that inevitably exists between evidence and action as it affords an opportunity for rigorous evaluation, monitoring and modification of care processes, and patient outcomes.

Facilitating Organizational Transformation: Strategic Planning, Management Accountability, and Communication

Developing a strategic plan. Data collection using a validated tool on more than 16,000 home care clients across 8 Canadian provinces revealed that at any given time, wound care may be responsible for 50% of the care being authorized and delivered in the home.[6] Given that wound care constitutes such a large volume of service and consumes such a large percentage of finite human and financial resources, it is imperative that wound care is delivered safely, effectively, and efficiently. Furthermore, the magnitude of the human and economic costs associated with care must be understood and linked to the overall strategic direction of the organization to ensure that the sustainability of the wound care program is included as a valued goal in the strategic plan. The development of a strategic plan is a critical step in advancing efforts to improve wound care outcomes through evidence-based practice. A strategic plan helps a healthcare organization focus its priorities by identifying and illuminating its most pressing challenges. Most healthcare organizations have formulated broad statements that communicate their vision and mission.

"The outcome measurement process has provided invaluable information that has been utilized to truly understand our progress. I also utilize the outcome measures to make decisions on education initiatives, expectations for service utilization and products. The detailed report that you provide enables us to drill down and target specific wound types for best practice initiatives across the continuum of care in our community. I find it especially helpful that you encourage me to ask new questions and find the answers within our very own data. You are an inspiration to work with!"

"Using Health Outcomes Worldwide for our audits is so easy—they send us the forms we collect the data and send the forms back to them. Health Outcomes Worldwide compiles all the data and breaks it down by care sector and wound type as well as what dressing was used all in a format that is easy to read and easy to understand. Another added value of having Health Outcomes Worldwide complete the audits is that they include comparisons with national averages. We have found these national comparisons to be very helpful to know how our wound care numbers stack up against the rest of the country."

Figure 3. Customer testimonials on the Outcome Measurement Process and its positive impact on efforts to implement a successful wound care program.

However, a clearly articulated plan that confirms organizational commitment and promotes positive changes in both policy and practice must be in place before any sustained improvement in wound care outcomes can be realized.

Management accountability and receptivity. Accountability is a ubiquitous term used in health care to define management responsibility for ensuring the quality and continuity of the many different initiatives aimed at improving clinical and financial outcomes. Management must enforce policies, direct programs, and uphold standards. Therefore, it is imperative that managers make a sincere and sustained commitment to change and offer evidence of their commitment to innovation through their direct involvement and ongoing engagement in the process. In 2006, a pilot project was conducted to implement a Pressure Ulcer Awareness Program (PUAP) on behalf of the Canadian Association of Wound Care (CAWC). One of the goals of the project was to improve policies through changes in clinical practice and encourage administrative support for a positive change in culture.[7] Home care organizations using outcome measurement report how it can support areas of managerial responsibility because it highlights areas of organizational success and points to areas of operational weakness with respect to wound care (Figure 3). With the implementation of an outcome measurement process managers no longer need to rely solely on anecdotal assumptions regarding the end point efficacy of their programs, because the outcome measurement process objectively reveals the validity and viability of the means in place to achieve end goals. Investing in the outcome measurement process has many positive implications for case coordinators, mid-level managers, and senior administrators, as each level of the organization can use baseline data to target areas of improvement, develop performance measures to address areas of concern, benchmark progress against other organizations, and demonstrate success to both internal and external stakeholders in tangible terms.

Communication. Open and ongoing communication is the cornerstone for effectiveness and empowerment in any organization. The sustainability of any wound care program is dependent upon communicating clearly and consistently with all stakeholders during all phases of the process. Engagement in the outcome measurement process requires strategies that facilitate the broad dissemination of information. Moreover, communication plans must be in place to address the different information needs of diverse internal and external groups including patients, families, care providers, physicians, clinical teams, management, and boards. Initial communications about the outcome measurement process must clearly convey strategic objectives, action steps, changes in processes as well as potential challenges and successes in efforts to improve patient care. A process for repeating pertinent communications and eliciting feedback from participants must also be firmly in place.

End point communication should also articulate the relevancy and value of the outcome measurement process, outline a plan for improvement, and confirm a commitment to repeat the process in order to ensure

continued success. Wide dissemination of information pertaining to outcome measurement successes and current areas of concern keep the program real, grounded, and relevant. Ongoing communication regarding efforts to better measure success empowers staff and organizations to strive continually to improve client care.

Outcome Measurement

Recently, an increased emphasis has been placed on the importance of outcome measurement in health care. It is a key area of accountability for stakeholders and an area of scrutiny for policy makers, health administrators, and funders. This trend toward the rigorous objective analysis of end results to assess the efficacy of current practice has evolved in a health care climate characterized by profound change, perpetual restructuring, and dominant economic forces.

Outcomes are those "tangible, quantifiable products measured for efficiency and effectiveness in time and dollar terms, which result from a specific set of health actions or interventions, and are represented by improvements in health status at either individual or population levels."[8] Outcomes are generally measured by the goals of treatments. Many wound care studies focus on complete wound healing, reduction in surface area, reduction in pain, debridement, or reduced incidence of complications, improved quality of life, and prevention of reoccurrence. However, outcomes should also focus on the strategic goals of the organization, be measurable, meaningful, and demonstrate areas of improvement as well as areas of opportunity. While outcome measurement can offer evidence to ascertain the efficiency of wound healing practices, it can also focus attention on other endpoints that are essential to improving patient care. "Rather than focus on physiologic endpoints (eg, type of granulation tissue at ulcer base), outcome studies assess the effect of interventions on endpoints that are important to patients: health-related quality of life, functional status, patient satisfaction, cost, quality of care, practice standards/patterns, and patient perspectives on new technology."[9]

A critical appraisal of the type of indicators (goals) to be measured is imperative to the process as attempting to measure too many indicators at one time is arduous and often ends in failure and frustration. Moreover, it is imperative to engage in a critical analysis of priorities in the workplace prior to implementing an outcome measurement process as expectations vary in different environments. For example, it may be unrealistic to measure all patient wound healing rates using benchmarks identified in literature at a referral center that receives the most complex patient case mix. In many instances, these patients have comorbidities that could prolong healing time beyond the framework of established benchmarks. Therefore, a more realistic goal in this scenario may be to reduce patient-reported pain or improve the patient's level of functional status.

In a home care setting where many of the clients may not have as many complex wounds as a tertiary clinic, it is equally important to measure indicators that are important to all stakeholders. Indicators must be contextualized and have relevance to the clinical and political milieu. Furthermore, it is essential that these indicators have real significance to both care providers and management as conviction in the process acts as a catalyst for staff empowerment. Outcome measurement can be an onerous process that is difficult to implement and quantify with tangible results not often realized in the short term. Therefore, it is imperative that all stakeholders understand that outcome measurement is an ongoing process rather than an isolated event.

Clinical Results Using Outcomes Measurement: 3 Success Stories

Methods

Design. An outcome measurement exercise using a validated assessment tool[10] and the Braden Risk assessment tool[11] was conducted to define the scope and nature of acute and chronic wound care challenges facing home care clients and professionals.

Setting and subjects. The assessment involved 16,079 clients in home care agencies across Canada.

Method of data collection. Each home care facility was offered a choice between 2 methods of data collection—a retrospective chart audit data collection or a picture in time outcome measurement exercise. Customers could choose either a complete outcome measurement study, which included visiting the client in the home and completing the assessment or an assessment of the client situation with a chart audit process utilizing the same tool as above, but with no actual visit to the home. Wound care nurses and team members collected the data for this study. They attended a 2-hour educational session given by a wound care expert—an enterostomal therapist (ET) or a wound care specialist (WCS). The session included assessment of wound types, proper use of the tool, familiarity with filling out the tool, and an inter-rater

reliability exercise among the data collectors. The data was collected over a 2–3 week period in the home care setting. As many clients as was possible were assessed using a standardized tool for recording aspects of clinical practice, wound assessment, and patient risk factors. The tool included demographic information, wound classification, wound type and characteristics, type of primary and secondary treatment, frequency of dressing change, type of care provider performing dressing change, wound origin, and frequency of use of an evidence-based intervention for wound treatment. The chart audit tool also elicited data on the percentage of wound closure by week 3, and the length of time to closure. These assessments were used to guide patient-oriented standardized care plans designed to achieve the goals of care for each patient. It was recommended that all clients on the home care caseload receive an assessment and the study was not confined solely to clients with wounds. The data was collected by the home care agency and sent to Health Outcomes Worldwide (New Waterford, Nova Scotia) for analysis and interpretation, which was communicated in a final report.

The Home Care Settings: Central Canada—Erie St. Clair Community Access Centre (ESCCCAC)

The Erie St. Clair Community Access Centre, Chatham, Ontario, (formerly the Chatham Kent Community Care Access Centre) identified that wound care constituted between 40%–50% of their monthly services to clients. The organization, lead by its management team, took up the challenge of improving services to its clients through a thorough and objective assessment of their existing policies, procedures and care practices with respect to wound care.

Investigating wound management strategies that had achieved success in other areas of the country was a critical first step for the organization. ESCCCAC staff who would play a leading role in the implementation of new wound management strategies attended workshops and educational

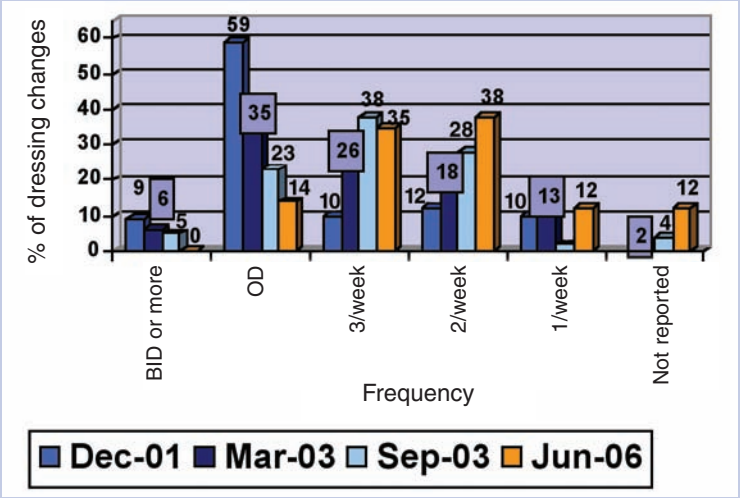

Figure 4. Frequency of dressing changes following best practice implementation. In 2001, The Chatham Kent CCAC (presently called the Erie St. Clair CCAC) was performing daily dressing changes 59% of the time, and twice daily dressing changes 9% of the time. This cost the organization approximately $3.5 million per year. Implementing the h.e.a.l. program and increasing knowledge uptake helped to decrease overall daily dressing changes to 14%. This resulted in more efficient wound care delivery, facilitated the reallocation of valuable human and financial resources, and enabled the CCAC to provide a wider range of services to their clients.

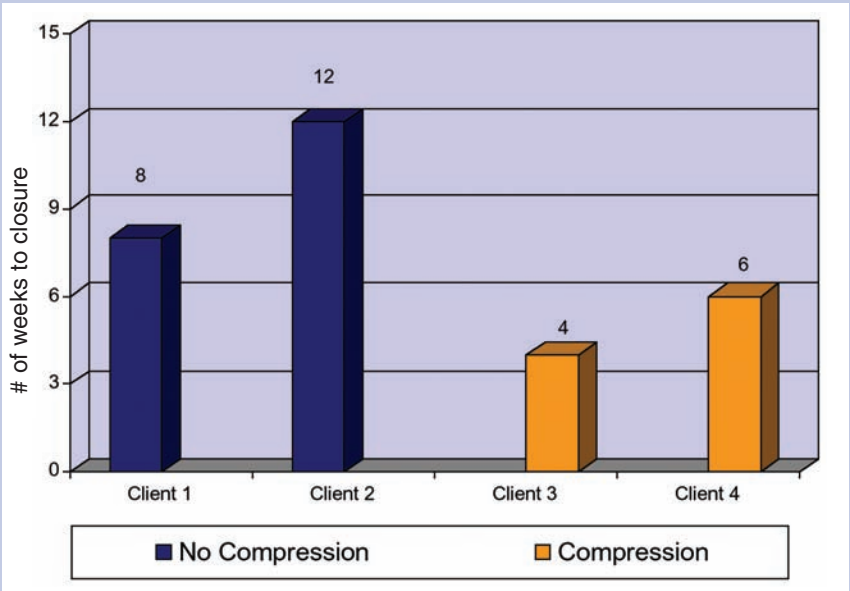

Figure 5. Wound closure time: similar venous leg ulcers (Erie St. Clair CCAC). Client outcomes demonstrated that with the use of compression therapy, venous leg ulcers closed at a quicker rate.

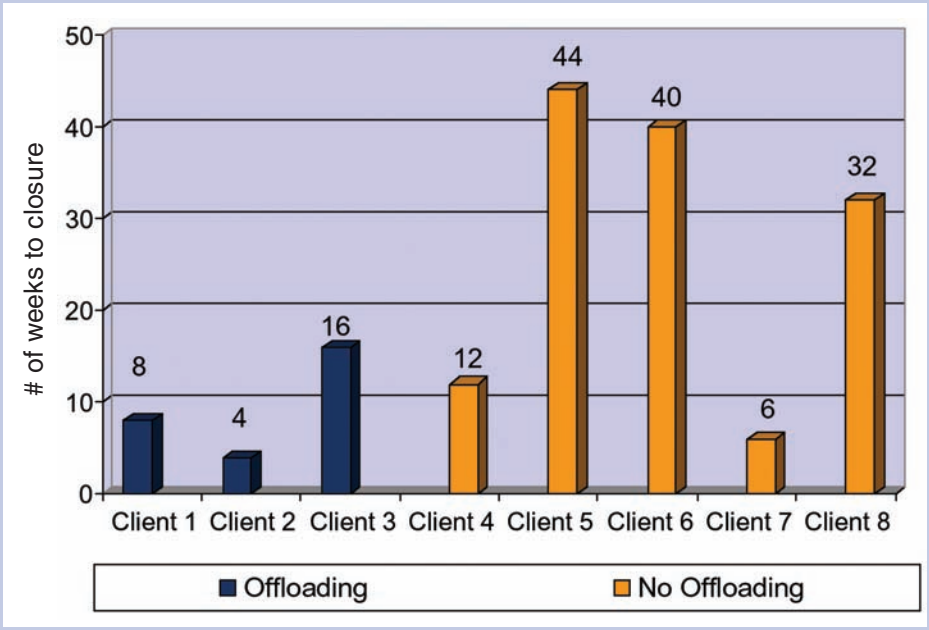

Figure 6. Wound closure time: similar diabetic foot ulcers (Erie St. Clair CCAC).

sessions to review the work being done in other provinces. After much thoughtful review and careful consideration of current models evidence based practice, the ESCCCAC decided to employ the methodology and strategies of the Nova Scotia Model for Best Practice in Community Wound Care,[12] and the Healing with Excellence Program (h.e.a.l.).[13] The h.e.a.l. program is a professional development program that utilizes the concepts of a multidisciplinary approach to care, standardized critical client and wound assessments, standardized interventions based on the client and wound assessment, and education of stakeholders including knowledge transfer, physician integration, and an ongoing process of outcome measurement.

The ESCCCAC participated in an Outcome Measurement Exercise to anticipate the needs of the clients, set a baseline for benchmarking, assess areas of success, and address potential areas of opportunity. Based on the findings of the outcome measurement exercise, the organization then developed a strategy to address all of the key factors in the implementation process. The ESCCCAC worked collaboratively with many of their stakeholders to implement a sound plan for implementation. Several information sessions were organized to inform stakeholders of the strategy, an education plan was established, resource nurses were appointed, and standardized forms were developed for consistency. Outcomes achieved are presented in Figures 4, 5, and 6.

Western Canada: Aspen Regional Health Authority

The Aspen Regional Health Authority (Alberta, Canada) was achieving very inconsistent outcomes in wound care delivery due to disparate care practices administered to a widely diverse patient population.

The cost and increased length of stay due to chronic nonhealing wound was an area of great concern across the region. Wound care practices varied widely within different regions and communities as wounds in acute care, long-term care, and community care were often treated differently. Wound care products varied from site to site, as did the knowledge of care providers across the region regarding best wound care practices. Management within the organization decided that standardizing their approach to wound care was the only remedy for reducing wound healing times and lessening the financial burden associated with care.

The organization formed a Wound Care Steering Committee to develop a standardization strategy that included representation from education, acute care, community care, long-term care, research, management, and materials management. They conducted outcome measurement exercises to ascertain the effectiveness of care processes throughout the region. The outcome measurement exercises revealed that outdated treatment practices were being employed in many facilities throughout the region. The committee then sought out staff in the targeted sites to act as resources to champion the standardization of care. After careful consideration, the committee chose the best practice guidelines developed by the Capital Health Region (Edmonton, Alberta) as their model for standardizing wound care practice. The committee also recognized the need for a standardized charting form to document wound type, location, measurement, wound management practices, and treatment

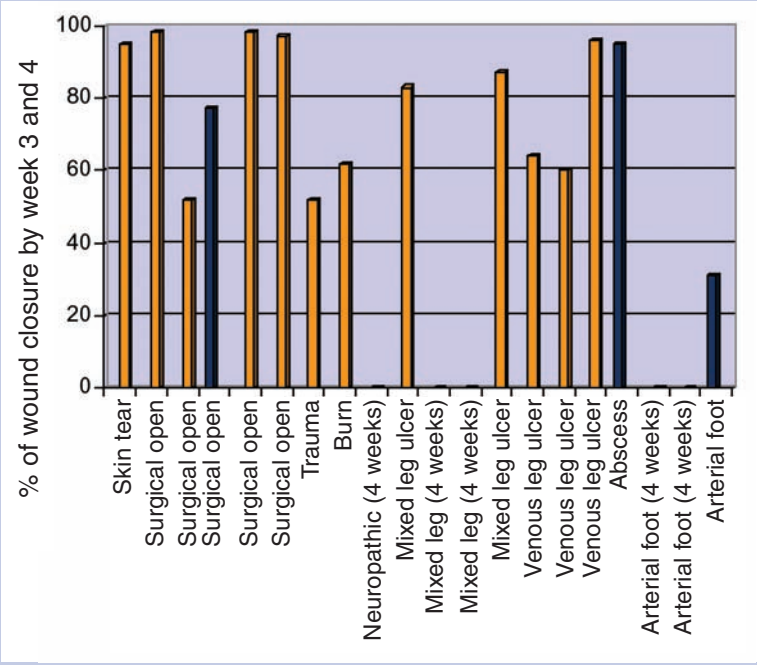

Figure 7. Wound outcomes by etiology (Aspen Regional Health Authority). The Aspen Regional Health Authority measured their wounds on admission, week 3, and week 4. All wound types demonstrated greater than 20% closure at week 3.

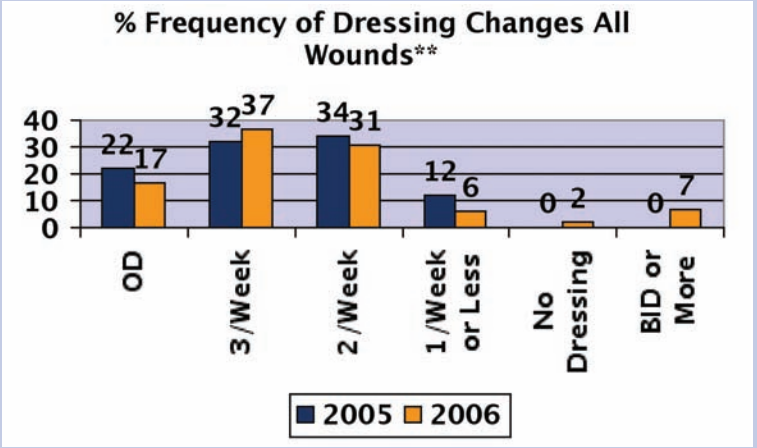

Figure 8. Frequency of dressing changes as a percentage of all wounds managed annually. The Aspen Regional Health Authority was able to reduce daily dressing changes from 22% to 17% following the implementation of best practice interventions.
***This graph represents 1 dressing frequency per client*

choices. The aim of the tool was to provide a standardized method of data collection, but it was also intended to act as constant reminder to staff regarding the proper procedures for performing a wound care assessment.

The committee then began an educational campaign using the Healing Excellence with Advanced Learning (h.e.a.l.) program aimed at more than 1500 care providers throughout the region.

Educational sessions were first presented for managers to ensure understanding of the process and confirm receptivity to the process. Managers, in turn, supported educational sessions across the region to the front line staff. A survey of managers and staff was then conducted to assess the effectiveness of the program and identify areas for improvement. The survey indicated that additional education was required and new wound prevention policies needed to be developed for the region. It was also determined that the initiative required a staff person who was dedicated full time to the delivery of education programs and the development of wound care best practice policies. The Aspen Regional Health Authority then repeated the outcome measurement process to confirm the success of their concerted effort to improve patient and economic outcomes, and to identify areas of continued concern. Outcomes are reported in Figure 7 and Figure 8.

Simcoe County CCAC: A Focus on Program Integration

The Simcoe County CCAC (SCCCAC, Ontario, Canada) had a common challenge to overcome in their efforts to implement an evidence-informed approach to wound care, as they had to develop a strategy to promote the transference of this approach to the day-to-day practice of visiting community nurses.

The SCCCAC mapped out a strategy for change and conducted a prevalence study to identify areas for improvement in community wound care practice. They also completed a comprehensive literature review to ascertain the state of current research with respect to knowledge transference, and the sustainability of best practice.

Strategies and tools such as educational sessions and the development of a mentoring model were employed to promote knowledge transference among community nurses. Data were collected regarding client outcomes as well as the cost of wound care and the results were com-

Table 1. Key components for the transfer of knowledge and sustaining best practice in wound care.*

Toolkit	Physician integration	Mentoring	Outcome measurement
• Education for all stakeholders • Ongoing educational opportunities • Intranet development • Algorithms • Lunch/learn • Reminders • Current Best Practice Guidelines (BPG) • Newsletters	• Physician champions • Attendance at physician meetings • Communication feedback to physicians • Concentrated effort to involve physicians • Dissemination of outcome measurement reports to physicians	• Expert to novice teaching at the bedside • Wound grand rounds • Development of clinical opinion leaders • Change agent/resource in agency	• Data collection tools • Internal report writing • Report outcomes to stakeholders

*van Rennes J, McIsaac C; 2007

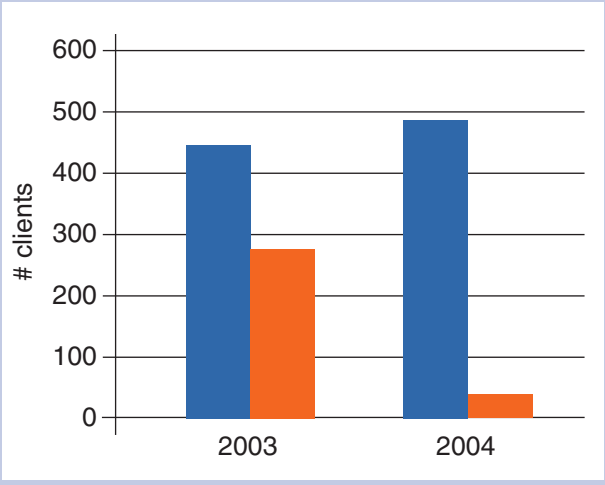

Figure 9. Comparison of daily wound care visits. Simcoe County CCAC demonstrated decreased nursing visits. In February 2003, 63% of nursing visits for wound care were daily. In February 2004, 7% of nursing visits for wound care were daily.

pared from pre-intervention and post-intervention periods. Qualitative surveys were conducted to identify critical areas that contributed to the sustainability of best practice. The survey also compared the challenges faced by community nurses to integrate practice change from a sample of professionals in both Atlantic and Central Canada. A framework was then designed to promote knowledge transference (Table 1). It identified key components that contribute to the sustainability of a best practice community wound care management program. The utilization of the framework and interventions demonstrated a decrease in the cost per patient to manage wounds and increased knowledge of evidence-based approaches to wound care.

One major factor that contributed to the program's sustainability was management's recognition that a staff member had to be tasked with spearheading, evaluating, and implementing strategies to improve the program. Client engagement has been another major emphasis for the SCCCAC. The program has focused on improving patient wound care outcomes, while simultaneously empowering patients to become part of their own healing process. To date, the organization has achieved impressive results in their efforts to build a sustainable evidence-based approach to wound care (Figure 9).

Discussion

Measuring indicators with home care agencies across Canada has been an enlightening journey. Outcome measurement facilitates organizational evolution 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 a sustainable best practice approach to wound care. Moreover, the objective measurement of indicators can empower agencies to steer the change process on their own terms and in ways that best serve the needs of their clients and their organization. In a sample of over 16,000 home care clients, 2772 of clients were receiving daily dressing changes and 412 clients were receiving twice daily dressing changes; the cost to the Canadian public for this service is approximately $65 million per year. The inclusion of these data is not intended as a recommendation for the abolishment of daily or twice daily dressing changes. Rather, it is intended to endorse the idea that many of these dressing changes could be done in a more efficient manner with newer technologies that decrease dressing frequency, and improve wound closure time. This is a more effective utilization of limited human and financial resources that are already overburdened.[13] All of the factors described here are integral to

successful implementation. It is presumptuous to argue that one factor in the change process is more important than another. However, the author's extensive engagement in the process suggests that outcome measurement is a key catalyst for change, a source of continuous empowerment for care providers, and the cornerstone for a sustainable best practice approach to wound care because it documents areas of success as well as areas of continued concern. Moreover, it provides ongoing evidence and feedback to sustain the momentum required to continually improve patient care through best practice interventions.

Conclusion

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 profitability. The outcome measurement process clearly demonstrates areas of improvement and highlights areas of concern 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. There are many factors that inform the effective delivery of a sustainable wound care program: the implementation of a multidisciplinary evidence based approach to wound care practice, ongoing education for all stakeholders, a clearly articulated process for knowledge transfer, the creation of a comprehensive strategic plan, a focus on manager accountability/receptivity, and increased communication opportunities. However, outcome measurement is an integral factor for sustainability because it offers meaningful evidence to inform and illuminate all other key aspects of a wound care program.

Outcome measurement is not a new concept. Researchers have valued the measurement of results since the dawn of empirical research.[9] However, an increased focus on the ways in which an examination of specific endpoints can elucidate broader strategic wound care program goals and objectives has opened up exciting new vistas of opportunity for home care agencies in Canada. Implementing and sustaining an evidence-based wound care program is a complex process that presents considerable challenges for all stakeholders. However, outcome measurement provides a concrete context and feedback for quality improvement, and 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 that inevitably exists whenever research evidence is utilized as the catalyst for changing human action.

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