

High Impact Practices

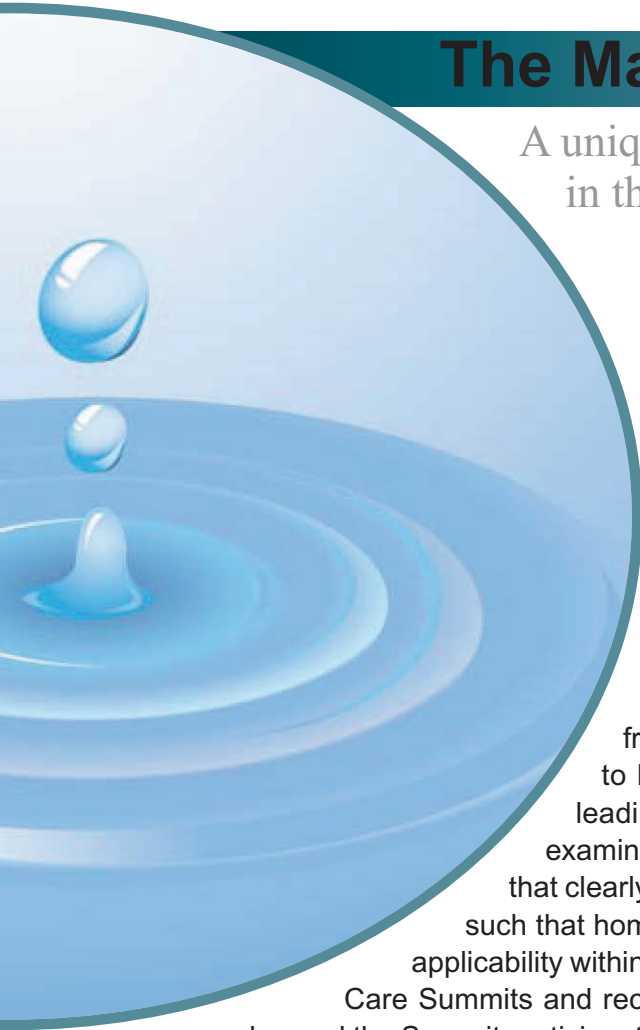
The Maximum Utility Program

A unique model for optimizing equipment management in the home and community care setting

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About High Impact Practices

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.



During the CHCA's annual Home Care Summit, health care leaders from across Canada and abroad share new and emerging approaches to home care and engage in dialogue about their experiences so that leading practices from across the country and, around the world, can be examined and adopted. Every year there are initiatives that stand out – those that clearly will impact the health care system. The potential of these practices is such that home care stakeholders want to hear more and are eager to explore the applicability within their respective jurisdictions. Building on the momentum of the Home Care Summits and recognizing the potential “ripple effect” of expanding the dissemination beyond the Summit participants, the CHCA has undertaken to document and publicize a selection of these innovative practices from across the country as High Impact Practices.

EACH OF THE HIGH IMPACT PRACTICES:

- **Promotes** home care that provides evidence-informed service delivery directed toward the achievement of health outcomes in the settings that best support the individual, and family
- **Enhances** the effectiveness of home care
- **Raises the awareness** of the ways that home care contributes to an effective health care system
- **Mitigates** rising health care costs and accentuates existing resources and expertise
- **Enables sharing** and transferring of knowledge, expertise and experience through networking and peer-to-peer learning.

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

KCI Medical Canada Inc. is the Canadian operations of Kinetic Concepts Inc. (KCI), a leading global medical technology company devoted to the discovery, development, manufacturing and marketing of innovative, high-technology therapies and products for wound care, tissue regeneration and therapeutic support systems. KCI's success is deeply rooted in innovation and a passion for significantly improving the healing, and the lives, of patients around the world.



The Maximum Utility Program

SUMMARY

Developed by KCI Medical in collaboration with a number of home care programs, this initiative achieves improved equipment utilization that results in increased cost savings and optimizes scarce human resources in home care. The program is about leveraging expertise in equipment utilization and management to support home care programs to better manage deployment of V.A.C.® Therapy¹ units to clients. Sometimes referred to as 'resource levelling', the technique is to manage the stock of resources in order to reduce both excess inventories and shortages. The goal is to achieve 100% utilization of equipment but with the need for cleaning and repairs that is essential for health care equipment, targets of 75% patient utilization is a realistic target.

The *Maximum Utility Program* is designed to maximize the utilization of home care owned and rented V.A.C. Therapy Units. This program, managed by KCI, facilitates the timely access and seamless use for patients who require this treatment, and for caregivers and home care staff who organize the logistics of delivery and return. By improving appropriate utilization, clients are better served, the return on investment for the equipment is increased and the home care program's overhead costs to manage the product are reduced.

Project Background

Health care organizations across the continuum are under pressure to become more efficient and to enhance client service. One way of increasing efficiency is to outsource their non-core business processes. By

working with an external partner, an organization can gain a new perspective on understanding demand, forecasting, and determining their current and future equipment requirements. Integrating and aligning with an external supplier that has expertise in equipment management and utilization results in a more cost-effective approach to resource management and can be a method of improving utilization and increasing client satisfaction.

Organizations that work with an experienced partner are able to lower administrative and operating costs, provide new services, improve customer satisfaction, and enhance focus on core business activities.

Foam-Interface Negative Pressure Wound Therapy (V.A.C. Therapy)

V.A.C. Therapy is the controlled application of sub-atmospheric pressure to a wound using a therapy unit to intermittently or continuously convey negative pressure to a wound dressing to help promote wound healing. The wound dressing, a specialized, open-cell foam surface, that assists tissue granulation and is sealed with an adhesive drape. A special drainage tubing enhances patient safety by regulating pressure at the wound site. In this way, the entire wound area is subjected to negative pressure. V.A.C. Therapy may be used for patients with chronic and acute wounds, diabetic wounds, pressure ulcers, meshed grafts or flaps.

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Paul Froggatt, Business Unit Executive, Home Care, KCI Medical Canada Inc.

Karen LaForet, National Business Development & Marketing Manager, KCI Medical Canada Inc.

Gordon Milak, Senior Director Performance Management & Accountability, South West CCAC

Project Background Cont ...

The *Maximum Utility Program* was designed to apply the theory of resource levelling on the management of equipment for wound care. Chronic wounds are complex and can be a significant source of suffering and morbidity in home care. Many individuals with these wounds suffer from multiple systemic co-morbidities that can delay or prevent healing. When a wound is hard to heal, it creates a significant burden on the patient's activities of daily living. Hard to heal wounds also create a financial burden on the health care system, consuming significant human resources. The number of individuals requiring community nursing services for chronic wound care has been gradually increasing. The duration of chronic wounds in approximately 25-30% of community-based patients is greater than six months, often associated with delayed or stalled healing, and complex medical needs.²

The aging population and increasing prevalence of diabetes mellitus are predictors of an increase in the number of individuals with slow healing wounds to be managed by the health care system. Many of these individuals will want to receive care at home; and indeed, home care programs participate in various wound management approaches, such as dressings, compression bandages, debridement, topical antimicrobials, skin grafting and V.A.C. Therapy.

Therapies that reduce the need for a home visit by a professional staff member are vital to enable the home care system to manage the increase in demand while experiencing an overall shortage of staff. The challenge for clinicians is to initiate effective therapeutic strategies in timely and cost-effective ways so as to manage the patient's symptoms and expectations and, where possible, achieve wound closure.³

V.A.C. Therapy has been proven to be effective on a wide range of complex wounds and requires minimal staff intervention. Once therapy is initiated, clients typically require home visits by a registered nurse three times per week: a reduction from the daily or twice daily visits that would, in some circumstances, otherwise be required. The nurse monitors the wound progression and changes the dressing and canister as required. The dressing is typically changed by a professional every 48 – 72 hours.

Depending on the mix of clientele, home care programs operate with a mix of owned and rented V.A.C. Therapy Units. Owned units are cost effective as long as they are in use by patients; but the administrative time and costs of processing, tracking, coordinating cleaning, repairing and transferring of the units from one patient to another can negate much of the financial benefits. V.A.C. Therapy was becoming an expensive proposition for home care programs and they needed to find a cost-effective business solution: one that minimized the amount of unit down time between patients.

While the unit rental option does not require as much oversight from the home care program, the per diem costs could be as much as 35% higher on average.⁴ Furthermore, nurses and caregivers in the community needed to be familiar with different administrative processes depending on whether the units were owned or rented. If incorrect return procedures were implemented, a unit could be out of circulation longer than necessary. Other delays typically occurred because of miscommunication, missing parts, and/or repairs.

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“With the new program, the delay in treatment is reduced when patients are discharged home.”

~ Surgeon, Toronto Ontario

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A strategy to improve the deployment of the units and maximize the cost savings so that more patients could benefit from V.A.C. Therapy was required. In partnership with the South West Community Care Access Centre (CCAC), KCI was challenged to develop a program that would maximize the return on investment for owned V.A.C. Therapy Units. This was the impetus behind the launch of KCI's *Maximum Utility Program*. The South West CCAC wanted an approach that would:

- Reduce the non-productive time for owned units (in transit, decontamination etc.)
- Reduce the amount of bureaucracy associated with tracking the units on the part of the CCAC
- Simplify the process for returning the units for the nurses and caregivers in the community
- Reduce the risk associated with contaminated units being transported via a variety of means and being received into the CCAC.

Implementation

After several months of consultation, process mapping and analysis, the *Maximum Utility Program* was launched in 2007 in Ontario. The Program was designed to improve deployment of the units, and the new administrative processes provided an opportunity for re-education about wound care. Nurses and case managers were provided support on the clinical use of the V.A.C. Therapy and educated on the new process for ordering and returning.

The concept

The program is based on a guaranteed 75% utilization of customer owned V.A.C. Therapy units, providing a set number of “entitlement” days per month towards the rental charge. The number of entitlement days is based on the number of customer owned V.A.C. Therapy Units set at a ratio of 75% of 30 days (23 days). For example, 10 owned units provide 230 “entitlement days” per month against the rental charge. This credit is not carried forward month over month so the mix of owned and rental units is carefully balanced.

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“Having started VAC while I was in hospital, it was an easy transition to continuing my treatment at home.”

~ Client, London, Ontario

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75% utilization was determined to be appropriate based on analysis of the clinical application of the device – whether it is used typically on chronic or acute wounds. Furthermore, the target was higher than most home care programs were able to achieve when managing the units on their own. And finally, it provided a realistic amount of time (an average of 7 days per month, or 25% of the month) for pick up, delivery, cleaning, quality control, repairs, packaging, and administration. The home care program is only invoiced for patient days exceeding the set monthly “entitlement days”.

The program also includes several replacement parts and repairs which means that there is no need for submission and approval of quotes for repairs between the client and the supplier. This expedites and enables ongoing maintenance of the equipment eliminating the need for loaner units.

How it works

Upon decision to place a patient onto V.A.C. Therapy, KCI is contacted and a unit is dispensed. The units can be ordered seven days per week. Delivery to the client is guaranteed by the next day, depending on the geographic region. Once therapy is completed, all units are returned directly to KCI for cleaning and quality assurance.

The home care program no longer worries about whether the unit is one that they own. KCI simply tracks all units, whether owned or rental and ensures that a unit is available on demand. KCI carries the responsibility for balancing inventory and demand.

Clients no longer have to wait for the specific unit owned by the home care program to be found and delivered. A unit is simply delivered and the utilization tracking is monitored by KCI.

In other words, if the home care program uses the V.A.C. Therapy Units frequently it will achieve a return on its owned units with a decrease in rental costs. The home care program is only invoiced for patient days exceeding the set monthly “entitlement days”.

Key Success Factors

Fundamental to the success of this initiative is the commitment by the home care program, frontline staff, nursing agencies and equipment supplier to work together to determine how best to streamline the administrative process for patient access to care. Other important factors to the success of the program include:

- Building a level of trust between partners
- Shared commitment to cost containment
- Focus on client outcomes
- Respect for client privacy

OUTCOMES

After six months on the program, the South West CCAC and KCI reviewed the utilization data and staff were surveyed to assess their level of satisfaction. Because all the units are managed by KCI, it was possible to generate meaningful data in order to assess prescribing practices, utilization and outcomes. Staff were pleased with the process and minor changes to the administration process were made in order to improve the level of detail for the CCAC.

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“...This new process has made it so much easier to provide patients with VAC wound care. Before it was such a headache!”

~ Case Manager

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For KCI, the program evolved from their commitment to produce innovative customer focused business solutions. It has resulted in reducing previously identified customer frustrations with a clinical modality that is vital to helping people recover at home. By working with the South West CCAC to improve efficiencies, optimize existing budgets and enable more patients access to V.A.C. Therapy, this program met the original objectives.

Due to centralized tracking, accurate data regarding utilization can be provided. Numbers of patient days, types of wound, prescriber, length of stay, and nursing agency rate of utilization are some of the reports available to help guide decision making.

IMPACT

In times of increasing fiscal accountability, it is vital that home care programs be able to track and improve their utilization of equipment and supplies. The *Maximum Utility Program* demonstrates a model for equipment management and tracking that helps to minimize the unnecessary cost burden by the home care program and assures that their owned units are utilized, tracked and maintained.

Ultimately the goal of home care programs is to decrease costs, increase efficiencies, develop partnerships and increase data for decision making.

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“The level of collaboration is the key to success.”

~ Gordon Milak, South West CCAC

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The *Maximum Utility Program* has resulted in:

- Decreased “down time” and increased use of owned V.A.C. Therapy units – from approximately 56% to 75% per month in 6 months at the South West CCAC.
- Reduced rental costs on a constant patient population
- Increased number of patients served while containing costs
- Decreased administration for the home care program. Some home care programs have anecdotally reported up to a 0.5 FTE savings
- Fewer complaints related to delivery and pick-up time and process
- Increased staff satisfaction as a result of a streamlined and simplified process

CONCLUSION

The demand for effective and efficient home care is a challenge facing the Canadian health system, in large part due to the growth of our aging population, the advances in technology and the economic realities of hospital care. Since the early 1990's home care programs have evolved and grown in response to changes in the acute care sector (bed closures, increase in ambulatory care clinics, and day surgery) and limitations in the long term care sector (waiting lists for beds, limited availability). Through this evolution, home care has emerged as an essential element of the health care system. As governments shift their policy focus from provision of care in an acute care setting to provision of care "closer to home", it is critical that home care programs and their partners work together to provide cost-effective service delivery models to meet the expectation of efficiency and enhanced client service.

The *Maximum Utility Program* is an example of this partnership and demonstrates how equipment suppliers can work effectively with home care programs to minimize administrative costs and improve product utilization ultimately to the benefit of the clients.

The Program has been adopted by several jurisdictions across the country.

For more information on the CHCA's High Impact Practices or other initiatives, contact www.cdnhomecare.ca

The CHCA defines home care

as an array of services, provided in the home and community setting, that encompass health promotion and teaching, curative intervention, end-of-life care, rehabilitation, support and maintenance, social adaptation and integration and support for the informal (family) caregiver.

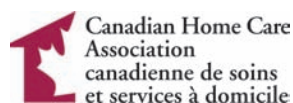
End Notes:

¹ V.A.C. Therapy is a negative pressure wound therapy system proprietary to KCI.

² Woo K, Alavi A, Botros M, et al. (2007) A transprofessional comprehensive assessment model for persons with lower extremity leg and foot ulcers. *Wound Care Canada*, 5(Suppl):S34-S47.

³ European Wound Management Association. (2008) *Hard-to-heal wounds: a holistic approach*

⁴ Based on data from initial pilot project



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