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**COLLABORATIVE  
APPRAISAL &  
RECOMMENDATIONS FOR  
EDUCATION**

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# Wound CARE Instrument

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**STANDARDS FOR WOUND MANAGEMENT  
EDUCATION AND PROGRAMMING**

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This document reflects the commitment of both the Canadian Association of Wound Care (CAWC) and the Canadian Association for Enterostomal Therapists (CAET) to evidence-informed best practices, guidelines and standards that deliver the best care possible for patients. The CAWC and CAET are also dedicated to translating the best available evidence into practical tools, frameworks and instruments that support the efforts of healthcare professionals to practice effective wound management and prevention for their patients.

This document provides a framework for the development of effective, evidence-informed wound management education and programming. It does not prescribe a curriculum for wound management education and programming. Curriculum should be developed from best practice guidelines and recommendations for effective wound management within the context of the community in which the institution or organization is operating. This document will assist in the development of wound management education and programming through a process that appraises the developmental framework and allows for recommendations for improvements.

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## **SUGGESTED CITATION**

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# INTRODUCTION

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*"Evidence shows that interprofessional education and collaborative patient-centred practice can positively impact current health issues such as: wait times, healthy workplaces, health human resource planning, patient safety, rural and remote accessibility, primary healthcare, chronic disease management and population health and wellness."*

- Canadian Interprofessional Health Collaborative, November 24, 2008

The need for knowledgeable and skilled clinicians to deliver acute and chronic wound care has grown exponentially over the last 15 years, creating an opportunity and a demand for basic and advanced wound care education for and from healthcare professionals. To meet the demand, wound care education has become available through educational institutions, online services, certification programs, professional association conferences and educational events, corporate sponsored wound education programs and webcasts, and the list goes on. However, in an effort to meet this demand and the pace for education, there has been little work to develop a set of standards to ensure or evaluate the quality of the wound care education in the market place. Are healthcare professionals receiving the quality education they need to support career-long learning that enables best practice for their patients?

The importance we place on effective, evidence-informed and outcome-driven health care requires healthcare professionals to be aware of the best available evidence for their clinical practice. Yet, with the amount of information and new research data doubling every 12 to 18 months (Virani & Bajnok, 2004), healthcare professionals are challenged to appraise, interpret and reconcile this information with their experiential knowledge and understanding of the clinical context while considering patient preferences.

We know that investing in the education of healthcare professionals will enhance an evidence-informed approach to wound management. Therefore, each year, Canadians invest significant human and financial resources into the provision of wound care by providing continuing education to healthcare professionals who help Canadians suffering from acute and chronic wounds. Healthcare professionals see learning as a career-long process that lies at the heart of their discipline, which must be planned, nurtured and managed in order to serve the needs of their patients (Falk Craven, Bassett DuHamel, 2003).

Administrators in government, regional health authorities, hospitals, long-term care and community-care facilities determine where and when to make public investments in professional education or skills training. In return, administrators and healthcare professionals require documented economic and patient health outcomes that show a positive result in response to their investment of public funds (Falk Craven, Bassett DuHamel, 2003).

## → INTRODUCTION

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The questions are: How do we translate the growing amount of rapidly evolving research and information into knowledge that can be used by healthcare professionals at the point of care delivery (Virani & Bajnok, 2004)? How can we be assured that the knowledge is delivered in an educational event or program that meets the highest standards?

Educational programs for wound management should be structured, organized and comprehensive. They also need to be updated and revised on a regular basis to incorporate new evidence and new technologies to enhance health outcomes. While there is a wide range of wound care education and associated programs available today, the evidence shows that professional educational programs achieve maximum benefits when targeted to the appropriate healthcare providers, patients, family members and caregivers, maximizing knowledge translation into practice and retention or sustainability (Registered Nurses Association of Ontario, 2007).

The Royal College of Physicians and Surgeons of Canada have recognized the need for professionals to have knowledge, skills and attitudes beyond their subject or clinical expertise. Within the subject expertise we can define the healthcare professional as expert and scholar. Successful professionals also need to have skills in healthcare systems as communicator, collaborator, and manager. And finally, each must consider their own personal growth to achieve a high level of performance in professionalism and health advocacy (Sibbald et al. 2007).

The Canadian Association of Wound Care (CAWC) and the Canadian Association for Enterostomal Therapy (CAET) agreed that there was sufficient evidence to support the publication of a standard for wound management education and programming that could be used by healthcare professionals and their employers to appraise existing and future investments in wound care education. By developing an instrument that encourages organizations to critically appraise and collaboratively recommend education, training and skills enhancement programs for healthcare professionals, the CAWC and CAET seek to influence the quality of wound management delivery and the overall health outcomes of patients across Canada.

In April 2010, the CAET and CAWC appointed a task force of wound care leaders (Appendix A) and asked them to evaluate the available evidence and make comprehensive recommendations that would help to ensure a collaborative, evidence-informed, unbiased, sustainable and patient-centred approach to wound management education and programming (Appendix B). We believe that the standards in this Wound CARE Instrument will ensure that the benefits of wound management education and programming will be achieved if the Wound CARE Instrument is utilized for the planning, implementation and evaluation of wound management education and programming. The resulting health and financial outcomes will benefit all Canadians both today and in the future.

## **PURPOSE AND OBJECTIVES OF THE WOUND CARE INSTRUMENT**

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The Wound CARE Instrument is designed to provide a set of standards that support healthcare providers, wound management leaders, educators, purchasing managers, administrators, organizations and health authorities to undertake a comprehensive, evidence-informed appraisal process before developing or introducing a wound management education initiative or program. As a set of standards they offer a minimum acceptable level of performance in the developmental process of wound management education and programming (Orsted, Keast and Campbell, 2007).

By providing a collaborative and evidence-informed approach to the appraisal and recommendation of wound management education and programming, we believe the Wound CARE Instrument standards can support decision-makers in their efforts to improve wound care knowledge and skills, and improve the health of patients at risk for or suffering from wounds.

### **THE WOUND CARE INSTRUMENT WILL:**

1. Provide a foundation to identify the components required to plan, develop, implement, evaluate and sustain evidence-informed wound management education and programming.
2. Provide a benchmark to appraise the quality of wound management education and programming.
3. Support collaboration in the development and implementation of wound management education and programming.
4. Inform decisions related to the endorsement, adoption, adaption, purchase or rejection of wound management education and programming.
5. Improve patient care and health outcomes relating to the prevention and management of wounds.

# THE WOUND CARE INSTRUMENT

## Who should use it?

- Leaders in organizations and institutions, including CEOs, directors, policy makers, managers, administrators or unit managers, as well as reimbursement and funding agencies, will benefit from using this Instrument. Anyone concerned with patient outcomes and cost effective use of healthcare resources and services will find the Wound CARE Instrument useful in ensuring the appropriate human and financial resources are supporting organizational objectives related to wound prevention and management effectively.
- Procurement departments, including the buyer or purchasing manager, will find the Instrument helpful in ensuring that the requirements for evidence informed wound management education and programming are met in the consideration of any wound management related product or service.
- Educators and developers of wound management education and programming from organizations, healthcare and educational institutions and industry will be able to critically appraise education and programming that affects the training of their learners.
- Key wound care leaders, such as wound care specialists, enterostomal therapy nurses or clinical managers will be able to critically appraise education and programming that affects patient care directly.
- Health professionals such as physicians, dietitians, podiatrists or chiropodists, social workers, and occupational and physical therapists will also find value in the appraisal process.

# THE WOUND CARE INSTRUMENT

## How to use it?

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To achieve optimal outcomes, the Wound CARE Instrument should be applied in an interprofessional collaborative method. A minimum of three stakeholders with diverse responsibilities within the organization or institution are required to appraise the wound care educational event or wound care program under review. Interprofessional collaboration for the appraisal and recommendations involves representation from administration, purchasing (if required), and a clinical expert with experience in wound management and/or wound management education.

- STEP 1:** Select educational event, initiative and/or program to be appraised and identify stakeholders to be involved.
  - STEP 2:** Stakeholders review the proposed or existing educational event or program, considering preliminary planning, planning and development, implementation, evaluation and sustainability.
  - STEP 3:** Each stakeholder appraises the event or program independently using the Wound CARE Instrument.
  - STEP 4:** Stakeholders meet to discuss their independent reviews and arrive collaboratively at a decision. Achieve consensus and decide to endorse, adopt, adapt, purchase or reject the education or program.
  - STEP 5:** The Instrument is then signed by each of the stakeholders and dated to document the appraisal and final recommendation. This record should be kept on file.
- NOTE:** Any conflict of interest needs to be addressed and the person(s) or company delivering or developing the wound management education or program should not be one of the appraisers. However, they can use the Wound CARE Instrument as a guide for the comprehensive development of their education initiative or program or for feedback on existing programs.

# AT A GLANCE

## Standards for Wound Management Education and Programming

<b>PHASE 1: STANDARDS FOR PRELIMINARY PLANNING</b>	<p><b>1.1</b> Organizational support obtained for:</p> <ul style="list-style-type: none"><li><b>1.1.1</b> A mandate for intended change related to new learning</li><li><b>1.1.2</b> Policy and procedure change based on new evidence</li><li><b>1.1.3</b> Alignment with organizational goals</li><li><b>1.1.4</b> Advocating and ensuring fair business practice</li></ul> <p><b>1.2</b> Environmental assessment conducted</p> <p><b>1.3</b> Practice-focused needs assessment conducted</p> <p><b>1.4</b> Strategic partnerships developed to ensure system-wide stakeholders are involved in change</p> <p><b>1.5</b> Fiscal and human resources have been considered and are in place</p> <p><b>1.6</b> On-site, contracted and/or external agency educators are trained in adult learning principles and evidence-informed curriculum</p>
<b>PHASE 2: STANDARDS FOR PREPARATION AND DEVELOPMENT</b>	<p><b>2.1</b> Curriculum has been developed through interprofessional collaboration</p> <p><b>2.2</b> Curriculum is:</p> <ul style="list-style-type: none"><li><b>2.2.1</b> Evidence informed</li><li><b>2.2.2</b> Based on adult learning principles</li><li><b>2.2.3</b> Reflective of knowledge, skill, attitude and behaviour learning</li><li><b>2.2.4</b> Current with revision plan in place</li></ul> <p><b>2.3</b> Curriculum is unbiased, generic and non-promotional</p> <p><b>2.4</b> Physical environment is optimized to support adult learning</p> <p><b>2.5</b> Promotion and publicity plans are in place</p>
<b>PHASE 3: STANDARDS FOR IMPLEMENTATION</b>	<p><b>3.1</b> Curriculum delivery is based on adult learning principles</p> <p><b>3.2</b> Curriculum is interprofessional and collaborative</p> <p><b>3.3</b> Objectives and key messages are clearly defined</p> <p><b>3.4</b> Learning is practice-focused</p> <p><b>3.5</b> Learning is patient-/client-centred</p> <p><b>3.6</b> Integration into practice strategies are identified</p>
<b>PHASE 4: STANDARDS FOR EVALUATION AND OUTCOMES</b>	<p><b>4.1</b> Measureable outcomes for the learner, organization, system and patient include:</p> <ul style="list-style-type: none"><li><b>4.1.1</b> Educational event outcomes (e.g. satisfaction with educational event)</li><li><b>4.1.2</b> Qualitative outcomes (e.g. practice change, quality of life for patients and healthcare professionals)</li><li><b>4.1.3</b> Quantitative outcomes (e.g. pre/post tests, skill testing, prevalence and incidence, economics)</li></ul>
<b>PHASE 5: STANDARDS FOR SUSTAINABILITY AND POST-IMPLEMENTATION PLANNING</b>	<p><b>5.1</b> Learning is flexible and adaptable to local resources</p> <p><b>5.2</b> Preceptorship and mentoring opportunities are in place</p> <p><b>5.3</b> Continuous measurement of integration of learning into practice</p> <p><b>5.4</b> Routine monitoring and identification of gaps in knowledge and practice</p>

# WOUND CARE INSTRUMENT

## For Collaborative Appraisal and Recommendation of Wound Management Education and Programming

### INSTRUCTIONS FOR USE:

A minimum of 3 appraisers are required. Each appraiser independently uses the Instrument to review and score the proposed wound management education or program.

**STEP 1:** Select educational event, initiative and/or program to be appraised and identify stakeholders to be involved.

**STEP 2:** Stakeholders review the proposed or existing educational event or program, considering preliminary planning, planning and development, implementation, evaluation and sustainability.

**STEP 3:** Each stakeholder appraises the event or program independently using the Wound CARE Instrument.

**STEP 4:** Stakeholders meet to discuss their independent reviews and arrive collaboratively at a decision. Achieve consensus and decide to endorse, adopt, adapt, purchase or reject the education event or program.

**STEP 5:** The instrument is then signed by each of the stakeholders and dated. This record should be kept on file.

Every statement has two choices: Score 1 if the standard has been substantially met; Score 0 if the standard has not been substantially met. Tally the sub-scores and comment on areas of strength or weakness to help you determine whether to *endorse, adopt, adapt, purchase* or *reject* the wound management education and/or program.

**NOTE:** Any conflict of interest must be addressed and the person(s) or company delivering or developing the wound management education or program should not be one of the appraisers. However, they can use the Wound CARE Instrument as a guide for the comprehensive development of their education initiative or program, or for feedback on existing programs.

PHASE 1:	STANDARDS FOR PRELIMINARY PLANNING	SCORE
1.1	Organizational support obtained for: 1.1.1. A mandate for intended change related to new learning 1.1.2. Policy and procedure change based on new evidence 1.1.3. Alignment with organizational goals 1.1.4. Advocating and ensuring fair business practice	
1.2	Environmental assessment conducted	
1.3	Practice-focused needs assessment conducted	
1.4	Strategic partnerships developed to ensure system-wide stakeholders are involved in change	
1.5	Fiscal and human resources have been considered and are in place	
1.6	On-site, contracted and/or external agency educators are trained in adult learning principles and evidence-informed curriculum	
<b>Comments:</b>		
<b>Sub-score</b>		/9

## → WOUND CARE INSTRUMENT

For Collaborative Appraisal and Recommendation of Wound Management Education and Programming

PHASE 2:	STANDARDS FOR PREPARATION AND DEVELOPMENT	SCORE
2.1	Curriculum has been developed through interprofessional collaboration	
2.2	Curriculum is: 2.2.1. Evidence informed 2.2.2. Based on adult learning principles 2.2.3. Reflective of knowledge, skill, attitude and behaviour learning 2.2.4. Current with revision plan in place	
2.3	Curriculum is unbiased, generic, and non-promotional	
2.4	Physical environment is optimized to support adult learning	
2.5	Promotion and publicity plans are in place	
<b>Comments:</b>		
<b>Sub-score</b>		<b>/8</b>

PHASE 3:	STANDARDS FOR IMPLEMENTATION	SCORE
3.1	Curriculum delivery is based on adult learning principles	
3.2	Curriculum is interprofessional and collaborative	
3.3	Objectives and key messages are clearly defined	
3.4	Learning is practice-focused	
3.5	Learning is patient-/client-centred	
3.6	Integration into practice strategies are identified	
<b>Comments:</b>		
<b>Sub-score</b>		<b>/6</b>

PHASE 4:	STANDARDS FOR EVALUATION AND OUTCOMES	SCORE
4.1	Measureable outcomes for the learner, organization, system and patient include: 4.1.1. Educational event outcomes (e.g. satisfaction with educational event) 4.1.2. Qualitative outcomes (e.g. practice change, quality of life for patients and healthcare professionals) 4.1.3. Quantitative outcomes (e.g. pre/post tests, skill testing, prevalence & incidence, economics)	
<b>Comments:</b>		
<b>Sub-score</b>		<b>/3</b>

## → WOUND CARE INSTRUMENT

For Collaborative Appraisal and Recommendation of Wound Management Education and Programming

PHASE 5:	STANDARDS FOR SUSTAINABILITY AND POST-IMPLEMENTATION PLANNING	SCORE	
5.1	Learning is flexible and adaptable to local resources		
5.2	Preceptorship and mentoring opportunities are in place		
5.3	Continuous measurement of integration of learning into practice		
5.4	Routine monitoring and identification of gaps in knowledge and practice		
<b>Comments:</b>			
<b>Sub-score</b>		/4	
<b>Total Score</b>		/30	
Signature and Date	Signature and Date	Signature and Date	Signature and Date
<b>NAME OF EDUCATIONAL EVENT OR PROGRAM:</b>			
<b>RECOMMENDATION:</b> Endorse              Adopt              Adapt              Purchase              Reject			
<b>Comments:</b>			

# THE WOUND CARE INSTRUMENT

## Phases of Wound Management Education and Program Development

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This Instrument was designed to address the key phases in the development and implementation of wound management education and programming (Baranoski and Benczewski 2007). The phases are:

**Phase 1: *Preliminary Planning*** is an often forgotten step that ensures the purpose and goal are considered beforehand.

This activity needs to be completed in a collaborative, comprehensive manner to successfully accomplish the remaining phases.

**Phase 2: *Preparation and Development*** ensures that the components of the design and planning of the wound management education or program are met.

**Phase 3: *Implementation*** supports the effective delivery of wound management education and programs.

**Phase 4: *Outcomes*** provide the elements needed to evaluate and measure the results post-implementation of wound management education and programs.

**Phase 5: *Sustainability and Post-Implementation Planning*** ensures that short- and long-term strategies are in place to maintain the benefits of the wound management education or program and to provide ongoing support and evaluation.

**Standards** are identified within each of the phases, followed by a discussion of the evidence.

Words identified in red are defined and described in the glossary.

## **DISCUSSION OF THE EVIDENCE:**

### **Standards for Wound Management Education and Programming**

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#### **PHASE 1:**

#### **Standards for Preliminary Planning**

##### **1.1 Organizational support obtained for:**

- 1.1.1 A **mandate for intended change** related to new learning
- 1.1.2 Policy and procedure change based on new evidence
- 1.1.3 Alignment with organizational goals
- 1.1.4 Advocating and ensuring fair business practice

*Consider: Educational events and/or programs often suffer from poor attendance and/or poor implementation if not fully endorsed by management. Getting “buy-in” from your organization before embarking on a new initiative is vital for success. Has organizational support been obtained?*

#### **DISCUSSION OF THE EVIDENCE:**

Kerfoot (2009) states that the work of leaders is to improve the organization and develop people who can participate positively and sustain the evolution of the organization to a higher level. Organizational leaders can align and set the strategic direction for change, establish structures and parameters for implementation, allocate human and fiscal resources, and stimulate change interest and commitment across a variety of stakeholders (e.g. clinicians, managers, educators, etc.). Support is needed for change agents who establish a climate for change, as well as implement and sustain change (Ginsburg & Tregunno, 2005). Implementation of **interprofessional education** (IPE) requires administrative support as they have the power to determine educational policies and control resources (D'Amour et al., 2004).

As healthcare responds to demand to contain costs and adapts business models, there is a potential for conflicts of interest to arise. It is imperative that strategies are in place to prevent or handle conflicts as they occur in order to build trusting relationships. Two strategies to reduce conflict are: 1) full disclosure of conflict; and 2) reviewing contracts for fairness (Willers, 2004).

Contracts with industry related to wound care education and wound care programs need to be engaged in with caution. It is critical that organizations establish an ethical framework in which healthcare professionals function appropriately in this situation (Packer and Parke, 2004). Therefore, a collaborative **procurement or tender process** needs to be in place for wound management education and programming contracts (for example a request for proposal that involves education and training as a **value-added service**) that includes purchasing, administration and **wound care leaders**.

The UK Institute of Business Ethics suggests a simple ‘test’ for ethical decision-making. Ask yourself:

1. **Transparency:** Am I happy to make my decision public, especially to the people affected by it?
2. **Effect:** Have I fully considered the harmful effects of my decision and how to avoid them?
3. **Fairness:** Would my decision be considered fair by everyone affected by it (consider all stakeholders: the effects of decisions can be far-reaching).

If you answer Yes to each of the above questions, then you are likely to be making an ethical decision. If you have any doubt about saying Yes to any of the questions, then you should consider the decision more carefully. Perhaps there is an entirely different and better solution – there often is.

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## → PHASE 1: Standards for Preliminary Planning

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### 1.2 Environmental assessment conducted

*Consider: Barriers impede learning and adoption of new practice. Is your organization ready to adopt change? Are there other conflicting events or resource issues that may impact the integration of learning into practice? Is the timing right?*

#### DISCUSSION OF THE EVIDENCE:

It is important to determine organizational readiness for change. An organization's circumstances and needs must be fully analyzed prior to implementation of a change initiative (Argyris, 1970; Ginsburg & Tregunno, 2005). An environmental assessment involves the process of gathering and examining information to obtain an accurate and thorough picture of the environment. The practice environment can exert a powerful influence on practitioners that can encourage or discourage the process of evidence transfer and use. An environmental assessment identifies structural, social and patient-related factors that can interfere with change initiatives. Structural factors include decision-making structures, workload and available resources. Social factors include the politics and personalities involved, and the culture and belief systems in place. Even patient-related factors, including patient willingness or ability to adhere to evidence-informed recommendations, will affect implementation of change (RNAO BPG Toolkit). Once analyzed, the information is then used to set goals, develop a plan of action and allocate resources ([www.gov.ns.ca/StepsinConductingaNeedsAssessment.pdf](http://www.gov.ns.ca/StepsinConductingaNeedsAssessment.pdf)).

### 1.3 Practice-focused needs assessment conducted

*Consider: If a learner doesn't feel the need to learn, they are not likely to value the educational event and/or program. Have you determined that the educational event and/or program is needed by the learner?*

#### DISCUSSION OF THE EVIDENCE:

A practice-focused assessment or **gap analysis** needs to be completed to determine if there is a gap between current practice and evidence informed practice. Kitson and Straus (2010) identify the need for gap identification between the evidence and what is actually being practiced. A needs assessment determines the size and nature of the gap between current practice and the desired knowledge, skills, attitudes/behaviours and outcomes. A learning needs survey provides a solid foundation to determine what a learner wants and needs to know. It can also assist educators in identifying what learners do not know. Perceived needs may come from learner surveys or interviews, however, unperceived needs must be obtained from audits and incident reports. Kruger and Dunning (1999) propose that those with limited knowledge in a domain suffer a dual burden: Not only do they reach mistaken conclusions and make regrettable errors, but their incompetence robs them of the ability to realize it.

### 1.4 Strategic partnerships developed to ensure system-wide stakeholders are involved in change

*Consider: Are you involving others that will or could be affected by the education or program? Is the initiative a collaborative effort to ensure successful implementation system-wide, not just for one specific department?*

#### DISCUSSION OF THE EVIDENCE:

Organizational literature states that the use and ongoing involvement of champions or opinion leaders are key to overcoming structural barriers to successful organizational change (Barker, Bosco and Oandasan, 2005; Irvine et al., 2002; Gustafson et al., 2003). The development of collaboration between team members is facilitated by leaders who know how to convey the new vision (Barker et al., 2005; D'Amour et al., 2004; Ginsburg and Tregunno, 2005; Leathard, 2003). Department heads and associate directors should also be involved since they are more likely to support a change

## → PHASE 1: Standards for Preliminary Planning

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if they believe that successful outcomes will promote their organizational goals (Gustafson et al., 2003) and if they feel involved in planning for the change (Ginsburg and Tregunno, 2005; Rousseau and Tijoriwala, 1999). A knowledge exchange strategy combines expertise, competencies and evidence-informed practices to reduce duplication and realize the full potential of innovations to advance interprofessional education and collaborative practice. If system-wide uptake of knowledge is not planned, then progress is piecemeal rather than transformative. Planners and developers of wound programs and educational initiatives must recognize the limitations of **silo approaches** (Canadian Interprofessional Health Collaborative).

The governance and management structures should also offer a collaborative environment for all participating disciplines such as: greater collaboration in curriculum development; control of resources; and promotion of educational changes that agree with those occurring in the workplace. The governance structure should make it imperative that faculties recognize and contribute to solutions that overcome traditional faculty barriers (Oandasan and Reeves, 2005).

### **1.5 Fiscal and human resources have been considered and are in place**

*Consider: Is there financial support for your event? Are the learners able to attend? Are there both financial and human resources available to support change in practice?*

#### **DISCUSSION OF THE EVIDENCE:**

Healthcare practices are influenced by the context (or physical environment) in which they occur. Economic, social, political, fiscal, historical and psychological factors, as well as decision making, staff relationships, organizational systems, power differentials and the potential of the organization to innovate, can all impact the transfer of knowledge into practice (McCormack et al., 2002). The environment can be seen as force-fields that are constantly changing and never remain static. Thus, decision makers need to be engaged with educational initiatives and program development to support resource alignment. McCormack et al. (2002) state that one of the challenges to the development of health care practice is the contradiction between a market-driven health care environment and the values of a person-centred practice. By acknowledging the many aspects of context and by working together, both can be achieved.

### **1.6 On-site, contracted and/or external agency educators are trained in adult learning principles and evidence-informed curriculum**

*Consider: Are the persons delivering the education and/or program appropriately trained educators who are knowledgeable about the development and delivery of education, as well as being qualified experts regarding the subject area?*

#### **DISCUSSION OF THE EVIDENCE:**

Harvey et al. (2002) discuss the role of facilitation in translating evidence into practice, and in helping individuals and teams understand what they need to change and how they need to change it.

However, possession of expertise by the educator does not guarantee that individuals will learn. Knowledge must be transformed into instruction and that instruction must be designed, planned and structured to facilitate learning (Forrest, 2004). Comprehensive educator or faculty development programs represent a crucial element in supporting a cultural change towards IPE. Faculty development can influence change by developing role models and mentors,

## → PHASE 1: Standards for Preliminary Planning

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supporting role integration for health professionals involved in a collaborative practice, and addressing barriers to teaching and learning that exist at both the individual and the organizational level (Steinert, 2005; Wilkerson and Irby, 1998). Hall and Weaver (2001) identified additional factors associated with positive educational outcomes:

- Faculty development – Education for faculty must be provided in order to encourage participation and faculty ‘buy-in’.
- Teaching methods – Non-traditional teaching methods, such as interdisciplinary problem-based learning, service/learning.
- Role-blurring – Despite resistance on the part of participants, the blurring of roles is necessary for interdisciplinary team functioning.
- Non-clinical skills – Group skills, communication skills and conflict resolution skills should all be taken into account in IPE.

In the context of IPE, a comprehensive faculty development program should address both individual and organizational development (Steinert, 2005; Wilkerson and Irby, 1998). At the individual level, faculty development should either promote or contribute to:

- addressing attitudes and beliefs that can impede successful IPE and collaborative patient-centred practice;
- transmitting knowledge about interprofessional learning, practice and teaching; and
- developing skills in teaching, curriculum design and interprofessional work.

At the organizational level, faculty development should help to:

- create opportunities for learning together;
- empower teams and reward collaborative practices; and
- address systems issues that can impede IPE.

## **PHASE 2:**

### **Standards for Preparation and Development**

#### **2.1 Curriculum has been developed through interprofessional collaboration**

*Consider: Due to the complex nature that illness presents, a variety of healthcare professionals with specialized expertise are often required to create educational events and programs.*

#### **DISCUSSION OF THE EVIDENCE:**

Interprofessional education (IPE), defined by the Centre for the Advancement of Interprofessional Education, occurs when “two or more professions learn with, from, and about one another, to facilitate collaboration in practice” (Centre for the Advancement of Professional Education, 1997). When healthcare professionals collaborate side-by-side with mutual respect, the experience and wisdom shared positively impacts patient care outcomes. According to Health Canada, the manner in which health providers are educated is key to achieving system change, and ensures that health providers have the necessary knowledge and training to work effectively on interprofessional teams within the evolving health care system (Health Canada: Interprofessional Education for Collaborative Patient-Centred Practice). Health Canada describes interprofessional education as learning together to promote collaboration. It involves:

- Socializing health care providers in working together, in shared problem solving and decision making, towards enhancing the benefit for patients, and other recipients of services.
- Developing mutual understanding of, and respect for, the contributions of various disciplines.
- Instilling the requisite competencies for collaborative practice.

#### **2.2 Curriculum is:**

- 2.2.1 Evidence informed
- 2.2.2 Based on adult learning principles
- 2.2.3 Reflective of knowledge, skill, attitude and behaviour learning
- 2.2.4 Current with revision plan in place

*Consider: Any education or program development must reflect the most recent evidence, be built on a strong foundation involving knowledge, skills and attitude to provide best practice, and accommodate a variety of learning styles. Because the body of knowledge is constantly evolving a revision plan is paramount. Does the education and/or program curriculum reflect these points?*

#### **DISCUSSION OF THE EVIDENCE:**

Evidence-informed practice involves a dynamic process of weighing available evidence against what is known to work in your local setting (Towards evidence informed practice, 2010). In the discovery of the evidence educators should look for the highest-level resource available. Haynes (2001) recommends a 4S approach to the discovery method: 1) Studies, such as found at Medline, 2) Syntheses, such as databases of systematic reviews, 3) Synopsis of studies and reviews, and, 4) Systems, such as computer decision supported systems. Examples of syntheses are the Cochrane Collaboration and clinical practice guidelines, which provide a union of current evidence and recommendations.

Finding the best evidence may be challenging (Ryan et al., 2003), and discovering the quality and value of the research is yet another step (Woodbury 2004). In addition, it is also important that any data collection tools or instruments used are validated and reliable, measuring what they purport to measure.

## → PHASE 2:

### Standards for Preparation and Development

Evidence-informed practice or evidence-based medicine increases professional responsibility and authority and provides a much more secure basis for decision making. It enhances the healthcare provider's capacity for clinical autonomy within organizations and societies that require public accountability and/or at least allows more open decisions making. It is crucial that health professionals have the requisite skills to use evidence-based medicine/practice responsibly and to withstand its misapplication for purposes other than best practice (Donald, 2002).

**Adult Learning or andragogy** is a systematic framework of assumptions, principles and strategies that look at the way adults learn best (Knowles, 1984). Adult learning differs from learning for the first time (or pedagogy) in that it builds on individual experiences and self-directed learning (Sibbald et al. 2007). Adult learning programs need to be developed to support:

1. **Mutual respect:** Learners feel safe and supported, individual needs and uniqueness are honored and abilities and experiences are acknowledged and respected.
2. **A supportive environment:** Fosters intellectual freedom, experimentation and creativity.
3. **Collaboration:** Faculty treats learners as peers, and learners are accepted and respected as intelligent experienced adults whose opinions are listened to, honored and appreciated. Faculty members learn as much from their learners as the learners learn from them.
4. **Self-directed learning and mutual planning:** Learners take responsibility for their own learning. They work with faculty to design individual learning programs which address what they need and want to learn in order to develop and grow in their profession.
5. **Intellectual challenge:** Challenges learners just beyond their present level of ability. If challenged too far beyond, learners may give up. If challenged too little, they may become bored and learn little. Those who reported experiencing high levels of intellectual stimulation, to the point of feeling discomfort, grew more.
6. **Interactive learning:** Learners and faculty interact and dialogue rather than passively listen to lectures. Learners try out new ideas and exercises and experiences are used to enhance facts and theory.
7. **Regular feedback mechanisms:** Learners can tell faculty what works best for them and what they want and need to learn and in turn, faculty make changes based on learner input.
8. **Personal discovery:** Learning can be a personal, emotional and even painful experience.

*(Bankert and Kozel 2005; Norman, 1999; Knowles, 1984, Sibbald et al 2007)*

The Canadian Nurses Association states that, to provide **best practice** through competent nursing care, a registered nurse must maintain and continuously enhance three types of learning. They believe that knowledge, skills, and attitude/judgment are required to meet client needs in an evolving health care system (Canadian Nurses Association). Knowledge, skills, and attitude/judgment learning are part of Bloom's Taxonomy of Learning Domains. These domains reflect learning behaviours that can be thought of as goals for the education or training process. That is, after the education or training session, the learner should have acquired new knowledge, new skills and new attitudes. Bloom's taxonomy is the most widely applied theory in today's educational and training world (Bloom et al., 1956).

With information doubling every 12 to 18 months, wound management education and programming needs to have a revision plan in place to ensure that it provides current information. The RNAO Best Practice Guidelines Program provides a complete review and revision of their existing guidelines every 3 years, supplying evidence to educators and setting a pattern for educational program review.

## → PHASE 2:

### Standards for Preparation and Development

#### 2.3 Curriculum is unbiased, generic and non-promotional

*Consider: Professional education and/or programming should not focus on specific products but on the process by which patient outcomes are optimized. Is the education and/or program unbiased, generic and non-promotional?*

#### DISCUSSION OF THE EVIDENCE:

Strong opinions have surfaced around industry involvement in educational development and delivery (Heaphy and Marrow, 2004; Packer and Parke, 2004; Morris and Taitzman, 2009). The proportion of University Continuing Medical Education/Continuing Professional Development (CME/CPD) Office funds that come from industry is highly variable across the country and several initiatives have begun to address industry and education conflicts.

One survey showed that some offices of CME strongly believe that the pharmaceutical and medical device industries should have no role in continuing medical education whatsoever, while others hold an equally strong belief that CME needs their involvement in order to survive.

Due to recent concerns, the Association of Faculties of Medicine Standing Committee on Continuing Professional Development (SCCPD), comprised of CME professionals from Canada's 17 medical schools and stakeholder organizations, felt that a document outlining its position on the relationship between university CME/CPD offices and industry is now needed (Association of Faculties of Medicine Standing Committee on Continuing Professional Development, 2010). Also, the Council of Medical Specialty Societies "Code for Interactions with Companies" will address transparency and independence, CME and non-CME funding issues in a new document soon to be released (Council of Medical Specialty Societies, 2010).

The Standards for Commercial Support from the Accreditation Council for Continuing Medical Education (2007) recognized by the Royal College of Physicians and Surgeons state that CME providers must ensure that decisions made regarding CME are free of the control of commercial interest. They identify 6 standards regarding CME activities: 1) independence, 2) resolution of personal conflicts of interest, 3) appropriate use of commercial support, 4) appropriate management of associated commercial promotion, 5) content and format without commercial bias, and 6) disclosure relevant to potential commercial bias. The ACCME (2009) states that even if the conflicts of interest are resolved, industry cannot be involved in the teaching of CME activities if it relates to their products.

Wound management education specific to a product or service is to be generic, except for **academic detailing**. Academic detailing or product in-servicing involves the delivery of evidence-based healthcare and therapeutics information via a personal visit by a trained person (such as a product sales representative), to a health provider(s) in their practice setting with the intent of changing the provider's prescribing behaviour (Bacovsky 2006).

Nurses are not immune to the conflict of interest that physicians often face. The same industries that have been sponsoring physician continuing education programs also sponsor continuing educational programs for nurses (Elen, 2008). When in doubt, the Canadian Nurses Association ethics guideline offers this statement; "Nurses identify and address conflicts of interest. They disclose actual or potential conflicts that arise in their professional roles and relationships and resolve them in the interest of persons receiving care." Jutel and Menkes (2009) state that with the promotion of the nurse prescribing, understanding the complexities of marketing and persuasion should be part of nursing education, nursing research and healthcare policy.

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## → PHASE 2: Standards for Preparation and Development

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Concerns have also been raised over the involvement of industry in guideline development bringing ethics into question (Choudhry et al., 2002). Since clinical practice guidelines are not all created equal, an international collaboration of researchers and policy makers created a tool called the AGREE Instrument to assist clinicians in determining the rigor of the developmental process. This tool establishes a shared framework to assess guideline development, reporting and assessment ([www.agreecollaboration.org](http://www.agreecollaboration.org)).

### 2.4 Physical environment is optimized to support adult learning

*Consider: Having a quality program does not ensure that you have connected with the learner. Teaching requires an environment that facilitates learning. Is the education and/or program taught in a conducive environment that optimizes the learning experience?*

#### DISCUSSION OF THE EVIDENCE:

Learning requires a safe space to share experiences, ideas and opinions. Learners need to feel they can trust and accept each other's differences to allow and stimulate learning. Therefore, the time and space allotted for learning are both important. Just as a safe place is important for patients so is it important to provide quality in the educational experience (Lepp, 2002). The typical classroom setup is the least conducive to learning as it supports one way learning, while tables of 5 or 6 allow for learning to occur from each other. Interactive learning and hands-on activities often involves more space and more time allowing for collaboration and reciprocal dialogue and this needs to be built into any wound management education or program design (Bankert and Kozel, 2005). Consideration should be given to the opportunities for a virtual or online classroom experience.

### 2.5 Promotion and publicity plans are in place

*Consider: Everything is in place but no one shows up BECAUSE THEY DIDN'T KNOW ABOUT IT! Are the initial and ongoing education events or programs promoted throughout the organization on a regular basis to encourage optimal participation?*

#### DISCUSSION OF THE EVIDENCE:

Healthcare professionals need incentive to buy in to a new way of providing care. Landrum (1998) says we need to focus on "an exchange"; meaning there must be 2 or more parties with something of value to one another. Innovation and improvement are two key words that can induce change, but they need to be promoted and publicized. It is recommended that the timeline for promotion is 16 weeks before the educational event or program. Considerations for promotion are based on budget limitations, available resources, and mailing lists (Baranoski and Brenczewski, 2007). Promotion and marketing of the educational event or program will be well received if it comes from valued opinion leaders who have a high regard for the educational event or program. Flyers, posters and cards can advertise a controlled positive message communicating the value of the educational initiative to many people simultaneously (Landrum, 1998). Brochures should include program title, date, time, place, program description, target audience, program schedule, speaker credentials and experience, registration information, CE information, cancellation/refund policy and phone numbers. The content must capture the attention and interest of the audience (Baranoski and Brenczewski, 2007). The learner's needs, the educational objectives and the education or program content are often the deciding factors in selecting or attending a program.

## PHASE 3:

### Standards for Implementation

#### 3.1 Curriculum delivery is based on adult learning principles

*Consider: Multiple modalities of delivery are required to accommodate the different learning styles that learners bring to the event or program. Is the education and/or program interactive and based on adult learning principles?*

#### DISCUSSION OF THE EVIDENCE:

The process of educational delivery is just as important as the content being delivered. Adult learners need to be supported in learning activities based on adult learning principles in order to discover the personal meaning and relevance of new ideas. Educational events alone do not ensure a change towards evidence-informed practice. The process of **interactive learning** engages the adult learner, making the learning more meaningful. Some methods to support interactive learning are the use of small learning groups, debates, question-and-answer sessions, case studies, enablers and audience response systems (Sibbald et al., 2007). For healthcare professionals, the alignment of interactive educational interventions in the context of the stage of learning assists in moving learning from awareness of a need to change to the integration of the new concepts into practice (Davis and Davis, 2010).

ALIGNMENT OF EDUCATIONAL INTERVENTIONS IN THE CONTEXT OF LEARNING BY HEALTH PROFESSIONALS				
CONTINUUM OF LEARNING OR CHANGE	AWARENESS	AGREEMENT	ADOPTION	ADHERENCE
ELEMENTS OF CHANGE	Predisposing elements	Enabling strategies		Reinforcing elements
POSSIBLE ROLES FOR EDUCATIONAL INTERVENTIONS	Conferences, lectures, rounds, print materials	Small group learning activity, interactivity in lectures	Workshops; materials distributed at conferences; audits and feedback	Audit and feedback; reminders

#### 3.2 Curriculum is interprofessional and collaborative

*Consider: Designing the educational event and/or program using interprofessional collaboration is important but so is the delivery – it facilitates learners becoming interprofessional in practice and promotes the value of a healthcare team. Does the education and/or program provide opportunities for interprofessional educators?*

#### DISCUSSION OF THE EVIDENCE:

A key motivator for educating interprofessionally is the need to develop healthcare professionals who understand and value the contributions of other professionals with respect to patient and health outcomes (Horsburgh et al., 2001). IPE must be considered by educators in health professional schools, as interprofessional care is considered the best model of care for many vulnerable groups (e.g. frail elderly individuals, palliative care patients). These vulnerable groups require coordinated care (Drinka and Clarke, 2000; Zwarenstein, 2005), as each health profession is necessary but insufficient to deliver the complex care that patients often require for optimal management (Borduas et al., 2006). The knowledge and skills required by health professions are increasingly overlapping. The current environment for the delivery of health services has caused clearly defined roles and responsibilities of individual health professions to be blurred, thus requiring health professionals to be “adaptable, flexible, collaborative team workers with highly developed interpersonal skills” (Horsburgh et al., 2001; p. 876). In order for positive outcomes to occur from interprofessional learning, a number of key characteristics and/or conditions must be present. Parsell and Bligh (1999) have identified the following important factors:

## → PHASE 3

### Standards for implementation

- **Relationships** – develop an understanding of the common goals as well as the values and beliefs of different professional groups.
- **Collaboration and teamwork** – develops knowledge and skills of how to work effectively with other health professionals in order to collaborate and work in a team-based setting.
- **Roles and responsibilities** – allow participants in an interprofessional learning setting to have an understanding of what people actually do.
- **Benefits** – provide knowledge of the benefits of an interprofessional approach for patients, professional practice and personal growth.

Supporting high-performance teams may represent a significant force for collaborative practice and IPE implementation. Such teams have a shared purpose, clear goals, standards for performance, competent members, a result-oriented direction, collaborative climate, external support and recognition, and fair and impartial leaders (Davis, 1995; Gilbert, 2005; Gilbert et al., 2000; Gitlin et al., 1994; Eva, 2002).

#### 3.3 Objectives and key messages are clearly defined

*Consider: Have the learning objectives been clearly defined and the key messages reinforced throughout the educational event or program to keep both educators and learners on track towards the learning goals?*

**DISCUSSION OF THE EVIDENCE:** Citing objectives as learning outcomes of instruction provides a basis for selecting the content, activities, methods and materials of instruction that will affect student learning (Baker, 2008). Writing learning objectives requires thought and consideration, but once the desired outcomes are known the objectives can be written by considering the audience, behaviours, conditions and degrees. In 1956, Benjamin Bloom headed a group of educational psychologists who developed a classification of levels of intellectual behaviour important for learning. Bloom's Taxonomy can be applied to create learning objectives by choosing the verb that fits the appropriate learning domain; cognitive (knowledge), psychomotor (skills) and affective (attitude) and expected learning outcome (knowledge, skills or attitude). The domains are also split into levels ranging from basic to highest order. The verb chosen for the learning objective can be changed according to these domains and levels in order to vary the difficulty or entirely change the degree of the outcome.

#### BLOOM'S SIX LEVELS OF COGNITION (KNOWLEDGE LEARNING) FROM LOWEST LEVEL (1) TO HIGHEST (6) ARE:

1. **Knowledge:** Rote memorization, recognition, or recall of facts
2. **Comprehension:** Understanding what the facts mean
3. **Application:** Correct use of the facts, rules, or ideas
4. **Analysis:** Breaking down information into component parts
5. **Synthesis:** Combination of facts, ideas, or information to make a new whole
6. **Evaluation:** Judging or forming an opinion about the information or situation

#### THE SEVEN MAJOR CATEGORIES WITHIN THE PSYCHOMOTOR DOMAIN (SKILL LEARNING) FROM THE SIMPLEST TO MOST COMPLEX ARE:

1. **Perception:** Ability to use sensory cues to guide motor activity
2. **Set:** Readiness to act mentally, physically and emotionally in response to a situation
3. **Guided response:** Imitation, trial and error. Learning a skill through practice
4. **Mechanism:** Intermediate stage in learning a skill. Responses are becoming habitual and performed with confidence and proficiency

## → PHASE 3

### Standards for Implementation

5. **Complex Overt Response:** Performing without hesitation, automatic, quick, accurate and highly coordinated performance
6. **Adaptation:** Skill is well developed and can now be modified to meet special requirements
7. **Origination:** Create new movement to meet a specific problem or need

#### THE FIVE CATEGORIES IN THE AFFECTIVE (ATTITUDE LEARNING) DOMAIN, FROM THE SIMPLEST BEHAVIOUR TO THE MOST COMPLEX ARE:

1. **Receiving phenomena:** Awareness, willingness to hear, selected attention
2. **Responding to phenomena:** Active participation, attends and reacts, willingness to respond
3. **Valuing:** Attaching worth to an object, phenomena or behaviour, acceptance and/or commitment
4. **Organization:** Organize values into priorities by comparing, relating and synthesizing
5. **Internalizing values:** Value system controls behaviour

Ideally, each of these domains should be covered in every course and at least one objective should be written for each domain. Depending on the nature of the course, a few of these domains may need to be given more emphasis than the others.

#### 3.4 Learning is practice-focused

*Consider: Only when learning is applied to practice will practice change occur. Does the education and/or programming revolve around the practice changes that need to occur and does it directly relate to the learner's practice?*

#### DISCUSSION OF THE EVIDENCE:

Learning needs to be practice-focused since learning occurs for work, at work and through work (Wenger, 1996). In a similar approach, Schön (cited in Heath, 1998) states that a practice-focused learner reflects in action (during the event) and on action (after the event). Reflection during and after a clinical event is the bridge between study and experience, and can be highly motivating (Cox, 2005). For this reflective process to occur we need to keep learning as close to practice as possible (Wenger, 1998). Heath (1998) combines the reflective work of Schön with the novice to expert concepts of Benner to demonstrate that theory and experience combined with reflective practice can support the growth from competent practice to expert practice.

Teaching close to the bedside or clinical teaching occurs when patient care and teaching are delivered simultaneously, providing direct instruction and role modeling (Irby and Bowen, 2004). The educational role involves planning, using multiple methods of teaching, evaluation and promoting self-reflection.

#### 3.5 Learning is patient-/client-centred

*Consider: No matter what the evidence states, learning needs to consider that individual care cannot change until the patient/client has been considered and, when able, consulted. Does the education and/or program consider the patient's needs?*

## → PHASE 3

### Standards for Implementation

#### DISCUSSION OF THE EVIDENCE:

Interprofessional wound caring requires that professionals learn to develop patient-centred and individualized plans of care. Wound care providers need to be taught to nurture trust by listening to and acknowledging the viewpoints of patients, families, and caregivers. This trust will lead to the confidence that heals wounds, patients, and lives (Krasner et al., 2007).

Patient-/client-centred care offers an approach where clients are viewed as whole, allowed advocacy, empowered, and at the same time respects the client's autonomy, voice, self-determination, and participation in joint decision making. The Registered Nurses' Association of Ontario (RNAO) Client Centred Care guideline strongly reflects the principles of primary healthcare as stated by the World Health Organization at Alma-Ata 1978 (WHO, 2005) listed below:

Accessibility	Allows reasonable access to essential health services with no financial or geographic barriers.
Appropriate Technology	Technology and modes of care should be based on health needs, and appropriately adapted to the community's social, economic and cultural development.
Community Participation	Communities are encouraged to participate in planning and decision making about their health.
Prevention and Health Promotion	Health systems focus on helping people stay well rather than treating the ill.
Intersectoral Collaboration	Professionals from various sectors work with community members to promote the health of the community.

#### 3.6 Integration into practice strategies are identified

*Consider: There are many bridges and barriers to change. When there is a move towards best practice, learners need the opportunity to discuss and problem solve on what will support or hinder change. Does the education and/or program allow for reflection and development of strategies to support practice change?*

#### DISCUSSION OF THE EVIDENCE:

Kitson et al. (1998) acknowledged that there are many interdependent factors that influence the implementation of evidence into clinical practice. Successful implementation is connected to the relationship between the evidence, the context and the facilitation. Simply stated we need to get the evidence straight... and get the straight evidence used. But we need to recognize that in doing this we need to have support for the practice change that impacts all three relationships; 1) the evidence is robust, 2) the **context** is receptive to accept change and 3) the change process is effectively facilitated. Educational programs need to provide strategies to support the learner in moving their new learning into practice. These strategies will assist in identifying bridges towards change and the elimination of barriers that obstruct change.

Glasziou and Haynes (2005) describe a research to practice pipeline that moves the evidence through the following steps: awareness, acceptance, applicable, acted on, agreed to and, finally, adhered to. To gain adherence, educators need to view the intended change through the eyes of the clinician. The clinician will want to know the following to determine whether they will adopt or reject the program or initiative being proposed:

1. **Relative advantage:** The degree to which the initiative is perceived as being better than the idea it supersedes
2. **Compatibility:** How closely the initiative fits with existing values
3. **Complexity:** How difficult the initiative is to understand and use
4. **Trialability:** The degree to which the initiative may be experimented with
5. **Observability:** The degree to which the innovation offers visible results (Landrum, 1998)

## PHASE 4:

### Standards for Evaluation and Outcomes

#### 4.1 Measureable outcomes for the learner, organization, system and patient include:

- 4.1.1 Educational event outcomes (e.g. satisfaction with educational event)
- 4.1.2 Qualitative outcomes (e.g. practice change, quality of life for patients and healthcare professionals)
- 4.1.3 Quantitative outcomes (e.g. pre/post tests, skill testing, prevalence and incidence, economics)

*Consider: What was the impact of the education and/or program? Did it make a difference? Was the impact evaluated using several methods?*

#### DISCUSSION OF THE EVIDENCE:

Harris and Shannon (2008) state that the greater the knowledge and skills of the nurse, the better the patient outcomes (i.e. cost, debridement, documentation of teaching, use of advanced wound care dressings). In order to determine if expected outcomes have been met, both educational events and wound management programs must be evaluated. A range of educational outcomes can be measured utilizing the modified Kirkpatrick's Model of Educational Outcomes (Freeth, Hammick, Koppel et al., 2002). They can be further identified as either short or long term to assist in realistic goal setting. Ideally, specific target dates should be set, since "ongoing" is not a target and does not confirm the goal or outcome has been met.

MODIFIED KIRKPATRICK'S MODEL OF EDUCATIONAL OUTCOMES FOR INTERPROFESSIONAL EDUCATION		
EDUCATIONAL OUTCOME	DESCRIPTION	GOAL SETTING
Reaction	Learners' views on the learning experience and its interprofessional nature.	Short term
Modification of attitudes/perceptions	Changes in reciprocal attitudes or perceptions between participant groups. Changes in perception or attitude towards the value and/or use of team approaches to caring for a specific client group.	Short term → long term
Acquisition of knowledge/skills	Including knowledge and skills linked to interprofessional collaboration.	Short term
Behavioural change	Identifies individuals' transfer of interprofessional learning to their practice setting and changed professional practice.	Short term → long term
Change in organizational practice	Wider changes in the organization and delivery of care.	Long term
Benefits to patients/clients	Improvements in health or well-being of patients/clients.	Short term → long term

## → PHASE 4: Standards for Evaluation and Outcomes

Outcomes for continuing education /continuing professional development can also be evaluated using **quality indicators** as identified in Moore's seven levels of CME measurement (Moore et al, 2009).

MOORE'S 7 LEVELS OF CME OUTCOME MEASUREMENTS (ADAPTED)			
LEVEL	OUTCOMES	METRICS OR INDICATORS	EXAMPLES OF MEASUREMENT TOOLS
1	Participation	Number of attendees	Attendance record
2	Satisfaction	Satisfaction of participant – degree to which expectations were met	Program evaluation or questionnaire
3A	Learning: Declarative knowledge	Degree to which participants state <b>what</b> it intended them to know	Objective: Pre and post test Subjective: Self-report of knowledge gained
3B	Learning: Procedural knowledge	Degree to which participants state <b>how</b> to do what the activity intended them to do	Objective: Pre and post test Subjective: Self-report of knowledge gained
4	Competence	Degree to which participants <b>show</b> how to do what the activity intended them to do	Objective: Observation Subjective: Self-report of competence; intention to change
5	Performance	Changes in performance in practice	Objective: Observation or chart audit Subjective: Patient self-reports
6	Patient health	Changes in health status of patient	Health status of patient recorded Subjective: Patient self-reports
7	Community health	Changes in health status of community	Objective: Epidemiological data such as prevalence and incidence Subjective: Community self-report

## **PHASE 5 :**

### **Standards for Sustainability and Post-Implementation Planning**

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#### **5.1 Learning is flexible and adaptable to local resources**

*Consider: What works in one clinical setting may not work in another. Have regional or situational difference in practice settings been considered?*

#### **DISCUSSION OF THE EVIDENCE:**

Accreditation at institutions where healthcare professionals work or are trained can act as a powerful force for change and can be a strong force for collaborative practice and structured interprofessional educational activities (D'Amour & Oandasan, 2005). Flexibility in structure and appropriate funding that may cross borders is mandatory to support academic administrators in their efforts to implement and sustain IPE. The structures that facilitate interprofessional collaboration need to be sustained and stable, and developed with the full expectation that those who are collaborating will continue to collaborate (Gilbert, 2005). **Knowledge exchange** strategy combines expertise, competencies and evidence-informed practices to reduce duplication and realize the full potential of innovations to advance interprofessional education and collaborative practice (Canadian Interprofessional Health Collaborative).

#### **5.2 Preceptorship and mentoring opportunities are in place**

*Consider: New learning requires a supportive environment for learners to practice and develop new skills. Clinical support is required to enable a safe transition from new learning to established practice. Does the education and/or program offer preceptorship and mentoring opportunities to support and practice new knowledge, skills and attitudes?*

#### **DISCUSSION OF THE EVIDENCE:**

**Preceptorship** and **mentorship** programs are used in the healthcare sector to educate healthcare professionals, enhance their leadership skills, and improve their quality of work life (DiCicco, 2008). Mentoring and preceptorship activities promote a climate of excellence and create an environment of encouragement, acceptance and support for skill building (Butler and Felts, 2006). A key to the success of mentoring is the relationship established between the learner and an experienced individual. Mentors need to assist the learner in knowing what they don't know (Butler and Felts, 2006). Additionally, effective leadership and supportive administrative structure, across all levels of the healthcare system, are recognized as critical to the successful implementation and maintenance of interprofessional teamwork and learning (Canadian Health Services Research Foundation, 2006).

If the educator has been contracted or is accessed from an external agency a provision plan through mentoring must be developed to ensure sustainability of the education or program.

#### **5.3 Continuous measurement of integration of learning into practice**

*Consider: Best practice is not only measured after an event or program introduction but routine reviews are important to ensure best practice continues over time. Does the education and/or program have a process in place to measure the success of the new learning in practice on a regular, continuous basis?*

## → PHASE 5: Standards for Sustainability and Post-Implementation Planning

### DISCUSSION OF THE EVIDENCE:

Continuous measurements are required to determine what has been done, and see if it can be done better. **Chart audits** are one method to routinely measure the quality of care in order to improve it. Health professionals can use audits to document that something is wrong, find the defect in the process, and fix it. Practices and health systems that agree upon guidelines and processes of care can use audits to assess how well they are following them. There are 8 steps in conducting a formal chart audit. Although the process is not always necessarily linear, this list represents the general steps involved.

1. **Select a Topic**
2. **Identify Measures**
3. **Identify Patient Population**
4. **Determine Sample Size**
5. **Create Audit Tools**
6. **Collect Data**
7. **Summarize Results**
8. **Analyze and Apply Results**

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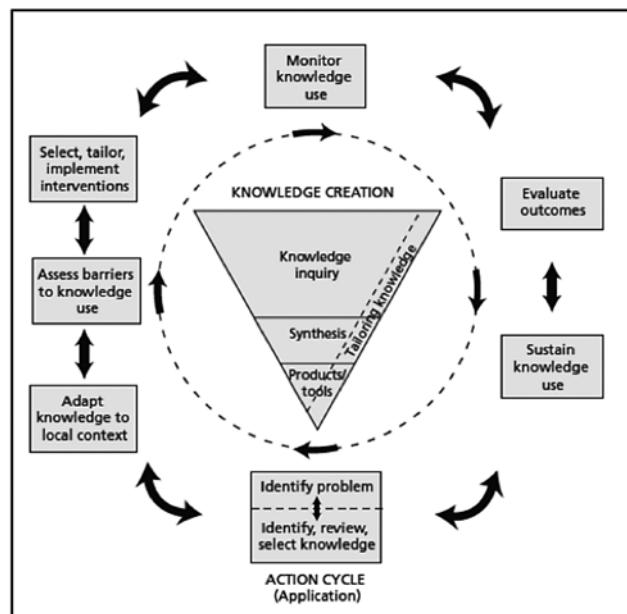
### 5.4 Routine monitoring and identification of gaps in knowledge and practice

*Consider: Is there a process in place to identify further gaps in knowledge and practice on an ongoing basis?*

### DISCUSSION OF THE EVIDENCE:

Learning does not occur until practice changes. The Knowledge to Action Cycle below represents a dynamic process for the implementation of knowledge (Harrison et al., 2010). The diagram contains two parts: the knowledge creation cycle illustrating the process of knowledge creation, and the Action cycle illustrating the process of knowledge application. The Knowledge Creation Cycle is positioned within the Action cycle. The stimulus for new knowledge is a key part of the knowledge to action cycle.

The recognition of success of any educational event or in the introduction of a wound management program lies in its ability to provide the best possible care for patients as it adapts and continues over time.



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## REFERENCES AND RESOURCES

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- Accreditation Council for Continuing Medical Education. *Standards for Commercial Support*, 2007. Available from: [www.accme.org/dir\\_docs/doc\\_upload/68b2902a-fb73-44d1-8725-80a1504e520c\\_uploaddocument.pdf](http://www.accme.org/dir_docs/doc_upload/68b2902a-fb73-44d1-8725-80a1504e520c_uploaddocument.pdf). Accessed June 24, 2010.
- Accreditation Council for Continuing Medical Education. *Involvement of Industry in CME*, 2009. Available from: [www.education.accme.org/video/accme-video-faq/involvement-industry-cme](http://www.education.accme.org/video/accme-video-faq/involvement-industry-cme). Accessed June 24, 2010.
- AGREE Collaboration. Available from: [www.agreecollaboration.org](http://www.agreecollaboration.org). Accessed June 24, 2010.
- Argyris C. *Intervention Theory and Method*. Reading MA: Addison-Wesley, 1970.
- Bacovsky R, Maclure M, Nguyen A, et al. Canadian Academic Detailing Collaboration: evaluating processes and outcomes of academic detailing. *Canadian Pharmacists Journal*. 2006;139(2):54–57.
- Baker R, Almerico GM, Thornton B. Evaluating course-objective writing effectiveness: applying the comprehensive Bloom verb list. *College Teaching Methods & Styles Journal*. 2008;4(4):21–24.
- Bankert EG, Kozel VV. Transforming pedagogy in nursing education: a caring learning environment for adult students. *Nursing Education Perspectives*. 2005; 26(4):227–229.
- Baranoski S, Brenczewski M. Developing educational programs: a blueprint for success. *Chronic Wound Care: A Clinical Resource Book for Healthcare Professionals*, Fourth Edition. Wayne, PA: HMP Communications, 2007: pp. 51–73.
- Barker KK, Bosco C, Oandasan I. Factors in implementing interprofessional education and collaborative practice initiatives: findings from key informant interviews. *Journal of Interprofessional Care*. 2005;19(2 suppl 1):166–176.
- Bloom B, Englehart MD, Furst EJ, et al. *Taxonomy of Educational Objectives. Handbook 1: Cognitive Domain*. New York: David McKay, 1956.
- Borduas F, Frank B, Hall P, et al. *Facilitating the Integration of Interprofessional Education into Quality Health Care: Strategic Roles of Academic Institutions*. Ottawa, ON: Health Canada, 2006.
- Butler MR, Felts J. Tool kit for the staff mentor: strategies for improving retention. *The Journal of Continuing Education in Nursing*. 2006; 37(5):210–213.
- Centre for the Advancement of Interprofessional Education. *Interprofessional Education – A Definition*. London, UK, 1997.
- Canadian Health Services Research Foundation, 2006.
- Canadian Interprofessional Health Collaborative. *Stronger Together: Collaborations for System Wide Change*. Available from: [www.cihi.ca](http://www.cihi.ca). Accessed June 24, 2010.
- Canadian Nurses Association website. *Continuing education*. Available from: [www.cna-nurses.ca/CNA/nursing/education/continuing/default\\_e.aspx](http://www.cna-nurses.ca/CNA/nursing/education/continuing/default_e.aspx). Accessed June 24, 2010.
- Choudhry NK, Stelfox HT, Detsky AS. Relationships between authors of clinical practice guidelines and the pharmaceutical industry. *Journal of the American Medical Association*. 2002; 287(5):612–617.

## → REFERENCES AND RESOURCES

---

- Council of Medical Specialty Societies. Available from: [www.cmss.org](http://www.cmss.org). Accessed June 24, 2010.
- Cox E. Adult learners learning from experience: using a reflective practice model to support work-based learning. *Reflective Practice*. 2005; 6(4):459–472.
- D'Amour D, Oandasan I. *Interprofessional Education for Collaborative Patient-Centred Practice: An Evolving Framework: Chapter 10*. Ottawa, ON: Health Canada. Available from: [www.hc-sc.gc.ca](http://www.hc-sc.gc.ca). Accessed June 24, 2010.
- Davis D. Changing physician performance: a systematic review of the effect of continuing medical education strategies. *Journal of the American Medical Association*. 1995;274(9):700–705.
- Davis D, Davis N. Selecting educational interventions for knowledge translation. *Canadian Medical Association Journal*. 2010;182(2) E89–E93.
- DiCicco J. Developing a preceptorship/mentorship model for home health care nurses. *Journal of Community Health Nursing*. 2008;25(1):15–25.
- Donald A. *Evidence-based medicine: key concepts*. Available from: [www.medscape.com/viewarticle/430709](http://www.medscape.com/viewarticle/430709). Accessed June 24, 2010.
- Drinka TJK, Clark PG. *Health Care Teamwork: Interdisciplinary Practice and Teaching*. Westport, CT: Auburn House/Greenwood, 2000.
- Duke University Medical Center. <http://patientsafetyed.duhs.duke.edu>
- Elen JA. Conflict of interest – nurses at risk! *Orthopaedic Nursing*. 2008; 27(2):135–139.
- Eva K W. Teamwork during education: the whole is not always greater than the sum of the parts. *Medical Education*. 2002;36(4):314–316.
- Falk Craven R, Bassett DuHamel R. Certificate programs in continuing professional education. *The Journal of Continuing Education in Nursing*. 2003;34(1):14–18.
- Forrest S. Learning and teaching: the reciprocal link. *The Journal of Continuing Education in Nursing*. 2004;35(2):74–79.
- Freeth D, Reeves S. Learning to work together: using the presage, process, product (3P) model to highlight decisions and possibilities. *Journal of Interprofessional Care*. 2004;8(1):3–56.
- Government of Nova Scotia website. *Steps in Conducting a Needs Assessment*. Available from: [www.gov.ns.ca/.../Steps%20in%20Conducting%20a%20Needs%20Assessment.pdf](http://www.gov.ns.ca/.../Steps%20in%20Conducting%20a%20Needs%20Assessment.pdf). Accessed June 24, 2010.
- Gilbert JH. Interprofessional education for collaborative, patient-centred practice. *Nursing Leadership*. 2005;18(2):32–38.
- Gilbert J H, Campbell RD, Cole CD, et al. Preparing students for interprofessional teamwork in health care. *Journal of Interprofessional Care*. 2000;14(3): 223-235.

## → REFERENCES AND RESOURCES

---

- Ginsburg L, Tregunno D. New approaches to interprofessional education. *Journal of Interprofessional Care*. 2005;19(suppl 1):188–196.
- Gitlin LN, Lyons KJ, Kolodner E. A model to build collaborative research educational teams of health professionals in gerontology. *Educational Gerontology*. 1994;20:15–34.
- Glasziou P, Haynes B. The paths from research to improved health outcomes. *Evidence-Based Medicine*. 2005;10:4–7.
- Gustafson DH, Sainfort F, Eichler M, et al. Developing and testing a model to predict outcomes of organizational change. *Health Services Research*. 2003;38(2):751–776.
- Hall P, Weaver I. Interdisciplinary education and teamwork: a long and winding road. *Medical Education*. 2001;35(9):867–875.
- Harvey G, Loftus-Hills A, Rycroft-Malone J, et al. Getting evidence into practice: the role and function of facilitation. *Journal of Advanced Nursing*. 2002;37(6):577–588.
- Harris C, Shannon R. An innovation Enterostomal Therapy Nurse model of community wound care delivery. *Journal of Wound Ostomy and Continence Nursing*. 2008;35(2):169–183.
- Harrison MB, Legare F, Graham ID, et al. Adapting clinical practice guidelines to local context and assessing barriers to their use. *Canadian Medical Association Journal*. 2010;182(2):E78–E84.
- Haynes B. The “4S” services for finding current best evidence. *Evidence Based Nursing*. 2005;8(1):4–6.
- Health Canada. *Interprofessional Education for Collaborative Patient-Centred Practice*. Available from: [www.hc-sc.gc.ca/hcs-sss/hhr-rhs/strateg/interprof/index-eng.php](http://www.hc-sc.gc.ca/hcs-sss/hhr-rhs/strateg/interprof/index-eng.php). Accessed June 24, 2010.
- Heath H. Reflection and patterns of knowing in nursing. *Journal of Advanced Nursing*. 1998;27(5):1054–1059.
- Heaphy DP, Marrow VB. Industry funding for continuing medical education. Is it ethical? *Archives of Ophthalmology*. 2004;122(5):771–773.
- Horsburgh M, Lamdin R, Williamson E. Multiprofessional learning: The attitudes of medical, nursing and pharmacy students to shared learning. *Journal of Interprofessional Care*. 2005;19(suppl 1):21–38.
- Irby DM, Bowen JL. Time-efficient strategies for learning and performance. *The Clinical Teacher*. 2004;1(1):23–28.
- Irvine DM, Baker GR, Murray M, et al. Achieving clinical improvement: an interdisciplinary intervention. *Health Care Management Review*. 2002;27(8):42–56.
- Jutel A, Menkes DB. “But doctors do it...” Nurses’ views of gifts and information from the pharmaceutical industry. *The Annals of Pharmacotherapy*. 2009;43(6):1057–1063.
- Kerfoot KM. Denial and immunity to change: it starts with the leader. *Nursing Economics*. 2009;27(6):422–423.

## → REFERENCES AND RESOURCES

---

- Kitson A, Straus SE. The knowledge-to-action cycle: identifying the gaps. *Canadian Medical Association Journal*. 2010;182(2):E73–E77.
- Kitson A, Harvey G, McCormack B. Enabling the implementation of evidence based practice: a conceptual framework. *Quality in Health Care*. 1998;7(3):149–158.
- Knowles MS. *Andragogy in Action: Applying Modern Principles of Adult Learning*. San Francisco, CA: Jossey-Bass, 1984.
- Krasner DK, Rodeheaver GT, Sibbald RG. Interprofessional wound caring and the IWC model. *Ostomy Wound Management*. 2007;53(8):6–8.
- Kruger J, Dunning D. Unskilled and unaware of it: How difficulties in recognizing one's own incompetence lead to inflated self-assessments. *Journal of Personality and Social Psychology*. 1999;77(6): 1121–1134.
- Landrum BJ. Marketing innovations to nurses, part 2: marketing's role in the adoption of innovations. *Journal of Wound Ostomy and Continence Nursing*. 1998;25(5):227–232.
- Leathard A (ed). *Interprofessional Collaboration: From Policy to Practice in Health and Social Care*. Hove, UK: Brunner-Routledge, 2003.
- Lepp M, Zorn CR. Life circle: creating safe space for educational empowerment. *Journal of Nursing Education*. 2002;41(9):383–385.
- McCormack B, Kitson A, Harvey G, et al Getting evidence into practice: the meaning of context. *Journal of Advanced Nursing*. 2002;38(1):94–104.
- Moore DE Jr, Green JS, Gallis HA. Achieving desired results and improved outcomes: integrating planning and assessment throughout learning activities. *Journal of Continuing Education in the Health Professions*. 2009;29(1):1–15.
- Moore ME, Vaughan K, Hayes BE, et al. Informatics education. Developing an interdisciplinary collaboration center in an academic health sciences library. *Medical Reference Services Quarterly*. 2005;24(4):99–107.
- Morris L, Taitsman JK. The agenda for continuing medical education – limiting industry's influence. *New England Journal of Medicine*. 2009;361(25):2478–2482.
- Norman GR. The adult learner: a mythical species. *Academic Medicine*. 1999;74(8):886–889.
- Oandasan I, Reeves S. Key elements for interprofessional education. Part 1: The learner, the educator and the learning context. *Journal of Interprofessional Care*. 2005;19(2 supp 1):21–38.
- Orsted H, Keast D, Campbell K. Best practice guidelines, algorithms, and standards: tools to make evidence-based practice available and user friendly. In: Krasner DL, Rodeheaver G, Sibbald RG. (eds). *Chronic Wound Care: A Clinical Resource Book for Healthcare Professionals*, Fourth Edition. Wayne, PA: HMP Communications, 2007: pp. 177–183.
- Packer S, Parke DW. Ethical concerns in industry support of continuing medical education: the con side. *Archives of Ophthalmology*. 2004; 122(5):773–776.

## → REFERENCES AND RESOURCES

---

- Parsell G, Bligh J. Multiprofessional working: learning from experience. *Medical Education*. 1999;33(9):632–633.
- Registered Nurses' Association of Ontario. *Client Centred Care (rev suppl)*. Toronto, ON: Registered Nurses' Association of Ontario, 2006.
- Registered Nurses' Association of Ontario. *Toolkit Implementation of Clinical Practice Guidelines. Chapter 3: Assessing your environmental readiness*. Toronto, ON: Registered Nurses' Association of Ontario, 2002.
- Rousseau DM, Tijoriwala SA. What's a good reason to change? Motivated reasoning and social accounts in promoting organizational change. *Journal of Applied Psychology*. 1999;84(4):514–528.
- Ryan S, Perrier L, Sibbald RG. Searching for evidence-based medicine in wound care: an introduction. *Ostomy Wound Management*. 2003; 49(11):67–75.
- SCCPD Position Paper on University CME/CPD Offices and Industry Relations*. Ottawa, ON: Standing Committee on Continuing Professional Development, Association of Faculties of Medicine.
- Sibbald RG, Alavi A, Sibbald M, et al. Effective adult education principles to improve outcomes in patients with chronic wounds. In: Krasner DL, Rodeheaver G, Sibbald RG. (eds). *Chronic Wound Care: A Clinical Resource Book for Healthcare Professionals*, Fourth Edition. Wayne, PA: HMP Communications, 2007: pp.29–43.
- Steinert Y. Learning together to teach together: interprofessional education and faculty development. *Journal of Interprofessional Care*. 2005; 19(suppl 1):60–75.
- Towards Evidence-Informed Practice*. Available from: [www.teip.hhrc.net/index.cfm](http://www.teip.hhrc.net/index.cfm). Accessed June 24, 2010.
- Virani T, Bajnok I. *Knowledge in clinical practice guidelines*. Senior Care Canada, 2004. Available from: [www.seniorcarecanada.com/articles/2004/q1/knowledge.management](http://www.seniorcarecanada.com/articles/2004/q1/knowledge.management). Accessed June 24, 2010.
- Wenger E. How to optimize organizational learning. *Healthcare Forum Journal*. 1996;July/August:22–23.
- Wilkerson L, Irby DM. Strategies for improving teaching practices: a comprehensive approach to faculty development. *Academic Medicine*. 1998;73(4):387–396.
- Willers L. Global nursing management: avoiding conflicts of interest. *Nursing Administration Quarterly*. 2004;28(1):44–50.
- Woodbury G. Research 101: Developing critical evaluation skills. *Wound Care Canada*. 2004;2(2):32–38.
- World Health Organization. *Declaration of Alma-Ata*. Available from: [http://www.who.int/hpr/NPH/docs/declaration\\_almaata.pdf](http://www.who.int/hpr/NPH/docs/declaration_almaata.pdf). Accessed June 24, 2010.
- Zwarenstein M., Reeves S, Perrier L. Effectiveness of pre-licensure interprofessional education and post-licensure collaborative interventions. *Journal of Interprofessional Care*. 2005;19(suppl 1):148–165.

# GLOSSARY OF TERMS

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- Academic detailing:** The process by which product experts inform prescribers about the cost and efficacy of particular products, either for educational or sales purposes. It is an education method known to change prescribing behaviour.
- Adapt:** To make suitable to or fit for a specific use or situation. The educational event or program may have some gaps but it could be modified or adapted to make it suitable for use.
- Adopt:** To take up and practice or use. The educational event or program is suitable for use.
- Adult learning or andragogy:** Consists of learning strategies focused on adults. It is often interpreted as the process of engaging adult learners with the structure of learning experience.
- Appraise:** To evaluate or estimate nature, quality, ability, extent or significance.
- Best Practice:** Occurs when care is based on the best available evidence acknowledging patient risks and available resources.
- Chart audits:** A review and evaluation of health care procedures and documentation for the purpose of comparing the quality of care provided with accepted standards.
- Collaborate:** To work together, especially in a joint problem solving situation.
- Competency:** Mastery of specific knowledge and skills that is learner- or participant-centred.
- Context:** The surroundings, circumstances, environment, background, or settings which determine, specify, or clarify a particular event.
- Contracted and/or external agency personnel:** An educator or program leader who is contracted by a healthcare organization or industry sponsored.
- Curriculum:** A detailed plan for an educational program that describes its aims, content, delivery, participants, faculty, resources and evaluation.
- Endorse:** To give approval of or support to. The educational event or program may be endorsed by the organization.
- Environmental assessment:** A process to predict the effects of proposed initiatives on the organization before they are carried out.
- Evidence:** Includes everything that is used to determine or demonstrate the truth of an assertion. This may range from expert opinion to a randomized controlled study.
- Evidence-informed practice:** The “best available practice or policy based on available evidence for a specific group.” It involves the integration of experience, judgment and expertise with the best available external evidence from systematic research.

## → GLOSSARY OF TERMS

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**Fiscal resources:** Related to financial resources of an organization.

**Gap analysis:** An activity that compares current practice to the best evidence available.

**Generic:** Referring to products in groups or classes using general terms rather than brand names.

**Human resources:** Related to the staff that operates an organization.

**Integration into practice:** Utilization into practice of knowledge, skills and attitudes attained by a person, group or organization.

**Interactive learning:** A method of acquiring information through hands-on, interactive means.

**Interprofessional education:** Occurs when two or more professions learn with, from and about each other to improve collaboration and quality of care.

**Knowledge exchange:** Collaborative problem-solving between researchers and decision makers.

**Knowledge transfer:** Transferring knowledge from one person, group or organization to another.

**Mandate for intended change:** For best practice to occur, change needs to happen at an institutional level, which requires administrative support.

**Mentorship:** A relationship in which a more experienced or more knowledgeable person helps a less experienced or less knowledgeable person.

**Non-promotional:** Does not promote one product over another for the purpose of increasing or generating product sales.

**Patient care outcomes:** Outcomes may include prevention of or closure of a wound, as well as effective management of non-healable wounds. They may also relate to quality of life issues, such as decreased pain and suffering, odor or wound infections.

**Patient-/client-centred care:** Patients working with their healthcare providers to determine health goals that are realistic and achievable.

**Preceptorship:** A period of practical experience and training that is supervised by an expert or specialist in a particular field.

## → GLOSSARY OF TERMS

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**Procurement or tender process:** The action or process of acquiring or obtaining materiel, property, or services at the operational level: for example, purchasing, contracting and negotiating directly with the source of supply.

**Purchase:** To obtain in exchange for money or its equivalent. Some educational events or programs may be suitable for purchase.

**Quality indicators:** Criteria or standards that are either qualitative or quantitative used to determine the quality of health care.

**Reject:** To refuse to accept or make use of. The educational event or program may have so many gaps that it is not suitable for use.

**Silo approach:** An approach that is kept separate or compartmentalized rather than integrated and collaborative with other systems. Collaboration among health professionals is the key to positive patient outcomes.

**Stakeholders:** A person, group, organization or system that affects or can be affected by an organization's actions; may include representatives from administration, purchasing, education or clinical practice. Stakeholders may be interdepartmental, interprofessional and cross clinical setting boundaries (acute care, long term care, community care).

**Standard:** A level of quality or an accepted or approved example of something against which others are judged or measured. It can be a formal document that establishes uniform criteria, methods, processes and practices.

**Strategic partnerships:** A cooperative strategy, leading to a common goal.

**Team:** A group of individuals who work together to produce products or deliver services for which they are mutually accountable.

**Unbiased:** Free from prejudice and favoritism, being fair and impartial in decision making.

**Validated and reliable:** Tools or instruments that have been studied and revised to provide reliability and validity in multiple healthcare settings.

**Value-added service:** Enhancement added to a product or service by a company before the product is offered to customers. Value added is a customer perception of what makes a product or service desirable over others.

**Wound care leaders:** Staff given the responsibility for directing wound management and wound management education within an organization.

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## **APPENDIX A**

### **CAWC and CAET Task Force**

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#### **DEVELOPMENT TEAM FOR THE WOUND MANAGEMENT EDUCATION & PROGRAMMING TASK FORCE**

- Heather Orsted, RN, BN, ET, MSc – Director, CAWC Institute, Professional Education, Canadian Association of Wound Care & Chair of the Task Force
- Kimberly Stevenson, RN, BN, IIWCC – Assistant Director, CAWC Institute, Professional Education, Canadian Association of Wound Care
- M Gail Woodbury, BScPT, MSc, PhD – Evaluation Researcher, CAWC Institute, Professional Education, Canadian Association of Wound Care

#### **TASK FORCE MEMBERS**

- Karen Bruton, RN, CETN(C), BScN(c), IIWCC – Clinical Resource Nurse and Wound/Ostomy Consultant, Northumberland Hills Hospital, Cobourg, Ontario
- Patricia Coutts, RN, IIWCC – President, Canadian Association of Wound Care
- Catherine Harley, RN, IIWCC, EMBA – Executive Director, Canadian Association for Enterostomal Therapy
- Mary Hill, RN, BScN, CETN(C), MScN – Past President, Canadian Association for Enterostomal Therapy
- David Keast, MSc, MD, FCFP – Centre Director, Aging Rehabilitation and Geriatric Care Research Centre, Lawson Health Research Institute St Joseph's Parkwood Hospital, London, Ontario
- Kathryn Kozell, RN, BA, MScN, CETN(C), APN (AC) – Clinical Nurse Specialist/Manager, Rachel M Flood Centre for Education in Ostomy and Wound Care
- Kim LeBlanc, BScN, RN, CETN(C), MN, IIWCC, Clinical Nurse Consultant and owner with KDS Professional Consulting, Ottawa, Ontario, Canada
- Heather Orsted, RN, BN, ET, MSc – Director, CAWC Institute, Canadian Association of Wound Care & Chair of the Task Force
- Karen Philp, D.Phil (Oxon) – Chief Executive Officer, Canadian Association of Wound Care
- R. Gary Sibbald, BSc, MD, FRCPC(Med)(Derm) – Med. Professor of Public Health Sciences and Medicine, University of Toronto, Director of International Interprofessional Wound Care Course (IIWCC) and Masters of Science Community Health (Prevention and Wound Care), Dalla Lana School of Public Health Sciences
- Kevin Woo, RN, MSc, PhD, ACNP, GNC(C) – Course Coordinator of International Interprofessional Wound Care Course (IIWCC) and Masters of Science Community Health (Prevention and Wound Care), Dalla Lana School of Public Health Science

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## **APPENDIX B**

### **Partners and Process**

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The Canadian Association of Wound Care (CAWC) is a non-profit organization of healthcare professionals, researchers, corporate supporters, patients and caregivers dedicated to the advancement of wound care in Canada since 1995.

The Canadian Association for Enterostomal Therapy (CAET) is a non-profit organization specializing in the nursing care of patients with challenges in wound, ostomy and continence dedicated to giving national leadership in wound, ostomy and continence nursing by promoting high standards for ET nursing practice, education, research and administration to achieve quality specialized nursing care.

Both the CAWC and CAET actively work towards influencing healthcare policy in order to enhance professional education, but also to ensure healthcare decisions that affect wound care or ET health professionals are supported by the best available evidence.

These two partners agreed to develop this instrument to support the use of evidence informed standards in wound management education and programming. Both agreed to the following process:

- Step 1:** Task Force established with appointment of members involved in wound management education and program development.
- Step 2:** Standards were identified from four key documents: Health Canada Strategy “Interprofessional Education for Collaborative Patient-Centred Practice”; Canadian Interprofessional Health Collaboration “Stronger Together: Collaborations for System-Wide Change”; International Diabetes Federation “International Standards for Diabetes Education, 3rd edition”; and Registered Nurses’ Association of Ontario “Toolkit – Nursing Best Practice Guidelines”.
- Step 3:** Literature search undertaken to identify the evidence to support the standards.
- Step 4:** Drafts reviewed and edited by Task force.
- Step 5:** Draft of Wound CARE Instrument reviewed and approved in principle by CAWC and CAET boards.
- Step 6:** Evaluation of Wound CARE Instrument using Delphi method, results to inform revision of the Wound CARE Instrument.
- Step 7:** Pilot of Wound CARE Instrument including stakeholders from across Canada.
- Step 8:** Translate Wound CARE Instrument into French.
- Step 9:** Formatting by Graphic Department
- Step 10:** Obtain external endorsements and implementation of the Wound CARE Instrument.
- Step 11:** Publish Wound CARE Instrument and evaluation results in peer reviewed journal.
- Step 12:** Dissemination strategy with outreach to target audiences (for example, private and public healthcare organizations, general purchasing organizations and endorsing bodies).
- Step 13:** Evaluate impact of Wound CARE Instrument on wound care education and programming with an independent evaluation and study.
- Step 14:** Revision plan in place for the Wound CARE Instrument.

## **APPENDIX C**

### **Delphi Panel Members**

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Louise Forest-Lalande, RN, MEd, ET Consultant Manager in Nursing Sciences CHU Sainte-Justine Montréal, Quebec	Jane Ratay, RN, BScN, ET, IIWCC Instructor: Faculty of Health and Community Studies Grant MacEwan University Edmonton, Alberta
	Bonita Yarjau, RN, BN, CETN Coordinator: Enterostomal Therapy Program Health Sciences Centre Winnipeg, Manitoba

## **APPENDIX D**

### **Pilot Sites**

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West View Health Center  
Stony Plain, Alberta

