RNAO

Registered Nurses' Association of Ontario
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**Clinical Best
Practice Guidelines**

Strategies to Support Self-Management in Chronic Conditions: Collaboration with Clients

ia BPG

INTERNATIONAL AFFAIRS & PRACTICE GUIDELINES

TRANSFORMING NURSING THROUGH KNOWLEDGE

Disclaimer

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Contact Information

Greetings from Doris Grinspun

Executive Director, Registered Nurses' Association of Ontario

It is with great excitement that the Registered Nurses' Association of Ontario (RNAO) presents this guideline, *Strategies to Support Self-Management in Chronic Conditions: Collaboration with Clients*, to the health-care community. Evidence-based practice supports the excellence in service that nurses are committed to delivering in our day-to-day practice. RNAO is delighted to provide this key resource to you.

RNAO offers its heartfelt thanks to the many individuals and institutions that are making our vision for Nursing Best Practice Guidelines (BPGs) a reality: the Government of Ontario, for recognizing our ability to lead the program and providing multi-year funding; Irmajean Bajnok, Director, RNAO International Affairs and Best Practice Guidelines (IABPG) Programs, for her expertise and leadership in advancing the production of the BPGs; each and every Team Leader involved. For this BPG in particular, I thank Patrick McGowan and Suzanne Fredricks for their superb stewardship, commitment and expertise. Also thanks to Althea Stewart-Pyne and Janet Chee, RNAO's IABPG Program Managers, for their intense work to see that this BPG moved from concept to reality. A special thanks to the BPG Panel – we respect and value your expertise and volunteer work. To all, we could not have done this without you!

The nursing community, with its commitment and passion for excellence in nursing care, is providing the knowledge and countless hours essential to the development, implementation, evaluation and revision of each guideline. Employers have responded enthusiastically by nominating best practice champions, implementing and evaluating the guidelines and working towards a culture of evidence-based practice.

Successful uptake of these guidelines requires a concerted effort from nurse clinicians and their health-care colleagues from other disciplines, from nurse educators in academic and practice settings and from employers. After lodging these guidelines into their minds and hearts, knowledgeable and skillful nurses and nursing students need healthy and supportive work environments to help bring these guidelines to practice actions.

We ask that you share this guideline with members of the interdisciplinary team, as there is much to learn from one another. Together, we can ensure that the public receives the best possible care every time they come in contact with us. Let's make them the real winners in this important effort!

Doris Grinspun, RN, MScN, PhD., O. ONT.
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APPENDICES

*Throughout this document words marked with symbol G can be found in Appendix A: Glossary of Terms

BACKGROUND

How to Use this Document

This nursing best practice guideline is a comprehensive document providing resources necessary for the support of evidence based nursing practice. The document needs to be reviewed and applied, based on the specific needs of the organization or practice setting/environment, as well as the needs and wishes of the client. Guidelines should not be applied in a "cookbook" fashion but used as a tool to assist in decision making for individualized client care, as well as ensuring that appropriate structures and supports are in place to provide the best possible care.

Nurses, other health care professionals and administrators who are leading and facilitating practice changes will find this document valuable for the development of policies, procedures, protocols, educational programs, assessment and documentation tools, etc. It is recommended that the nursing best practice guidelines be used as a resource tool. Nurses providing direct client care will benefit from reviewing the recommendations, the evidence in support of the recommendations and the process that was used to develop the guidelines. However, it is highly recommended that practice settings/environments adapt these guidelines in formats that would be user-friendly for daily use. This guideline has some suggested formats for such local adaptation and tailoring.

Organizations wishing to use the guideline may decide to do so in a number of ways:
    a) Assess current nursing and health care practices using the recommendations in the guideline.
    b) Identify recommendations that will address identified needs or gaps in services.
    c) Systematically develop a plan to implement the recommendations using associated tools and resources.

The RNAO is interested in hearing how you have implemented this guideline. Please contact us to share your story. Implementation resources will be made available through the RNAO website to assist individuals and organizations to implement best practice guidelines.

Purpose and Scope

The purpose of this guideline is to provide evidence-based recommendations for Registered Nurses and Registered Practical Nurses in self-management support. These recommendations identify strategies and interventions that enhance an individual's ability to manage their chronic health condition.

It is intended for nurses who work in a variety of practice settings across the continuum of care. It is acknowledged that the practitioner's knowledge, skills, attitudes, critical analysis and decision making vary and are enhanced over time by experience and education. It is acknowledged that effective health care depends on a coordinated interprofessional approach incorporating ongoing communication between health professionals and clients/families.

A client is a person or persons with whom the nurse is engaged in a professional therapeutic relationship. In most circumstances, the client is an individual but in some circumstances (e.g., in practice settings where family-centred care occurs) the client can include family members and/or substitute decision-makers of the individual client (RNAO, 2006). Regardless of the role, whether directly or indirectly involved with individual clients, all nurses are responsible for providing ethical care or service within College of Nurses of Ontario (CNO) standards and this is reflected within the RNAO Best Practice Guidelines.

Best practice guidelines are systematically developed statements to assist practitioners' and clients' in making decisions about appropriate health care (Field & Lohr, 1990). This best practice guideline focuses on assisting nurses in adult practice settings. This is not meant to exclude the paediatric client, but children have special assessment needs related to developmental stages that are beyond the scope of this guideline. However, an assessment of the individual's cognitive and physical capabilities should be taken into consideration regardless of age.

Guiding Principles

The guiding principles of this guideline on self-management supports follow the tenet that they are client-led, nurse-facilitated processes (i.e., the client sets the agenda by driving interactions and action plans). Furthermore, client and family participation is paramount. Care strategies must be tailored toward the attitudes, beliefs, culture and preferences of client, and a shift of power must occur from health care provider to client. This can be achieved through the establishment of a therapeutic relationship and a focus on client-centred care.

The establishment of a therapeutic relationship is critical to the success of self-management support. Self-management support establishes trust and is based on RNAO's *Establishing Therapeutic Relationships* Best Practice Guideline. The therapeutic relationship is grounded in an interpersonal process that occurs between the nurse and the client/family. It is a purposeful, goal-directed relationship that is focused on advancing the best interest and outcome of the client (RNAO, 2006).

Therapeutic relationships begin on assessment as the practitioner establishes a rapport and obtains accurate information about the client's context.

The nurse gains specific information about:
- the client's interpretation of their disease
- the client's feelings about their disease
- the plan of care
- home life and family circumstances
- roles and relationships of family members

Professional nursing associations and regulatory bodies have identified that a therapeutic or helping relationship, is a central aspect of nursing care and have embedded qualities of the therapeutic nurse/client relationship in many statements on practice (College of Nurses, 2006 RNAO, 2006).

The central qualities of the therapeutic relationship include active listening, trust, respect, genuineness, empathy and responding to the client's concerns (RNAO, 2002).

Client-centred care is based on the principles outline in RNAO's *Client Centred Care Best Practice Guideline* (RNAO, 2002). There is great variation in the definitions of client-centeredness used by researchers (Michie, Miles, & Wienman, 2003). However, it is often described as "meeting people where they are at" or "starting where the client is," and represents a major shift away from traditional paternalistic models in which the care provider "knows best."

Client-centred care does not make assumptions about who people are, what they need or should value, or what motivates them. A person-centred approach is collaborative, relational and goal-oriented. It is relational because the provider's style and attitude are characterized by openness, genuine respect, and interest in the well-being of the client. People are more likely to change within the context of a safe, trustworthy relationship in which they can consider their situation and explore possible change steps. Hence, the provider's role is to encourage the person to talk, examine options and resources with them, ask what might impede them from taking a particular action, help to explore ambivalence, provide useful information and assistance, and support them along the way. The foremost goals of the provider are focused on the care-recipient's goals, which optimally are collaboratively defined, as well as on the quality of the process of providing care to help meet those goals (Morrison, 2007).

Terminology

Many terms are used interchangeably with chronic health conditions. The most common are chronic diseases, chronic illness, and chronic health problems. For the purposes of this document, chronic health condition is used. Chronic health conditions are defined as: diseases of long duration and generally slow progression, such as heart disease, stroke, cancer, chronic respiratory diseases and diabetes.
(WHO, 2009).

Key Assumptions

The recommendations within this guideline are based on the following key assumptions:

1. While clients may need information and support to self-management about their health state, they are ultimately in control of these important self-management decisions. (Bodenheimer, Lorig, Holman, Grumbach, 2002).

2. The client's need for support with decision making specific to their self-management is variable and should be individually tailored.

3. Information and support for clients related to their self-management should promote care consistent with scientific evidence and client preferences.

4. Collaborative relationships with clients and their families are critical to the success of self-management support.

5. Self-management options depend on individual client's circumstances, and availability of resources.

6. This BPG is is intended to promote the provision of evidenced based care of the highest quality related to decision and self-management support for adults with chronic health conditions.

7. Nurses are one of several health care provider groups that are involved in providing self-management support.

Summary of Recommendations

Practice Recommendations

5 A'S APPROACH		TYPE OF EVIDENCE[1]
1.0	Nurses utilize the "5 A's" behavioural change approach of assess, advise, agree, assist and arrange, to incorporate multiple self-management strategies when supporting clients with a chronic illness to assist in improved outcomes.	**Ia**
	ASSESS	
1.1.a	Nurses establish rapport with clients and families.	**III**
1.1.b	Nurses screen for depression on initial assessment, at regular intervals and advocate for follow-up[G] treatment of depression.	**Ib**
1.1.c	Nurses establish a written agenda for appointments in collaboration with the client and family, which may include: ■ Reviewing clinical data ■ Discussing client's experiences with self-management ■ Medication administration ■ Barriers/stressors ■ Creating action plans ■ Client education	**IIb**
1.1.d	Nurses consistently assess client's readiness for change to help determine strategies to assist client's readiness for change to help determine strategies to assist client with specific behaviours.	**III**
1.1.e	Nurses encourage clients to use health risk appraisal instruments; model use of such tools, and discuss the results of the risk assessment with them at regular follow up.	**Ib**
	ADVISE	
1.2.a	Nurses combine effective behavioural, psychosocial strategies and self-management education processes as part of delivering self-management support.	**Ia**
1.2.b	Nurses utilize the "ask-tell-ask" (also known as "Elicit- Provide-Elicit") communication technique to ensure the client receives the information required or requested.	**III**
1.2.c	Nurses use the communication technique "Closing the Loop"[G] (also known as "teach back") to assess a client's understanding of information.	**III**
1.2.d	Nurses assist clients in using information from self-monitoring[G] techniques (e.g., glucose monitoring, home blood pressure monitoring) to manage their condition.	**Ib**
1.2.e	Nurses encourage clients to use monitoring methods (e.g., diaries, logs, personal health records) to monitor and track their health condition.	**III**

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	AGREE	

1.3	Nurses collaborate with clients to:
	  ■ Establish goals;
	  ■ Develop action plans that enable achievement of goals; and
	  ■ Monitor progress towards goals.
		Ia

	ASSIST	
1.4.a	Nurses who are appropriately trained use motivational interviewing with their clients to allow clients to fully participate in identifying their desired behavioural changes.	**Ia**
1.4.b	Nurses teach and assist clients to use problem-solving[G] techniques.	**Ia**
1.4.c	Nurses are aware of community self-management programs in a variety of settings, and link clients to these programs through the provision of accurate information and relevant resources.	**Ib**
	ARRANGE	
1.5	Nurses arrange regular and sustained follow-up for clients based on the client's preference and availability (e.g., telephone, email, regular appointments). Nurses and clients discuss and argee on the data/information that will be reviewed at each appointment.	**Ia**
	INNOVATIVE DELIVERY MODELS	

2.0	Nurses use a variety of innovative, creative, and flexible modalities with clients when providing self-management support such as:
	  a) Electronic support systems
	  b) Printed materials
	  c) Telephone contact
	  d) Face-to-face interaction
	  e) New and emerging modalities
		IIb

2.1	Nurses tailor the delivery of self-management support strategies to clients' culture, social and economic context across settings.	**IIa**
2.2	Nurses facilitate a collaborative practice team approach for effective self-management support.	**Ib**

Educational Recommendations

RECOMMENDATION		TYPE OF EVIDENCE
3.0	Nursing academic programs integrate principles of self-management support education throughout their core curriculum and in continuing education.	**IV**
3.1	Organizations provide self-management support education through a variety of ongoing professional development opportunities to support nurses in effectively developing skills in self-management support.	**IV**

Organization and Policy Recommendations

RECOMMENDATION		TYPE OF EVIDENCE
4.0	Organizations provide opportunities for nurses to take leadership roles in the provision of self-management support.	IV
4.1	Organizations integrate self-management support values and principles related to fostering client-centered care and therapeutic relationships in the delivery of care and services, through inclusion in strategic plans and organizational goals.	IV
4.2	Decision makers (Chief Executive Officers, Directors, Managers, Stakeholders) within organizations ensure adequate funding is available for self-management support initiatives such as technology to provide education to clients and nurses	IV
4.3	Nursing best practice guidelines can be successfully implemented where there are adequate planning strategies, resources, organizational and administrative supports and appropriate facilitation of guideline uptake among clinicians. An effective organizational plan for implementation includes: ■ An assessment of organizational readiness and barriers to implementation, taking into account local circumstances. ■ Involvement of all members (whether in a direct or indirect supportive function) who will contribute to the implementation process. ■ Ongoing opportunities for discussion and education to reinforce the importance of best practices. ■ Dedication of a qualified individual to provide the support needed for the education and implementation process. ■ Ongoing opportunities for discussion and education to reinforce the importance of best practices. ■ Opportunities for reflection on personal and organizational experience in implementing guidelines.	IV

Interpretation of Evidence

Types of Evidence

Ia	Evidence obtained from meta-analysis or systematic review of randomized controlled trials.
Ib	Evidence obtained from at least one randomized controlled trial.
IIa	Evidence obtained from at least one well-designed controlled study without randomization.
IIb	Evidence obtained from at least one other type of well-designed quasi- experimental study, without randomization.
III	Evidence obtained from well-designed, non-experimental descriptive studies, such as comparative studies, correlation studies and case studies.
IV	Evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities

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BACKGROUND

Guideline Development Process

The Registered Nurses' Association of Ontario (RNAO), with funding from the Government of Ontario, has embarked on a multi-year program of nursing best practice guideline development, pilot implementation, evaluation, dissemination and support of uptake. One area of emphasis is nursing interventions related to self-management support. This guideline was developed by a panel of nurses and other health professionals convened by the RNAO. This work was conducted independent of any bias or influence from the Ontario government.

In March 2007 an international, multidisciplinary panel of nurses and allied health professionals with expertise in practice, education and research on chronic condition management from a range of practice settings was convened under the auspices of the RNAO. The panel discussed the purpose of their work, and came to consensus on the scope of the best practice guideline.

Subsequently, a search of the literature for best practice guidelines, systematic reviews, relevant research studies and websites was conducted. No existing best practice guidelines focusing on chronic condition management for **adults** were found. See Appendix B for details of the search strategy and outcomes.

The panel members discussed the evidence summaries and key articles, and came to a consensus on the best available evidence on which to base recommendations. The panel then divided into subject matter expert subgroups for the purpose of drafting recommendations for nursing interventions. This process resulted in the development of practice, education, and organization and policy recommendations. The panel members as a whole reviewed the draft recommendations, discussed gaps, reviewed the evidence and came to consensus on a final set of recommendations.

This draft was submitted to a set of stakeholders for review and feedback – an acknowledgement of these reviewers is provided on page 12 of this document. Stakeholders represented various health-care professional groups, clients and families, as well as professional associations. Stakeholders were provided with specific questions for comment, as well as the opportunity to give overall feedback and general impressions. The feedback from stakeholders was compiled and reviewed by the development panel – discussion and consensus resulted in revisions to the draft document prior to publication.

Background Context

Over the last decade, a dramatic rise in the prevalence of chronic health conditions has emerged, altering the way in which care is sought, managed, delivered and received. Presently, one in every three individuals, across the lifespan, is living with a chronic health condition (Pepper-Burke, 2003). Chronic diseases are unlike acute illness where, in most cases, an illness episode requires time sensitive intense specialized attention from a health care professional that may or may not include some limited follow-up. Instead, chronic illnesses extend over long periods of time, and rather than limited intense professional attention, they require considerable professional self-management support over the client's lifetime, time to enable full client engagement and related life management, followed by long term regular professional follow-up.

In Canada, the three most prevalent chronic health conditions are cancer, cardiovascular disease and diabetes, followed by chronic obstructive pulmonary disease, asthma, depression and anxiety, and arthritis (CNA, 2005).

The increasing prevalence of chronic health conditions will be evident in at least one-third of developed nations over the next 50 years. Chronic diseases are the major cause of death and disability worldwide. In Canada it is projected that 89% of all deaths will be attributable to chronic diseases (World Health Organization Canada, 2005).

It is further predicted 34% of these deaths will be caused by cardiovascular disease, mainly stroke and heart disease; 29% will be related to cancer deaths; 17% will be due to other chronic diseases; 6% will be related to chronic respiratory disease, and 3% will be caused by diabetes.

The incidence of Canadians who are living with chronic diseases is greatest amongst those aged 65 or older (Health Council of Canada, 2007). Coupled with aging populations and rising health care costs, chronic health conditions will contribute to a financial burden that could strain is expected the finite medical and personal resources of any given country (WHO, 2005). Canadians feel the impact of these conditions in many ways, as was expressed by Canada's Minister of Health "…the burden of these long-term illnesses falls not just on individuals and their families, but also costs the Canadian economy an estimated $80 billion annually through illness and disability" (Intersectoral Healthy Living Network, 2005, pg 1). Clearly, we can do a better job of more effectively assisting those with chronic illness live an optimal lifestyle that has better clinical, functional and even economical outcomes.

> *"Self-management and decision support are recognized as integral components of many models for chronic disease prevention and management (Improving Chronic Illness Care, 2005; World Health Organization, 2002). Canadians generally wish to participate in decisions about their health (O'Connor et al., 2002, 2003) and patients and families want providers to listen to their views and preferences (Coulter, 2005). As well, professional standards of practice and guidelines call for patient inclusion in care planning (College of Nurses of Ontario [CNO], 2006a; RNAO, 2006)."*
>
> Excerpted from RNAO Decision Support for Adults Living with Chronic Kidney Disease, July 2009

This growing prevalence of chronic conditions further exacerbated by the changing demographics in Canada, along with the increasing expectations of the public to be involved in their health care, and the practice standards of care reinforcing client centredness require a shift from the traditional provider-oriented methods that are not as effective in enabling clients to maintain an optimal lifestyle in the face of a chronic illness. Such a shift will influence the work of many nurses and includes a move to more promising client-centred methods that focus on client self-management and empowerment. Canadian nurses are encouraged to examine their role within the health-care system and education to ensure that they are prepared to realign their approaches to care in order to adopt more effective chronic disease management strategies.

A promising approach to improving outcomes and reducing health care costs associated with chronic conditions is "self-management," whereby individuals, in collaboration with nurses and other health-care professionals, assume greater responsibility for health care decisions. Self-management involves addressing multiple behavioural risk factors, (i.e., physical activity, diet, smoking, and alcohol) through three basic tasks:

1. Monitoring and managing the signs and symptoms of disease;
2. Engaging in health and lifestyle behaviours and taking medications appropriately; and
3. Maintaining regular contact with health care providers.

Therefore, self-management is defined as:

> *"... The tasks that individuals must undertake to live well with one or more chronic conditions. These tasks include having the confidence to deal with medical management, role management, and emotional management of their conditions"*
>
> (Adams, Greiner, & Corrigan, 2004, p.57).

This definition envisions self-management as actions supported by education that the client will need to acquire and use to effectively manage their own condition. The focus includes the notion of "confidence" and embraces clinical management as well as role and emotional management by the individual. It provides clarity in that the definition focuses on the person with the chronic condition and links to the concepts common to self-management as identified by Redman (2004). These concepts are: participating in treatment; managing health conditions on a day-to-day basis; practicing specific behaviours and acquiring the skills and abilities to decrease the physical and emotional impact of their chronic health condition.

Clients require support in order to obtain the education, skill and confidence required to effectively manage their condition. Health-care providers utilize a variety of techniques and strategies to offer this support. Specifically, self-management support is defined as:

"... the systematic provision of education and supportive interventions by health-care staff to increase patients' skills and confidence in managing their health problems, including regular assessment of progress and problems, goal setting[G]*, and problem-solving support."*

(Adams et al., 2004, pg 57).

The goal of self-management support is increased confidence in the ability to change, rather than compliance with a caregiver's advice. The purpose of self-management support is to help clients become informed about their conditions and take an active role in treatment (Bodenheimer, MacGregor & Sharifi, 2005).

True self-management support involves both client education and collaborative decision making. The education component of self-management support moves away from a didactic model of client education toward an approach that provides information based on the clients context, and their needs.

Using a collaborative approach, providers and clients work together to define problems, set priorities, establish goals, create treatment plans and solve problems along the way (Improving Chronic Illness Care, 2007).

Self-management support consists of the means by which individual practitioners and the broader health-care system support clients in the systematic process of self-management (Bodenheimer et al., 2002). Self-management encompasses problem-solving skills and clients' collaborative involvement in establishing goals to manage their disease (Adams et al., 2004).

Self-management support is the assistance caregivers give clients with chronic disease in order to encourage daily decisions that improve health-related behaviours and clinical outcomes. Self-management support can be viewed in two ways: as a portfolio of techniques and tools that help clients choose healthy behaviours; and a fundamental transformation of the client-caregiver relationship into a collaborative partnership (Bodenhemier et al, 2005, p4). This guideline embraces the latter, but acknowledges the necessity of appropriate knowledge, skills and resources to accompany such a transformation of the client caregiver relationship.

"Self-Management Support" is a major component of the Chronic Care Model (Wagner, Austin & Von Korff, 1996), which has been implemented through the Chronic Illness Breakthrough Series conducted by the Institute for Health Care Improvement (Wagner, 1998). The Chronic Care Model, or adapted versions of the model, is being used to guide the planning and delivery of chronic health care in the majority of Canadian provinces.

Figure A. Chronic Care Model
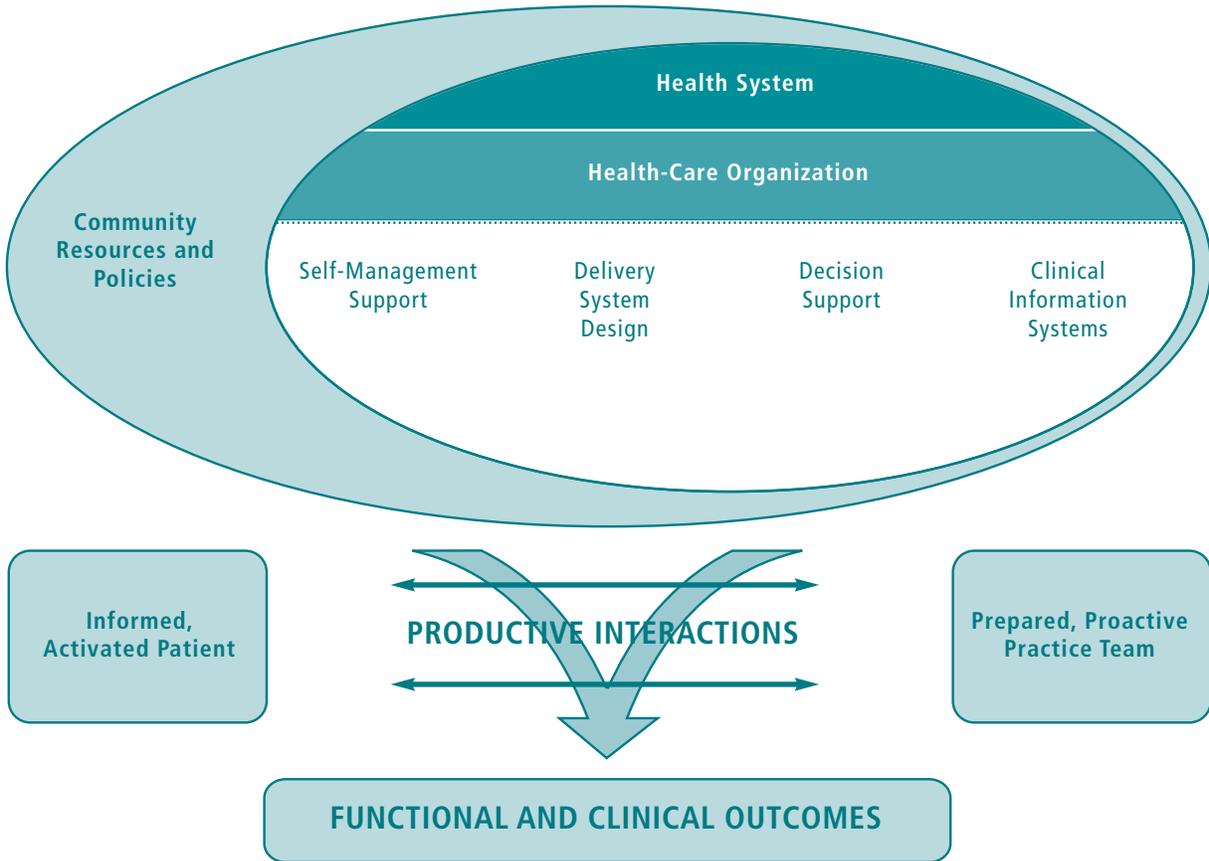
Printed with Permission from Effective Clinical Practice.

Source: Wagner, E.H. (1998). *Chronic disease management: What will it take to improve care for chronic illness?* Effective Clinical Practice, 1, 2-4.

The model involves two overlapping realms, the community and the health-care system, with "Self-Management Support" as one of the four essential components within the health-care system. The self-management support refers not only to coping with a condition, but also to the development of personal skills for health and wellness (Barr et al., 2003,).

Ultimately, the model posits that when "Informed Activated Clients[G]" interacts with a "Prepared, Proactive, Practice Team," the result is improved "Functional and Clinical Outcomes." To encourage these outcomes, health authorities provide inputs to strengthen and maximize the efficiency of each of the four essential components components – including "Self-Management Support" (see Table 1).

Table 1: Characteristics of the Chronic Care Model

DESCRIPTION OF THE COMPONENTS OF THE CHRONIC CARE MODEL		
Component	**Description**	**Example**
Self-Management Support/ Develop Personal Skills	Enhancing skills and capacities for personal health and wellness	■ Smoking prevention and cessation programs; RNAO BPG ■ Seniors walking programs
Decision Support	Integration of strategies for facilitating the community's abilities to stay healthy	■ Development of health promotion and prevention "best practice" guidelines ■ Utilization of decision support tools
Delivery System Design Re-orient Health Services	Expansion of mandate to support individuals and communities in a more holistic way	■ Advocacy with, and on behalf of vulnerable populations ■ Emphasis on quality improvement and health and quality of life outcomes, as well as clinical outcomes
Clinical Information Systems	Creation of broadly based information systems to include community data reflecting the determinants of health	■ Use of broad community needs assessment that take into account indicators such as: • Poverty rates • Availability of public transportation • Violent crime rate
Informed, Activated Individuals and Families	The individual understands their chronic health condition, and has assumed the role of self-manager for their care. Family and friends are engaged in the individual's self-management process	■ Consults with health-care provider as a guide; develops goals and self-care plan that includes family/friends
Prepared, Proactive Practice Team	Establish care for chronic health conditions as a priority among all team members	Develop self-management goals and tools to be implemented in a collaborative way with the client, family and health team members
Community Resources and Policies	Working with the community groups to set priorities and achieve goals that enhance the health of the community	■ Maintaining older people in their homes for as long as possible ■ Senior centres, and self-help groups

Adapted from Barr, J. V., et al. (2003). The expanded chronic care model: An integration of concepts and strategies from population health promotion and the chronic care model. *Hospital Quarterly*, 7(1), 79.

Of the four essential components—self-management support, delivery system design, decision support and clinical information systems within the Chronic Care Model, self-management supports is a key area of focus and interaction for nurses. Many clients may not fully understand what they have been told about their chronic health condition, and as a result may have difficulty participating in decisions about their care. Delivering effective self-management support enables the client to make decisions and engage in daily practices that lead to successful clinical and functional outcomes (Schaefer et al., 2009).

Delivering Self-Management Support

In recent years, the main responsibility of managing one's chronic health condition has been shifting to the client. This shift is directly related to studies that have shown interventions involving client self-efficacy, social support, improved coping skills, and certain follow-up plans as having a positive impact on self-management and health outcomes in specific chronic diseases (Barlow, Turner & Wright, 2000).

This shift to self-management is also in response to the need for a more effective and efficient approach to health care as people are living longer lives with complex, ongoing chronic health conditions that cannot be cured but can be managed appropriately to lessen the impact on overall health, quality of life and health system costs (Glasgow et al., 2003).

Managing these chronic conditions will allow individuals to prevent and minimize their admissions to hospital, continue their lives at home, maintain employment, contribute to their communities, and enjoy their families and friends. Self-management support moves away from the traditional model of clients being given instructions that they should adhere to in order to improve their health outcomes, and places the onus on the client to take a more proactive role in their health (Coleman & Newton, 2005).

Effective self-management encourages the client to assume a leadership role, in partnership with the health-care professionals, in achieving a healthful and satisfying life. A self-management approach promotes strengthening the self-efficacy of clients, who through their own abilities derive solutions to the problems they face as a result of their chronic health condition. For self-management to be successful, a shift in the roles between client and nurse should occur enabling the client to take a leadership role. This can be a challenging change for nurses and other health-care providers who have been educated to take a leadership role in health care decision-making (Schaefer et al, 2009).

Nurses and other health-care professionals will continue to use their knowledge and expertise to inform, activate and assist clients in their care to achieve successful self-management; in addition, there is considerable responsibility for governments, health-care policymakers, health-care organizations, and communities to provide support and resources for this new approach (Glasgow et al., 2003).

Client Education and Self-Management Education

One aspect of self-management support (Adams et al., 2004) focuses on is the educational strategies and techniques used by nurses, and other health-care professionals. These educational strategies, termed self-management education, offer solutions to complement the professionally managed care and education the client is already receiving (Health Council of Canada, 2010).

Based on work done by Bodenheimer et al (2002) (see Table 2), it is clear that client education has often focused largely on the disease process, where technical skills related to managing the disease are taught, for example, insulin administration. However, the focus of self-management education is to teaching clients skills that they can use to self-identify problems related to living with a chronic disease and how to address those problems. In the case of a diabetic such education could address how to know when you need to adjust your diet and or insulin, how to plan for changes in lifestyle, or when to contact a health-care professional related to your personal health goals and plan of care.. Both types of education are essential in assisting the individual to achieve the best quality of life and independence. The intent is to provide education that enables the client to understand the disease process, acquire skills related to technical management, as well as learn how to live a complete life with the disease.

Table 2: Comparison of Client Education and Self-Management Education

CLIENT EDUCATION	SELF-MANAGEMENT EDUCATION
■ Issues covered reflect widespread common problems related to a specific disease.	■ Issues covered are identified by the client.
■ Disease-specific and offers information and technical skills related to the disease.	■ Provides problem-solving skills relevant to the concerns identified by the client living with a chronic condition.
■ Based on the underlying theory that disease-specific knowledge creates behaviour change, which in turn produces better outcomes.	■ Based on the theory that greater client confidence in his/her capacity to make life-improving changes yields better clinical and other outcomes.
■ The goal is "compliance".	■ The goal is increased self-efficacy and improved clinical outcomes.
■ Delivered by health-care professional.	■ Educators may be nurses, other health-care professionals, or others who are living with the disease.

Adapted from Bodenheimer, T., Lorig, K., Holman, H., & Grumbach, K. (2002). Patient self-management of chronic disease in primary care. *Journal of the American Medical Association*, 288(19), 2469-2475.

Self-management education has long been considered the essential first step in successfully preparing clients to manage and live with their chronic condition. Among published studies, self-management education compared to client education generally produces positive results in terms of clinical outcomes, at least in the short term (Lorig, Ritter & Jacquez, 2005; Skinner et al. 2006). There is some evidence that self-management education in Type 2 diabetes also improves quality of life outcomes (Cochran & Conn, 2008) and reduces costs (Duncan et al., 2009; Robbins et al., 2008). Traditional client education alone is generally not sufficient for clients to maintain the self-management gains made as a result of education for chronic disease care (Gibson, Powell & Coughlan, 2007; Kirschbaum, Aarestad & Buethe, 2003; Newman, Steed & Mullligan, 2004; Norris et al., 2002).

There is evidence in multiple literature reviews and meta-analyses that identifies the underlying principles and critical elements for successful self-management (Barlow et al., 2002; Ellis et al., 2004; Gary et al., 2003; Kirschbaum et al., 2003; Newman et al., 2004; Norris, Engelgau & Narayan, 2001; Norris et al., 2002; Roter et al., 1998). Behavioural strategies are generally considered to be important components of self-management support. These strategies can be incorporated into the education process by teaching clients how to use them to solve problems, respond to physical and self-management challenges throughout the course of their illness, and make and sustain changes in their own behaviour, thereby improving outcomes (Ellis et al., 2004; Gary et al., 2003; Glasgow et al., 2002; Krischbaum et al., 2003; Norris et al., 2002). Self-directed goal-setting, problem-solving, skill-building[G], action planning, healthy coping[G], stress management, self-monitoring and providing links to community resources have been effectively used in successful client education programs (Anderson & Funnell, 2005; Bodenheimer et al., 2005; Bodenheimer & Handley, 2009; Glasgow et al., 2002; Hill-Briggs & Gemmell, 2007; Lorig et al., 2001; Mullen et al., 1997; Newman et al., 2004; Norris et al., 2002; Tang & Lansky, 2005) There is some evidence that using more than one of these strategies increases effectiveness (Anderson et al., 2005; Ellis et al., 2004; Lorig et al., 2001; Krichbaum et al., 2003; Tang et al., 2005).

Why is Learning How to Provide Self-Management Support Important to Nurses?

Successful management of chronic health conditions, based on mutual respect, rapport, trust, and effective interventions, is best addressed through a therapeutic client nurse relationship based on the philosophy of client-centred care. The therapeutic relationship within the context of the client-centred care has been a longstanding value of nurses all over the world (ICN, 2006), and in Canada is a value supported by provincial standards of practice (CNO, 2006) and the nursing code of ethics (Canadian Nursing Association, 2008). The RNAO has published a client-centred care guideline in this area that addresses respect and human dignity among other topics as the values and beliefs that are foundational to client-centred care (RNAO, 2002). A client-centred care approach is essential for successful self-management support (RNAO, 2006). Client-centred care involves advocacy, empowerment and respecting the client's autonomy, voice, self-determination and participation in decision-making." (RNAO, 2006, pg. 2) This empowers the client to focus on the required healthy lifestyles changes (RNAO, 2002).

> *"Inherent in nursing is respect for human rights, including cultural rights, the right to life and choice, to dignity and to be treated with respect. Nursing care is respectful of and unrestricted by considerations of age, colour, creed, culture, disability or illness, gender, sexual orientation, nationality, politics, race or social status."*
>
> (International Council of Nurses, 2006) .

Nurses and other health-care professionals have responded to the challenge of providing self-management support through two main approaches:

1) By developing and delivering self-management programs; and

2) By using and providing information to clients about behavioural strategies that enhance their ability to be an effective self-manager. Teaching techniques that assist clients to learn these behavioural strategies include:

- setting goals, collaboratively, with clients, using templates that can be modified based on the clients context;

- setting goals, collaboratively, with clients, using templates that can be modified based on the client's context;

- assessing clients' readiness for self-management, based on tools that the client can use in the future;

- helping clients to break down goals and tasks into small steps as part of an action plan, using specific tools and templates that can be modified based on the client's context;

- providing personalized feedback and helping the client learn how to ask for, and receive and use feedback;

- teaching self-monitoring, using tools and templates;

- helping clients obtain social support;

- informing clients of and linking them to community resources;

- helping clients assess their ' commitment to key tasks; and

- building in follow up processes to help clients measure their progress and milestone attainment.

In all settings, from acute care to long-term residential or home care, a client with a chronic illness requires care that promotes independence and self-management. The Health Council of Canada has focused its attention on prevention and management of chronic conditions to encourage discussion of the changes to public policy, health-care management and health services delivery required to improve health outcomes for Canadians (Broemeling, Watson & Prebtani, 2008). Recognition of this approach to care has led to the development of this best practice guideline, which will serve as a resource for nurses as they support and educate clients to take an active role in their own care through the use of self-management interventions.

> *"Self-management and decision support are recognized as integral components of many models for chronic disease prevention and management (Improving Chronic Illness Care, 2005). Canadians generally wish to participate in decisions about their health (O'Connor 2002, 2003) and patients and families want providers to listen to their views and preferences (Coulter, 2005. As well, professional standards of practice and guidelines call for patient inclusion in care planning (CNO, 2006a; RNAO, 2006)."*
>
> Excepted from Registered Nurses' Association. (2009). *Decision Support for Adults Living with Chronic Kidney Disease.* Toronto, Canada: Registered Nurses Association of Ontario.

Practice Recommendations

Multiple Self-Management Strategies.

RECOMMENDATION 1.0

Nurses utilize the "5 A's" behavioural change approach of assess, advise, agree, assist and arrange, to incorporate multiple self-management strategies when supporting clients with a chronic illness to assist in improved outcomes.

Level of Evidence = Ia

Discussion of Evidence:

Figure B. The "5 A's" of Behavioural Change*

5. ARRANGE
Specify plan for follow-up
(e.g. visits, phone calls, mailed reminders)

1. ASSESS
Beliefs, Behavior and Knowledge

2. ADVISE
Provide specific information about health risks and benefits of change

Personal Action Plan

1. List specific goals in behavioral terms
2. List barriers and strategies to address them
3. Specify Follow-up Plan
4. Share plan with practice team and client's social support

4. ASSIST
Identify personal barriers, strategies, problem-solving techniques and social/environmental support

3. AGREE
Collaboratively set goals based on patient's interest and confidence in their ablity to change the behavior

Reproduced by courtesy of Society of Behavioral Medicine and Springer from Glasgow, RE, et al. (2002) *Annuals Behavioural Medicine*, 24(2): 80-87.

* See Appendix C: The Five A's for detailed description

RECOMMENDATIONS

As depicted in the model of the 5 A's approach, evidence reinforces an effect of multiple self-management strategies used at once. For example: the use of multiple modalities has been shown to have improved health behaviour outcomes in four studies (Pignone et al., 2003; McTigue et al., 2003; Whitlock, Orleans, Pender & Allan, 2002; Fiore et al., 2000 as cited in Goldstein et al., 2004). According to Bodenheimer & Grumbach, (2007),

> *"the triad of goal setting, action planning, and problem-solving, while not rigorously evidenced based, appear to be important techniques to improve health-related behaviours and clinical outcomes. Finally, regular and sustained follow-up is essential"*
>
> (p. 94)

Systematic reviews by Gibson et al (2002) and Toelle & Ram (2004) showed that the use of education, written action plans and regular reviews improved outcomes, although the impact of each intervention on individual outcomes is unknown. A Cochrane review of 56 randomized controlled trials examining various interventions to improve control of blood pressure in clients with hypertension, concluded that this was most likely obtained with multiple organized interventions, including registration, recall and regular review, aligned with vigorous stepped care to anti-hypertensive drug treatment. They also found that education alone to either clients or health-care professionals was not associated with large net reductions in blood pressure levels (Fahey, Schroeder, & Ebrahim, 2005). Another systematic review involving 11 studies and 1,532 participants with diabetes also indicated efficacious outcomes; however, the multitude of self-management interventions utilized made it difficult to determine which intervention influenced which outcome (Deakin, McShane, Cade & Williams, 2005).

"Systematic reviews and clinical experience have shown that practices that use multifaceted interventions are more effective in promoting healthy behaviours than those that institute isolated measures" (Goldstein, 2004; Cohen, Tallia, Crabtree & Young, 2005; Mullen et al., 1997; Solberg et al., 2000 as cited in Woolf et al., 2005, S20). Most self-management research studies showing positive results have utilized multiple strategies. As an example, Mullen et al (1997) in their study of coronary heart disease found psychosocial and psychological interventions to be successful when delivered in individual as well as group formats. The individual intervention provided a major benefit for the client through the provisions of specifically tailored interventions; the group format provided an opportunity for the client to benefit from interactions with the designated group leader and provided a context to normalize individual experiences and provided social interaction. The psychosocial intervention usually involves health education, counseling and/or cognitive-behavioral stress management. Utilizing multiple strategies has been consistently shown to result in effective outcomes. (Fahey et al., 2005; Fiore et al., 2000; 2005; Gibson et al., 2002; Glasgow et al., 2003; Goldstein, 2004; McTigue et al., 2003; Pignone et al., 2002; Pignone et al., 2003; Renders et al., 2000; Rubak, Sandbaek, Lauritzen & Christensen, 2005; Smith West et al., 2007; Solberg et al., 2000; Toelle & Ram, 2004; Whitlock et al., 2002; Woolf et al., 2005;). However, at the same time, use of multiple interventions makes it difficult to delineate exactly which strategy may be the most effective in contributing to behavioural change, (Bodenheimer & Grumbach, 2007; Deakin, 2005; Gibson & Powell, 2002; Toelle, 2004).

The 5 A's multi-modal approach, which embodies the principles and strategies to successfully deliver behavioural risk factor interventions, provides a unifying conceptual framework for supporting self-management(Goldstein, Whitlock, & DePue, 2004). The 5 A's are Assess, Advise, Agree, Assist and Arrange. The 5 A's represent a comprehensive set of activities that health-care providers can use. These activities are not necessarily linear with each step following the other sequentially. The goal of the 5 A's, in the context of self-management support, is to develop a personalized, collaborative action plan that includes specific behavioural goals and a specific plan for overcoming barriers and reaching those goals. The 5 A's are elements that are interrelated and are designed to be used in combination to achieve the best results especially when working with clients in complex health and life situations (Glasgow, Goldstein, Ockene & Pronk, 2004). The 5A's has also been recommended for use as an approach in describing counselling interventions for a variety of health-related behaviours (Whitlock et al., 2002).

ASSESS: Beliefs, behaviour and knowledge

RECOMMENDATION 1.1.a

Nurses establish rapport with clients and families.

Type of Evidence = III

Discussion of Evidence:

Professional nursing organizations have identified the therapeutic relationship or helping relationship, as a central component of nursing care and have embedded qualities of the nurse-client relationship in many statements of practice (CNA, 2010; CNO, 2006). Qualities of the therapeutic relationship include active listening, trust, respect, genuineness, empathy, and responding to client concerns. Establishing rapport is a fundamental component in establishing the overarching therapeutic relationship and ensures that clients have opportunities to express their priorities and concerns. It includes active listening, trust, respect, genuineness, empathy and responding to client concerns. Establishing rapport has been shown to lead to positive client outcomes (O'Connor, Gaylor & Nelson, 1985; Mejo, 1989; Paley & Lawton, 2001; Stewart, 1995;), and may be responsible for improving client satisfaction and treatment adherence (O'Connor et al., 1985). Establishing rapport also provides opportunities for clients and families to provide their perspectives and allows nurses the opportunity to listen. Please refer to the RNAO Nursing Best Practice Guideline "Establishing Therapeutic Relationships" (2006).

An important component of establishing rapport is to assess and address distress, such as feelings of anger and frustration (Redman, 2004) related to coping with and caring for a chronic illness. Illness-related distress is common and persistent and can interfere with self-management efforts (Skovlund & Pevrot, 2004; Peyrot et al., 2005). In the Diabetes Attitudes, Wishes, and Needs (DAWN) program, a large international study conducted among over 5,000 clients with Type 1 and Type 2 diabetes, and 1,122 nurses and 2,705 physicians, a large majority of clients (85.2%) reported a high level of distress at the time of diagnosis, including feelings of shock, guilt, anger, anxiety, depression and helplessness. Many years after diagnosis (mean duration almost 15 years), problems of living with diabetes remained common, including fear of complications and immediate social and psychological burdens of caring for diabetes (Skovlund & Peyrot, 2004).

RECOMMENDATION 1.1.b
Nurses' screen for depression on initial assessment, at regular intervals and advocate for follow-up[G] treatment of depression.
Type of Evidence = Ib

Discussion of Evidence

Depression and Chronic Health Conditions

Major depression is a major health concern commonly seen in those with chronic diseases (Chapman, & Gratz, 2007). A worldwide study conducted by Moussavi et al (2007), of depression rates in relation to four chronic diseases (angina, arthritis, asthma and diabetes), results indicated depression can "exacerbate chronic disease and should be tackled head-on." Similarly, in a randomized control study containing 42 participants, Anderson et al (2001)found that depression affects 20% of people with diabetes and is at least twice as prevalent among people with diabetes as among the general population (Anderson, Freedland, Clouse & Lustman, 2001, Demakakos, Pierce & Hardy, 2010).

The interaction of diabetes and depression is problematic because each negatively influences the other. The presence of depression may attenuate the effects of diabetes interventions by decreasing patients' medication adherence and physical activity, and by limiting acquisition of diabetes knowledge (Taveira, Pirraglia, Cohen & Wu, 2008).

Depression is one of the most common complications of chronic illness. It is estimated that up to one-third of individuals with a serious medical condition experience symptoms of depression (Cleveland Clinic, 2010). People diagnosed with chronic illnesses must adjust to the demands of the illness as well as to its treatment. The illness may affect a person's mobility and independence, and change the way a person lives, sees him or herself, and/or relates to others. These requirements can be stressful and cause a certain amount of despair or sadness that is normal.

In a four-year prospective cohort study involving 2,558 clients, results indicated increasing rates of depression with increasing medical co-morbidity (Unutzer et al., 1997). With a growing elderly population, and the associated increase in prevalence of chronic medical conditions, a concomitant rise in the prevalence of depression is to be expected (Moussavi et al., 2007). According to Egede, Nietert & Zheng (2005) and Djernes (2006), between 20% and 50% of older adults with long-term conditions such as diabetes, osteoporosis and hypertension, have significant clinical symptoms of depression.

Depression Affects Ability to Self-manage

Untreated depression in individuals with co-morbid chronic health conditions increases morbidity and mortality rates and reduces the capacity for self-management (Bodenheimer et al., 2002). Cross-sectional correlation studies using self-report surveys and screenings have confirmed that depression affects the ability to self-manage diabetes (Park et al., 2004; Lerman et al., 2004).

Depression caused by chronic illness can in turn aggravate the illness, causing a vicious cycle to develop. Depression is especially likely to occur when the illness is associated with pain, disability, or social isolation. Depression can intensify pain, fatigue, and the self-doubt that can lead to avoidance of others (Katon & Ciechanowski, 2002).

DiMatteo, Lepper & Croghan (2000) in a meta-analysis found that, compared with non-depressed clients, depressed clients were three times more likely to be noncompliant with medical treatment recommendations. A population-based study by Schmitz, Wang, Malla & Lesage (2007) found that the prevalence of functional disability was higher in subjects with chronic conditions and comorbid major depression (46.3%) than in individuals with either chronic conditions (20.9%) or major depression (27.8%) alone. The results suggest that there is a joint effect of depression and chronic conditions on functional disability.

Screening for Depression

Systematic screening for depression is a necessary component of disease management programs to improve detection, treatment and outcomes of depression. A commonly used screening tool is the Client Health Questionnaire-2 (PHQ-2) (Kroenke, Spitzer & Williams, 2003) (See Appendix D for PHQ-2 Client Health Questionnaire). If concerns arise, appropriate follow up, referral and treatment are imperative. (See Appendix E for screening tool for depression).

RECOMMENDATION 1.1.c

Nurses establish a written agenda for appointments in collaboration with the client and family, which may include:

- Reviewing clinical data
- Discussing client's experiences with self-management
- Medication administration
- Barriers/stressors
- Creating action plans
- Client education

Type of Evidence = IIb

Discussion of Evidence

Establishing the visit agenda ensures that both the client and nurse identify concerns for discussion at each encounter. There are several techniques recommended to establish the visit agenda with clients, including pre-visit questionnaires and assessment forms, agenda setting sheets, and interactions with the client at the beginning of the visit. By utilizing the setting agenda tools (see Appendix F: Tools for Establishing an Agenda), the client can prioritize the topics that he/she wishes to discuss. This approach supports the collaborative approach and establishes the client's active involvement in his/her care, resulting in higher patient satisfaction and behavioural changes (Epstein et al., 2008).

Research has generally focussed on the interactive aspects of the health-care professional/client interaction and not on outcomes. Research findings on client satisfaction with this interaction have been inconsistent. Some studies have found that clients tended to be more satisfied with the consultations (Little et al., 2001; Middleton, McKinley & Gillies, 2006), especially when psychosocial problems are mentioned (Winefield, Murrell, Clifford & Farmer, 1995); conversely, other studies, (Hornberger, Thorn & MaCurdy 1997), found trends towards lower client satisfaction. There appears to be a consensus that asking clients to write down the questions they want to ask improves client outcomes. The process of collaboratively establishing the visit agenda with clients is also consistent with the process of motivational interviewing (Miller & Rollnick, 2002). A study conducted by Middleton et al (2006) found that by using an agenda setting form, physicians were able to identify more problems and clients were more satisfied with the depth of the doctor client relationship.

RECOMMENDATION 1.1.d

Nurses consistently assess client's readiness for change to help determine strategies to assist client's readiness for change to help determine strategies to assist client with specific behaviours.

Type of Evidence = III

Discussion of Evidence

Assessing the client's readiness to change[G] a specific behaviour helps the nurse to select an appropriate behaviour change strategy with the client. Traditional approaches to client education assume that clients are ready to change (Edwards, Jones & Belton, 1999), however, in fact only a minority of clients are ready to change their behaviour at any one time (Jones et al., 2003). As part of the assessment the nurse or other health-care professional should identify where the client is positioned in the stages of change at each encounter in order to understand and support the client appropriately. This knowledge will assist in identifying the client's readiness to change. There are a variety of ways to determine readiness for change, and the nurse/provider should select the approach most consistent with their knowledge and skill level and the client context.

Prochaska, DiClemente & Norcross have outlined a theory-based Stages of Change Model (1992), which has been used in relation to assisting clients with various heath-related behavioural changes such as smoking cessation. It helps identify where the client is in the process of change, beginning with precontemplation, and it offers numerous intervention strategies that enable the health-care professional to collaborate with the client to help them move to behavioural change and sustaining change.

Table 3: Stages of Change Model

STAGE IN TRANSTHEORETICAL MODEL OF CHANGE	PATIENT STAGE
Precontemplation	■ Not thinking about change ■ May be resigned ■ Feeling of no control ■ Denial: does not believe it applies to self ■ Believes consequences are not serious
Contemplation	Weighing benefits and costs of behavior, proposed change
Preparation	Experimenting with small changes
Action	Taking a definitive action to change
Maintenance	Maintaining new behavior over time
Relapse	■ Experiencing normal part of process of change ■ Usually feels demoralized

Adapted from Prochaska ,J.O., DiClemente, C.C. & Norcross, J.C. (1992) In search of how people change. *Am Psychol* .47:1102-4, and Miller, W.R., & Rollnick, S. (2002). Motivational interviewing: *Preparing people for change* (2nd ed.). New York: Guilford Press.

RECOMMENDATIONS

Assessing "Readiness to Change" is an integral component of providing self-management support. Using the clients perception of importance of a particular behaviour and their confidence in their ability to change or modify the behaviour is key to an optimal outcome because it can guide clinicians in choosing an appropriate interventions (Keller & White, 1997; Rollnick, Mason & Butler, 1999; Whitlock et al., 2002).

Using this "Readiness to Change" technique, a person is asked how "important" (sometimes referred to as "conviction") a specific behavior is to improving his/her health condition, and how "confident" he/she is that he/she can actually carry out the specific behavior. When doing this assessment, it is important to focus on only one behaviour (e.g., walking), and to ask the person's permission to talk about the behavior. The following is a script (adapted from Bodenheimer et al., 2005) between a health-care professional and a client that demonstrates this type of assessment interaction.

Assessment of Client's Readiness for Change Script

Nurse: I just got back your last HbA1c^G, it's gone up to 8.5.
Client: *It's supposed to be 7 or lower?*

Nurse: That's right. What would you like to do about this?
Client: *I'm already on a diet, I'm so busy, I have no time for exercise. I don't know what to do.*

Nurse: Could we talk about exercise?
Client: *Umm, yeah, OK.*

Nurse: How important is it to you to increase your exercise?
Let's do this on a scale of "0" to "10." A "0" means it isn't important, and "10" means it's just about as important as it can get.

1	2	3	4	5	6	7	8	9	10
Not Important									Very Important

Client: *It's an "8." I know I really need to do it.*

Nurse: Now, using the same "0" to "10" scale, how confident are you that you can get more exercise? A "0" means you aren't sure at all; "10" means you're 100% sure.

1	2	3	4	5	6	7	8	9	10
Not Sure									Very Sure

Client: *It's a "4." Like I said, I have no time.*

Nurse: Why did you say a "4" and not a "1"?
Client: *I can exercise on the weekends, so it's not something that is completely impossible.*

Nurse: What would it take to raise the confidence level of a "4" to an "8"?
Client: *Maybe if I could exercise with a friend, I'd enjoy it more, be more motivated. I have a friend at work that has diabetes, too.*

Nurse: Do you want to set a short-term goal about your exercise? We could agree on an action plan.

In assessing a person's "conviction" and "confidence" to change a specific behavior, it is possible for him/her to be in one of four places: 1) high conviction & high confidence; 2) high conviction & low confidence; 3) low conviction & high confidence; and 4) low conviction & low confidence. The importance of determining where the person is with respect to being ready to change a behavior is that it guides nurses to assist the person by using the appropriate strategy. Please refer to Keller, V.F. & White, M.K. (1997). Choices and changes: A new model for influencing patient behaviour. *Journal of Clinical Outcomes Management*, 4(6), 33-36.

RECOMMENDATION 1.1.e

Nurses encourage clients to use health risk appraisal instruments; model the use of such tools, and discuss the results of the risk assessment with them at regular follow up.

Type of Evidence = Ib

Health Risk Appraisal (HRA) is defined as a systematic approach to collecting information from individuals that identifies risk factors, provides individualized feedback, and links the person with at least one intervention to promote health, sustain function and/or prevent disease. A typical HRA instrument obtains information on demographic characteristics (e.g., sex, age), lifestyle (e.g., smoking, exercise, alcohol consumption, and diet), personal medical history and family medical history. In some cases, physiological data (e.g., height, weight, blood pressure, cholesterol levels) are obtained.

Having clients complete a HRA provides an opportunity for them to obtain independent, objective information about their health. This information may provide assistance for clients in addressing their health concerns. The purpose of the HRA is to help bring awareness to health issues. The information the client receives from the appraisal is used for discussion with the nurse or other health-care providers.

Results from the Research ANd Development (RAND) Corporation (2003) literature review indicates that conclusive evidence regarding the effectiveness of HRAs for older adults is limited, but encouraging. Effective HRA programs have demonstrated beneficial effects on behaviour (particularly exercise), physiological variables (particularly diastolic blood pressure and weight), and general health status.

To be an effective health promotion strategy, HRA questionnaires must be coupled with follow-up interventions (e.g., information, support and referrals) to be effective (RAND Corporation, 2000).

An example of a generic Health Risk Appraisal Tool can be accessed Creative Wellness Solutions the following website:http://ohra.ucis.dal.ca/

ADVISE: Provide specific information about health risks and benefits of change.

RECOMMENDATION 1.2.a

Nurses combine effective behavioural, psychosocial strategies and self-management education processes as part of delivering self-management support.

Type of Evidence = Ia

Strategies to improve outcomes resulting from self-management education include:

a) **Behavioural strategies:**

- Involving the client (or caregiver) in their own care (Hibbard, Mahoney, Stock & Tusler, 2007; Mosen et al., 2007). Client involvement is a critical element necessary for successful self-management. When the client is a knowledgeable, active, collaborative partner in their own care, it results in better health outcomes for the client (Hibbard et al., 2007).

- Utilizing adult learning principles and engaging the client in the learning process by using such techniques as active learning (Anderson & Funnell, 2005; Tang et al., 2005).

- Teaching participants the skills needed to adjust their behaviour in order to manage their health and/or illness (Krichbaum et al., 2003; Lorig et al., 2001; Bodenheimer & Handley, 2009).

b) **Psychosocial strategies :**

- Integrating feelings and attitudes with clinical content (Norris et al., 2002; Barlow et al., 2002).
- Feelings and attitudes are an integral part of managing chronic disease and it is important that the client understands and acknowledges that emotional responses related to their chronic disease is vital to their success with self-management and their quality of life (Barlow et al., 2002).

c) **Other strategies:**

- Tailoring the intervention or messages to the age, culture, ethnicity and health literacy of the participants. (Brown et al., 2005; Anderson & Funnell, 2005; Sarkisian et al., 2003; Lorig et al., 2001; Tang & Laskey, 2005; Glazier, Bajcar, Kennie & Wilson, 2006; Schillinger et al., 2002).

<div style="writing-mode: vertical">RECOMMENDATIONS</div>

RECOMMENDATION 1.2.b

Nurses utilize the "ask-tell-ask" (also known as Elicit-Provide-Elicit) communication technique to ensure the client receives the information required or requested.

Type of Evidence = III

Discussion of Evidence

Ask-Tell-Ask is a foundational technique that provides information to clients in a manner directed by the client (Miller & Rollnick, 2002). It is a strategy that ensures the client receives the information he/she is seeking. The tone of the ask-tell-ask interaction is non-judgemental, empathetic and encouraging (Resnicow et al., 2001), and does not attempt to convince or persuade the client. Instead, reflective listening[G] and positive affirmations are used to help clients identify their own health goals and the discrepancies in the behaviour that influence achieving these goals (Miller, 1983). According to Rollnick (2003), clients are far more likely to retain information if it is information they want to know. Barrier, James Li & Jenson (2003) and Keller & Carroll (1994) suggests the use of an ask-tell-ask framework in medical interviews.

The treatment of migraine headaches largely depends upon clear communication between the client and health-care professional. This chronic condition is ideal for studying communication techniques as the diagnosis is based upon the assessment of the headache as described by the patient. This assessment happens through dialogue with the client and the accuracy of questions posed by the health-care professional (Lipton, R. et al., 2008).
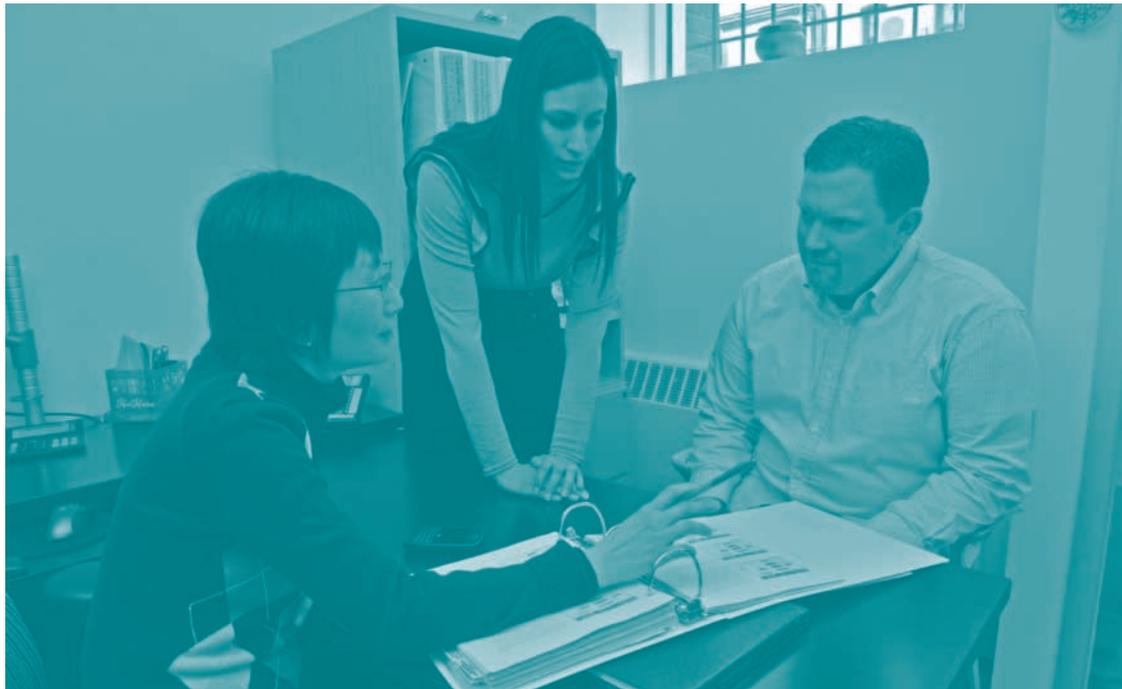
The case below represents a dialogue between the client and health-care professional using the ask-tell-ask technique.

Example of "Ask-Tell-Ask" script

ASK

Nurse: Tell me in your own words, how do you think your migraines affect your daily life?
Client: *Well, a lot really. There are days I cannot work, or even interact with my family. I close myself off and just want to be left alone in bed.*

Nurse: So you cannot go to work and you do not interact with your family, when you have a migraine. Is that right?
Client: *Yes, when I was in school, I missed so many classes I could not keep up.*

Nurse: How many times in the last six months, have you had a migraine?
Client: *Hmm, probably at least seven times per month, so that would be about 52!*

Nurse: At least seven per month?
Client: *At least.*

Nurse: How long does each migraine last?
Client: *They last about two days*

Nurse: So each attack last two days each, so you would be in bed and not able to work or interact with your family for 14 days per month. Is that right?
Client: *Yes it is*

Nurse: So, do you know of anything that causes the headaches, or makes them worse?
Client: *Not really, there have been many suggestions about weather and perfumes, but I really cannot say.*

Nurse: Okay, so you do not really know what may cause your headache; what about making them worse, does anything you can think of make them worse?
Client: *I guess light, because when I do have an attack, I need to be in the dark to feel better.*

Nurse: So light makes the migraine attacks worse and you use a darkened room to feel better.

Nurse: So what would you like to know about migraines?
Client: *I need to know what causes my migraines, and if there is something that can help me function, because I cannot keep missing work and not spending time with my family.*

TELL

Nurse: We will need to schedule some testing to help determine that, and there are a number of ways to treat migraines. The treatment may include altering your diet, the use of medication, and changing your environment. Once we have the results of your tests, we will be able to better identify a plan of care with you. For now, we can start by you writing down what you are eating, where you are, and what you are doing when you get your migraines.

So can you repeat for me the next steps in treating your migraines, so I know that you understand this?
Client: *Well, I am going to have some tests done and also write down what I ate before my migraines, where I was and what I was doing.*

ASK

Nurse: Yes, that is correct. Is there anything else you need to know?

RECOMMENDATION 1.2.c

Nurses use the communication technique "Closing the Loop"[G] (also known as " teach back") to assess a client's understanding of information.

Type of Evidence = III

Discussion of Evidence

Communication Technique

The communication technique "Closing the Loop" is used to ensure that the client understands the information he/she receives. It is a foundational communication technique that involves assessing a client's level of understanding and clarification of information received (Miller & Rollnick, 2002). The Kalamazoo Consensus Statement, developed in 1999 by 21 communication experts representing medical education organizations in North America, supports checking for understanding as part of the core communication skill of sharing information (Makoul, 2001).The closing the loop technique focuses on understanding, whereas the "ask-tell-ask" focuses on patients identifying their own health goals and behaviours that influence these goals.

A study by Bertakis (1977) showed that clients asked to repeat in their own words the information given to them showed a significant increase in retention of information and satisfaction with their physicians. In an observational study by Schillinger et al (2003), clients who were given information using the closing the loop strategy had an average HbA1c level lower than clients who were not. The technique therefore has the potential to improve client comprehension and diabetes outcomes. A comparative study (Kemp, Floyd, McCord-Duncan & Lang, 2008) investigated client preferences in assessing understanding of medical information from physicians, and reported that clients preferred a "tell-back collaborative method" over a "physician-centred tell back directive method" or a method requiring clients to "respond positively or negatively to understanding information". Kemp et al (2008) recommended that clients re-state what they understand using their own words.

Example of "Closing the Loop" Script

Closing the Loop: A 65-year-old female client with gradual onset of symptoms of heart failure was seen in the emergency department. Results of her physical examination and diagnostic tests show evidence of abnormal pump function. The health-care team decided outpatient management was appropriate and the patient was given education to self-manage her care.

Nurse: Mrs. Smith, do you have any questions about what the doctor has told you?

Mrs. Smith: I may have some later, but not right now.

Nurse: There are some things that are very important for you to do when you are at home to take care of yourself and to help us know how you are doing. I have them written down and will review these with you, does that sound okay?

Mrs. Smith: Yes, I want to make sure I do everything I can to take care of myself.

Nurse: Okay, the amount of medication you take may need to change depending on your weight, so you will need to weigh yourself daily, and call us if any of your symptoms get worse. Any sudden weight gain of two pounds in one day or five pounds in one week will need to be reported to us. This weight gain may be caused by excess fluid in your body, so it is important that you let us know.

Can you repeat back to me what you need to do at home, so I know that this is clear?

Mrs. Smith: Yes, of course. I need to weigh myself daily, and call you if any of my symptoms worsen. I did not quite get the amount of weight gain that I should be looking for?

Nurse: That's okay, I have written it down for you, but just so it is clear, if you gain two pounds in a day or five pounds in one week you will need to call us right away.
Can you repeat this back to me?

Mrs. Smith: Yes, if I gain two pounds in one day and five pounds in one week, I should call you.

Nurse: Good.

RECOMMENDATIONS

RECOMMENDATION 1.2.d

Nurses assist clients in using information from self-monitoring[G] techniques (e.g., glucose monitoring, home blood pressure monitoring) to manage their condition.

Type of Evidence = Ib

Discussion of Evidence

It is important to note that clients can self-monitor their symptoms and utilize various tools (such as symptom management action plans) to manage their chronic conditions. One tool used frequently is the asthma action plan. Asthma action plans are not the same as behaviour-change action plans. Behaviour change action plans generally address specific health or lifestyle behaviours and are developed collaboratively with providers to help clients achieve self-selected goals. Symptom management action plans generally are defined by physicians, nurses, or case managers, and are designed to guide clients in taking action to manage symptoms and prevent office or Emergency Department visits. They are both a self-monitoring and self-care[G] tool. Clients monitor their condition by comparing their symptoms to standards and follow instructions regarding next steps. Evidence supporting their use is varied (Powell & Gibson, 2003; Toelle & Ram, 2004; Lefevre et al., 2002). However, a recent review indicated that asthma self-management that involves self-monitoring by either peak expiratory flow or symptoms, coupled with regular medical review and a written action plan, improved health outcomes for adults with asthma (Gibson et al., 2007).

Client self-monitoring can include a range of activities. Self-monitoring techniques may include monitoring blood pressure (BP), glucose, warfarin levels and other clinical indicators. Nurses should assist clients to interpret these results in order to help clients manage their condition. There is some evidence indicating that when clients with diabetes have knowledge of HbA1c and other targets the likelihood of them achieving their target goals increases (Berikai et al. 2007).

A literature review conducted by Yang, Robetorye & Rodgers (2004) found that clients who self-monitored and self-adjusted their warfarin dose at home had international normalized ratios (INR) levels in the target range more frequently than clients whose physicians adjusted doses. Results of studies of self-monitoring of blood glucose (SMBG) among non-insulin treated Type 2 diabetes clients have been mixed. A systematic review by Welschen et al (2005) showed that SMBG may be effective for improving glycemic control among clients with Type 2 diabetes. However, a study among clients with Type 2 diabetes, found there were no significant between-group differences for clients who monitored blood glucose levels three times a day, twice a week and discussed results with their provider by phone, and an intensive intervention that taught clients to interpret the results (Farmer et al., 2007). In a recent meta-analysis (Towfigh et al., 2008) indicated that SMBG produces a statistically significant, but clinically modest, effect in controlling blood glucose levels in clients with diabetes not taking insulin. However, clients with Type 2 diabetes who are on insulin and who use monitoring information and algorithms to make insulin dose adjustments have improved metabolic outcomes. (Blonde, Merilainen, Karwe & Raskin, 2009; Selam & Meneghini, 2009).

A further meta-analysis related to self-monitoring assessed the effect of home versus clinic-only BP monitoring. The results of BP levels and the proportion of hypertensive clients achieving target BP levels revealed that home BP monitoring had a significant (positive) impact on lowering both systolic and diastolic BP levels. Results also indicated an increasing number of clients who reached target BP levels (i.e., normal range) relative to clinic-only monitoring (Cappuccio, Kerry, Forbes & Donald, 2004). This meta-analysis included the results of 18 randomized trials, and the findings maintained even after considering publication bias. These findings suggest that home BP monitoring should be encouraged as part of a comprehensive hypertension self-management program.

RECOMMENDATION 1.2.e

Nurses encourage clients to use monitoring methods (e.g., diaries, logs, personal health records) to monitor and track their health condition.

Type of Evidence = III

Discussion of Evidence

The Cincinnati Evidence-Based Care Guideline for Chronic Care: Self-Management in Children (2007) recommends using diaries and journals for self-monitoring as part of self-management support.

The limited research on the use of monitoring methods such as Personal Health Records has produced mixed results. There is some evidence to indicate client's behavioural changes improve when personal health recording systems are used and lead to better communication with clinicians (Scherger, 2005; Tang & Lansky, 2005; Tang et al., 2003; Wald et al., 2004). However, in Newell, Sanson-Fisher, Girgis & Davey (2002) a randomized controlled trial found that the use of personal health record booklets did not result in significant increases in cancer screening behaviour. Another study (Simmons et al., 2004) found that use of a diabetes passport was not associated with improved glycemic control, diabetes knowledge or self-empowerment.

Current evidence does not adequately show the potential capabilities and utility of personal health record systems (Tang et al., 2006). The technology supporting personal health records is still under development; these types of tools require further monitoring and their use is based on the client's individual preference.
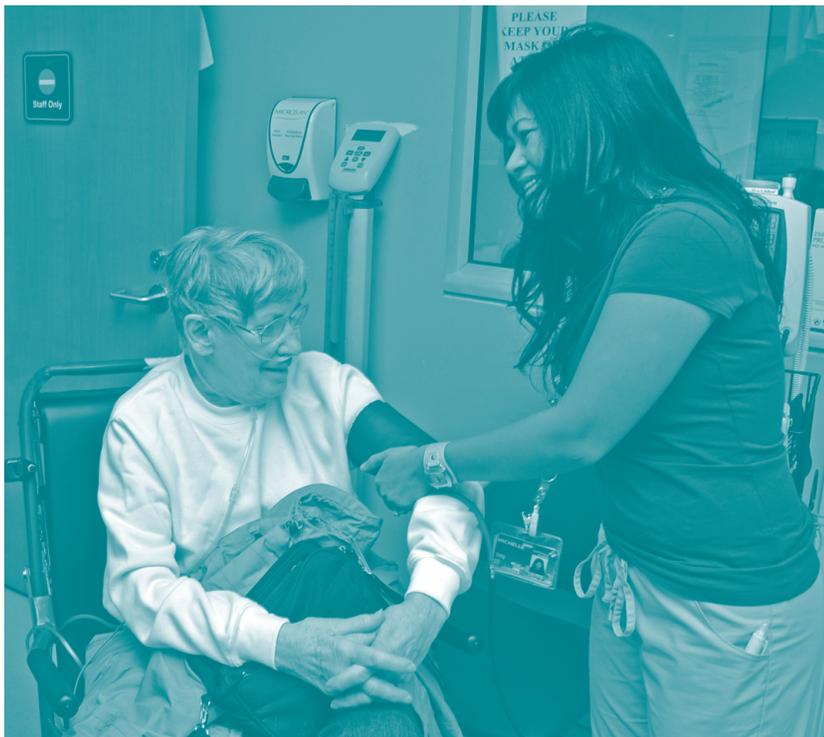
RECOMMENDATIONS

AGREE: Collaboratively set goals based on client's interest and confidence in their ability to change the behaviour.

RECOMMENDATION 1.3
Nurses collaborate with clients to: • Establish goals:, • Develop action plans that enable achievement of goals: and • Monitor progress towards goals. **Type of Evidence = Ia**

Discussion of Evidence

The purpose of goal setting and action planning[G] is to get clients to effect behaviour changes that improve clinical outcomes, or to effect smaller behaviour changes that are not sufficient to improve clinical outcomes, but which increase the client's self-efficacy[G] and may in turn lead to further clinically significant changes (Bodenheimer & Handley, 2009). Self-efficacy is associated with healthier behaviours and improved clinical outcomes; indeed, growing evidence suggests that self-management strategies incorporating self-efficacy enhancing interventions yield valuable beneficial effects in the management of chronic health conditions (Marks, Allegrante & Lorig, 2005; Lippke et al., 2009).

Multiple reviews have been conducted to examine the effects of goal setting and action planning. A systematic review of 92 studies by Ammerman et al (2002) of diet behaviours found that goal setting or action planning were associated with improved health behaviours, specifically consumption of less fat and more fruits and vegetables. Another systematic review of 28 studies on diet and physical activity found that 32% of studies supported the use of goal setting or action planning for adults (Shilts, Horowitz & Townsend, 2004). Estabrooks et al (2005) found that clients with diabetes who were involved in choosing goals for self-management and making plans to attain those goals often chose goals for behaviours, which required the most change and improved in that particular area more than clients who chose less relevant goals. Handley et al (2006) concluded that incorporating collaborative goal setting with action plans into routine primary care practice may be a useful strategy to promote behaviour change. However, the state of knowledge of the effectiveness of making goals and action plans to improve clinical outcomes is limited, as studies have not isolated "action planning" but rather have included it as one of several strategies that constitute the intervention (Bodenheimer & Handley, 2009).

ACTION PLAN

The purpose of an action plan is to increase self-efficacy (confidence that the client can change something (Bodenheimer , Davis & Holman, 2007).
 	
An action plan is an agreement between the clinician and client that the client will make a specific behaviour change (Handley et al., 2006).
 	
It is also defined as an agreement between clinician and client that the client will attempt to work on a concrete, small behaviour change that has a high potential of success.
 	
Action plans are also defined as highly specific, concrete activities that clients agree to do to help reach their goals (e.g., walking around the block twice on Mondays, Wednesdays, and Saturdays before lunch for a goal of doing more exercise).
 	
Action plans are negotiated with a health-care provider to attain a goal. Collaborative process are used to agree on an action plan.
 	
An action plan must:
    ■ be something the person wants to do;
    ■ be reasonable (something the person can expect to be able to accomplish in a certain time period (e.g., week, month) – choosing an action plan with a high probability of success is crucial, as success in making a behaviour change, no matter how small, increases self-efficacy;
    ■ be behaviour-specific;
    ■ answer the question: What? How much? When? How often?; and
    ■ have a confidence level of seven or greater (0 being no confidence, 10 being total confidence that they will complete their entire action plan).

An example of creating an action plan with a client is contained in Appendix G.

ASSIST: Identify personal barriers, strategies, problem-solving techniques and social/environmental support.

RECOMMENDATION 1.4.a
Nurses who are appropriately trained use motivational interviewing with their clients to allow clients to fully participate in identifying their desired behavioural changes.
Type of Evidence = Ia

Discussion of Evidence

Motivational Interviewing (MI) is defined as a client-centred directive method for enhancing intrinsic motivation for change by exploring and resolving ambivalence (Miller and Rollnick, 2002). The focus is to facilitate behaviour change by helping clients explore and resolve ambivalence about the change. Its effect is to reduce defensiveness and promote disclosure, engagement and participation, thereby motivating the client to make behavioural changes. Motivational Interviewing recognizes client autonomy, assumes that most people are ambivalent about whether to change their behaviour, and tries to bring ambivalence out into the open. Ideally, it is the client, and not the provider, who present the argument for change. Motivational Interviewing is a component of the "ASSIST" phase of the 5 A's.

In an attempt to increase clarity Miller and Rollnick (2009) state that MI incorporates reflective listening to guide the resolution of ambivalence about change and is:

- collaborative and person-centred;
- intended to enhance clients' motivation for change ("change talk") and does not need to be based on the transtheoretical model[2] (TTM) of change (i.e., pre-contemplative stage);
- always meant to honour the client's autonomy and should never be used to coerce them into doing what you think they should;
- a complex clinical skill that requires practice to increase proficiency, rather than a step-by-step manual;
- a method to elicit solutions from the client, rather than providing solutions for them in the assumption that they lack something necessary to be successful; and
- not necessary if the client is ready for change.

A recent meta-analysis by Rubak et al (2005) evaluated the effectiveness of using MI with clients who had various diseases. They found that MI produced significant effects in some areas (body mass index, total blood cholesterol, systolic blood pressure) but not in others (cigarettes per day and A1C levels). Lewin et al (2001) recommended that MI be used to counsel clients/families on health behaviour change. MI can be effective in brief encounters of fewer than 15 minutes; however, the "dose" of effectiveness is individualized, assuming that increased use increases the likelihood of favourable outcomes (Miller & Rollnick, 2009). As well, some studies have shown greater efficiency when combined with other treatment methods (Hettema, Steele & Miller, 2005). MI outperforms traditional advice-giving for a broad range of behavioural problems and diseases in approximately 80% of studies (Rubak et al, 2005).

Studies show that any appropriately trained health-care professional can successfully use MI skills with their clients (Ruback et al, 2005). Miller & Rollnick (2009) recognize that most health-care professionals learn about motivational interviewing through self-study or in short one or two-hour workshops and state that although this clinical method is simple, it is not as easy to master, requiring repeated practice with feedback and encouragement from knowledgeable guides to facilitate both skill and comfort of use.

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[2] See recommendation 1.1.d

> **RECOMMENDATION 1.4.b**
>
> Nurses teach and assist clients to use problem-solving[G] techniques.
>
> **Type of Evidence = Ia**

Discussion of Evidence

The ability to problem-solve is a core self-management[G] skill (Funnell et al., 2008; Glasgow et al., 2002; Glasgow et al., 2003; Lorig & Holman, 2003; Whitlock et al., 2002). The process usually involves problem definition, generation of possible solutions including the solicitation of suggestions from friends and health-care professionals, solution implementation and the evaluation of results.

Although there are few studies of associations between client problem solving and clinical measures of disease control, cross-sectional studies in adults provide consistent evidence of associations between problem solving and HbA1c levels. Meta-analyses have found that problem solving was effective in relieving emotional and physical symptoms in clients treated for depression (Malouff, Thorsteinsson & Schutte, 2007; Bell & D'Zurilla, 2009), and for substance abuse and cancer (Malouff et al., 2007). Lifestyle change intervention including instruction in problem-solving skills in comparison to controls showed that the intervention effects on diet and self-efficacy were partially mediated through problem solving (Glasgow et al., 2004). Most intervention studies report an impact in behaviours, most commonly in dietary behaviours in adults (Hill-Briggs & Gemmell, 2007).

RECOMMENDATION 1.4.c

Nurses are aware of community self-management programs in a variety of settings, and link clients to these programs through the provision of accurate information and relevant resources.

Type of Evidence = Ib

Discussion of Evidence

Research has shown that providing evidence-based self-management can be enhanced by combining clinical efforts with community involvement, reaching beyond the clinic walls to create community linkages (Cifuentes, Fernald & Green, 2005; Renders et al., 2001; Woolf et al., 2005). Nurses can extend their self-management skills and offer many additional resources to meet specific client needs through awareness of, and collaboration with, effective community self-management programs (Heisler, 2009). Linking clients to community resources takes into account the multiple levels of influence on health behaviour change (Green & Kreuter, 1999). Many resources are available to help clients with self-management of their chronic health conditions. These resources include such things as social support, access to fitness facilities and information resources available on the Internet. Coaching the client to learn to identify, evaluate and use these resources is a component of self-management support (Fiandt, 2006). An intervention by Eakin et al (2007) using both a behaviour-ecological approach to chronic disease management and a social-ecological approach with a focus on identification of multi-level/community supports for health behaviour change, resulted in improvements in dietary behaviour and multilevel support for healthy lifestyles but not for physical activity. Group-based self-management education has been shown to decrease both health care costs and resource utilization, while improving health outcomes (Deakin et al., 2005).

The United States National Council on Aging, Center for Healthy Aging (NCOA, 2006) provides a list of recommended evidence-based health promotion programs offered by trained community volunteers. These programs have demonstrated both internal and external validity and have been shown to be effective in a variety of countries and across cultures (Brody et al., 2005; Fu et al., 2003; Fu, Ding, McGowan & Fu, 2005; Griffiths et al., 2005; Lorig & Holman, 2003; McGowan & Green, 1995; Plews, 2005; Siu, 2007; Sobel, Lorig & Hobbs, 2002; Swerissen et al., 2006). The majority of these programs include self-management support components such as: goal setting, action planning and follow-up; modeling, social persuasion, and reinterpretation of symptoms; problem-solving; and follow-up. As well, program content can include information about the condition and its treatment, medication management, symptom management, management of emotions and psychological consequences, lifestyle behaviour change, social support, and communication (Leveille et al., 1998).

These programs have demonstrated positive outcomes such as improvement in knowledge, self-efficacy to manage the disease and its symptoms, exercise, cognitive symptom management, communication with physicians, and self-reported health. Such programs have also demonstrated decreases in health distress, fatigue, disability and social/role limitations, perceived difficulty in exercising, and pain and fatigue (Barlow, 2000; Barlow & Ellard, 2007; Deakin et al., 2005; Gifford et al., 1998; Heisler, 2006; Lorig et al., 1985, 1999, 2001, 2003, 2005; Schreurs et al., 2003; Tang & Lansky, 2005; Siu et al., 2007; Swerissen et al., 2006). A Cochrane Review (Foster G., et al., 2007) on lay-led self-management programs (using only levels 1 or 2 evidence criteria or effect sizes to estimate impact) found small short-term improvement in participants' self-efficacy, self-rated health, cognitive symptom management, and frequency of aerobic exercise. Kennedy et al (2007) found that although the Chronic Disease Self-Management Program (CDSMP)G did not have a significant effect on health service utilization over six months, it was associated with improvements in health-related quality of life at no extra cost, and was likely to be cost effective.

RECOMMENDATIONS

ARRANGE: Specify plan for follow-up (e.g., visits, phone calls, mailed reminders).

RECOMMENDATION 1.5

Nurses arrange regular and sustained follow-up for clients based on the client's preference and availability (e.g., telephone, email, regular appointments). Nurses and clients discuss and argee on the data/information that will be reviewed at each appointment.

Type of Evidence = Ia

Discussion of Evidence

A large body of evidence supports the importance of regular and sustained follow-up and a review of diabetes self-management studies emphasizes that follow-up is key to long-term success (Clement, 1995) and improved dietary self-management (Kim& Oh, 2003). Studies have shown that individuals are more likely to maintain lifestyle changes if they have regular follow-up (Diabetes Prevention Program Research Group, 2002; Perri et al., 2001). A systematic review by Norris et al (2001) found that interventions with regular reinforcement were more effective than one-time or short-term educational interventions, and although the duration of follow-up was not specified, the results showed that that the benefits of self-management support for clients with diabetes diminished over time and that regular follow-up was needed (Norris et al., 2002). In another study of people with diabetes (Brown et al., 2005), long-term education with scheduled follow-up enhanced the effect of education on glycemic control. An individualized follow-up plan for clients – with the goal of sustaining self-management – is advocated in The National Standards for Diabetes Self-Management Education (Funnell et al., 2008).

Innovative Delivery Models

RECOMMENDATION 2.0

Nurses use a variety of innovative, creative and flexible modalities with clients when providing self-management support such as:
 a) Electronic support systems
 b) Printed materials
 c) Telephone contact
 d) Face-to-face interaction
 e) New and emerging modalities

Type of Evidence = IIb

Discussion of Evidence

Nurses are encouraged to use innovative, creative and flexible modalities for self-management support in their interactions with clients. This includes delivery of self-management support interventions using telephone, written materials, in-person meetings, computers and the internet as the medium for delivery. The self-management support should be interactive, flexible, reflective, and tailored to the learning needs and preference of the client. As well, self-management support should be delivered using various techniques that encompass face-to-face and group delivery methodologies.

Electronic Support Systems

Lorig, Ritter, Laurent & Plant, (2006) evaluated group programs offered through various modalities that included interactive, web-based instruction provided in English that included bulletin board discussion, illustrated exercises and peers as moderators. Participants were also provided with a book about major chronic diseases. This study showed significant improvement in health status indicators and self-efficacy.

In a randomized trial, Glasgow et al (2003) evaluated self-management support delivered via the internet to 320 adult Type 2 diabetes clients. One group of participants had access to a professional coach with expertise in dietary knowledge for clients with diabetes. A second group had access to a peer directed support group, professionally monitored, via the internet. The interventions included goal-setting, personalized feedback, tailored strategies, and posting messages to the peer group and the professional coach.

The authors reported moderate success with internet-based self-management interventions. Results indicated that the client's dietary changes were similar to those found in face-to-face interventions. Key outcomes noted included improvement in the behavioural, psychosocial and biological domains. While factors such as novice computer participants, and decrease use of the program over time the authors conclude that internet-based self-management interventions have applicability across a variety of settings and clients.

Printed Materials

Eakin et al (2007) and Kennedy et al (2003) evaluated the effectiveness of tailored printed materials delivered in combination with other strategies that included telephone calls, face-to-face sessions and use of a guidebook. Results indicated a significant increase in self-efficacy, exercise adherence, dietary behaviour, the quality of physical activity, enablement, communication and satisfaction, and with a decrease in the number of relapses, hospital visits, costs and stress.

In one study, tailored print materials included a mailed questionnaire on exercise level, pain disability and other behaviours associated with arthritis. These materials included a mailed survey from the family physician that contained a summary report and suggested action plan. Also included were an arthritis self-help book, a comprehensive guidebook, a relaxation tape, and a pamphlet on physician/client communication. The survey and summary report were mailed every four months (Lorig, Ritter, Laurent & Fries, 2004). The authors reported a reduction in pain, disability and medical care use, along with an increase in physical functioning.

Telephone

Maljanian, Grey & Conroy, (2005) and Barnason et al (2003) evaluated the effectiveness of self-management support for clients with diabetes delivered via telephone. Telephone was considered a means of communication that provided clients with information to allow them to assess symptoms and risk factor modification; strategies to manage reported symptoms; education related to recovery, and to positively reinforce their self-efficacy related to symptom management, functioning and risk factor modification adherence. The telephone intervention was provided daily for six weeks. Results indicated increased self-efficacy, exercise adherence, management of dietary behaviour, support, and the quality of physical activity. Decreased stress and reduced HbA1c levels were also reported.

Face-To-Face

Coultas et al (2005) and Eakin et al (2007) evaluated self-management support delivered using a face-to-face modality. The face-to-face delivered interventions required the health-care provider to have advanced skills in establishing rapport, setting agendas, assessing individuals' readiness to change, tailoring information and providing feedback. Findings indicated a decrease in illness intrusiveness, an improvement in dietary behaviour management, multilevel support for healthy lifestyles and improvements in the quality of physical activity.

New and Emerging Modalities

New and emerging modalities being developed offer some promise of enhanced reach and the ability to tailor self-management support to clients' needs and preferences. Schillinger et al (2008) found that automated telephone disease management, when linked to nurse case management, might be used effectively to reach clients with limited English proficiency and literacy. This approach was found to be slightly more effective with this population than language-specific group medical appointments. Both interventions increased activation of participants.

RECOMMENDATIONS

RECOMMENDATION 2.1

Nurses tailor the delivery of self-management support strategies to the clients' culture, social and economic context across settings.

Type of Evidence = IIa

Discussion of Evidence

Language/Culture

Group medical appointments and self-management programs can be especially effective and efficient ways to offer support to clients from diverse cultures and social contexts. Focus group research conducted with African-American clients with diabetes indicate a preference for learning within a group setting. This group found family networks, and religious communities to be a strong source of social support especially for diabetes self-management (Tang et al., 2005).

Language barriers can be addressed through the engagement of approved translators and multilingual health education fact sheets. A program of interest in Canada is the "Immigrant Settlement Workers" program funded by Citizenship and Immigration Canada. This program supports hospitals to hire multilingual settlement workers from various cultures to help new immigrants navigate the health-care system. In addition, these workers will assist health-care providers refer their clients to other agencies, or practitioners in the community as appropriate for their condition.

Nath (2007) discussed health literacy as it relates to diabetes self-management. She reasoned that barriers for clients with inadequate literacy will remain unless nurses and other health-care providers make a conscious effort to simplify care, tailor education and reduce the complexity of the health-care system.

> Visit http://www.cic.gc.ca/english/department/media/releases/2010/2010-06-29.asp to view a Government of Canada news release on improving access to health care for families

Studies have found that translation and implementation of chronic disease management programs and self-management programs that have been developed in the United States have been successful in other countries, such as Canada (McGowan, 1994; 2006), China (Fu et al., 2005), Hong Kong (Chui, Lau & Yau, 2004; Siu et al., 2007; Yip et al., 2006), and Australia (Swerissen, 2006). Targeted cultural groups included Canadian Aboriginals (McGowan & Green, 1995: McGowan & Green, 2002), Chinese (Fu et al., 2005; Siu et al., 2007; Yip et al., 2006; Swerissen, 2006), Latin American (Lorig, 2005), Italian, Vietnamese and Greek (Swerissen, 2006). Client outcomes included improved knowledge (Fu et al, 2005), improved self-management skills and behaviour, enhanced self-efficacy (Fu et al., 2005; Chui, 2004; Siu et al., 2007, Rogers, 2005; Lorig et al., 2005), and improved health or functional status (Lorig et al., 2005; Yip et al., 2006; Swerissen, 2006).

Local programs led by community health workers may be particularly effective with diverse ethnic or cultural groups, especially when they originate from the communities they serve (Heisler, 2006). Cultural appropriateness is particularly important when tailoring health education to each client. Inclusion of representatives from the target audience in the planning and development of health education materials will help ensure cultural appropriateness. Learning the client's preferences, such as the names of foods common in the cuisine of his or her culture, is critical in planning interventions for support. Illustrations in educational material should reflect the target population (Georges, Bolton & Bennett, 2004)

Individualizing and tailoring interventions for the client's unique needs is consistent with the values and beliefs of client-centred care. RNAO published the Client Centred Care Best Practice Guideline (2006) to support nursing and organizational leaders in their goal of empowering patients and enhancing quality of care.

Community Setting

It is important to provide self-management support at a location where clients can most easily access these resources. However, self-management programs are most effective when delivered in health care or community settings, or the home (Deakin, Cade, Williams & Greenwood, 2006; Norris et al., 2002; Leveille et al., 1998; Pepper-Burke, 2003). A randomized controlled trial by LeFort, Gray-Donald, Rowat & Jeans, (1998) found that in community-based, nurse-delivered self-management support programs, short-term improvements were found with respect to reduction of pain and dependency, increased vitality, role functioning, life satisfaction, self-efficacy and resourcefulness. Findings showed fewer declines in function and a decrease in hospitalization participants, suggesting that community-based collaboration with primary care practitioners can improve function and reduce inclient hospitalization in target populations. A community program targeted to urban African-Americans with Type 2 diabetes found significant improvements in BMI (Body Mass Index) , total cholesterol, HDL-C (High-density lipoprotein cholesterol), LDL-C (low-density lipoprotein cholesterol), and self-care behaviour (Tang et al., 2005). Female congestive heart failure clients attending a nurse-based outclient clinic increased their self-care knowledge more than those who attended only primary physician health care (Karlsson et al., 2005).

Coleman et al. (2004) in a quasi-experimental study examined whether the provision of a transition coach and communication tools used by caregivers and clients facilitated communication. The tools and the transition coach were intended to promote cross-site communication, and provide guidance and support. While not explicit, the results indicated that when older clients and their caregivers were provided with the communication tools and a transition coach, they were only half as likely to return to hospital, reported higher levels of confidence in managing their condition, in communicating with members of the health-care team, and understanding their medication regimen.

Clients who are transitioning from various health-care delivery sites (such as hospital to community settings and vice versa) must have their self-management support plans follow them so that nurses can continue to help them manage their condition in a consistent way based on their individualized plan. These can include appropriately trained transition coaches and cross-site communication initiatives. Nurses must also implement supports to enable transition across the continuum of care (Coleman et al., 2004).

Social Context

Nurses need to consider the psychological and social context of clients' lives and their impact on self-management support when delivering support in various health-care delivery settings. Factors include level of education, language barriers, socio-economic factors, other social determinants of health, access to health care and family situations. Studies that incorporate these factors are few and mainly qualitative in nature, with small samples and conflicting results. Research needs to be conducted to find ways to support clients within various social contexts.

The current evidence consistently supports that barriers to health care exist based on social factors. In a randomized controlled study Eakin et al (2007) evaluated the intervention of dietary behaviour, and physical activity based on the social-ecological model G. Participants of this study were 200 low-income, Spanish-speaking clients with multiple chronic conditions. The interventions in this study utilized proven self-management techniques such as goal setting and problem solving, but also included culturally modified and Spanish translated resources. These resources included local community resource guides and an individualized newsletter focused on the client's own personal physical activity and dietary goals. Video education was provided at the community centre for those who could not read or write in any language.

The researchers measured outcomes for the primary activities of diet and exercise, and the secondary outcome of multilevel support such as family, friends, health-care providers, neighbourhood, community, media, and health policies (Glasgow, Toobert, Barrera, & Strycker, 2004 in Eaken et al., 2007). Outcome measures indicated significant improvements in dietary behaviour and multilevel community support; however, there was no change in physical activity. The researchers reported a need for multilevel community support to address social issues (e.g., literacy), through use of improved communication methods, such as a newsletter specifically directed toward those who speak Spanish to facilitate support for healthy lifestyles.

RECOMMENDATION 2.2

Nurses facilitate a collaborative practice team approach for effective self-management support.

Type of Evidence = Ib

Discussion of Evidence

The tasks of providing ongoing empowerment and support are most readily accomplished through an interdisciplinary team approach to care (Bray et al., 2005; Coleman & Newton, 2005; Glasgow et al., 2002; Keers et al., 2004). A client care team is a group of diverse clinicians who participate in, and communicate with each other regularly about the care of a defined group of clients (Bodenheimer et al., 2003; Morgan, 1997). These teams should consist of health-care professionals that have experience or training in clinical, educational and behavioural aspects of care (Funnell & Anderson, 2004). Overall, teams may involve members such as physicians, nurse practitioners, nurses, health educators, pharmacists, dieticians, social workers, nutritionists, unity health workers, coaches and trained clients. Training in self-management support techniques and tools for all personnel is essential to ensure effective delivery of self-management support (Bodenheimer et al., 2005; Mensing et al., 2006; Fisher et al., 2005).

Teams may also include members of the community and the resources of their programs or institutions (Coleman & Newton, 2005; Jack, Liburd, Spencer & Airhihenbuwa, 2004). To be effective related to fiscal and client outcomes, efficient self-management support must be integrated by all staff members throughout the entire visit to the clinic, hospital or community setting (Glasgow et al., 2003; Heisler, 2005; Glasgow et al., 2004). A client-centred environment that espouses self-management support that is practiced, and reinforced by all clinicians and integrated into the flow of care needs to be created (Funnell & Anderson, 2004; Heisler, 2005; Glasgow et al., 2004). A collaborative team approach and philosophy is vital to the success of such an environment.

Team care can be effective in improving outcomes in people with chronic conditions (Bodenheimer, 2003; Jayasuriya, Roach, Bailey & Shaw, 2001). To be maximally effective, teams should use a transdisciplinary approach to help clients receive services where they live and work in the greater community (Holland, Greenberg, Tidwell & Newcomer, 2003; Jack, 2004; Wagner, 1999). Senior citizens and vulnerable populations may be particularly helped by a community-based team approach (Jack et al., 2004). Finally, effective teams use planned care visits to ensure that the necessary expertise, information, time and resources to achieve effective clinical management are available and that client's have the information and confidence they require to manage their conditions (Bodenheimer et al., 2005).

Collaborative practice involving a number of disciplines has been identified as improving the success of self-management programs. Improved outcomes were found when primary care practitioners and physicians participated as partners (Kennedy et al., 2003; Leveille et al., 1998;). Moreover, expansion of collaborative practice is imperative for the successful implementation and sustainability of self-management strategies (Wilson, Coulon, Hillege & Swann, 2005). Partnerships with the client and team of nurses, physicians and other health-care providers have been shown to improve outcomes and sustained self-management behaviours (Deakin et al., 2006; Loeb et al., 2003).

Education Recommendations

RECOMMENDATION 3.0

Nursing academic programs integrate principles of self-management support education throughout their core curriculum and in continuing education.

Type of Evidence = IV

Self-management support represents a guiding principle of care that shifts the focus from the nurse as leader to the client as leader. Redman (2004) refers to self-management preparation as:

> *"the training that people with chronic health conditions need to be able to deal with, taking medication and maintaining therapeutic regimens, maintaining everyday life such as employment and family, and dealing with the future, including changing life plans and the frustration, anger, and depression" (p.4) that accompany a chronic condition.*

Academic programs should integrate within their curricula the self-management knowledge and skills required to educate and support client self-management. Nursing education should include assessment skills, motivational interviewing, facilitating both problem solving and goal setting, and the promotion of empowerment and follow-up interventions. (Cincinnati Chronic Care Self-management, 2007). Educational institutions must provide appropriate education to enable nurses to meet the complex needs of clients, caregivers and families living with a chronic health condition. Self-management support skills and objectives should be included in education programs for all health-care professionals and across all health-care sectors (Rausher, 2006).

All academic programs preparing nurses for entry to practice or providing continuing education should include theoretical and competency-based principles that develop the knowledge, skill and attitudes nurses require for provision of effective self-management support.

Health-care providers who teach and support clients with chronic diseases include: Registered Practical Nurses (RPN), Registered Nurses (RN) and Registered Nurse Extended Class (RN (EC)). Their basic professional education, taken at community colleges or universities, is guided by global standards set out by the Ministry of Training, Colleges and Universities. Theoretical components should be taught to the appropriate skill level of the regulated health care provider according to specific competencies outlined by the jurisdiction in which they are registered.

Regulated Health Professions Act, 1991
http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_91r18_e.htm

Ontario Ministry of Training, Colleges and Universities
(www.edu.gov.on.ca/eng/general/college/progstan/health/nurse.html;
www.edu.gov.on.ca/eng/gener¬al/college/progstan/health/supwork.html)

College of Nurses of Ontario
www.cno.org

RECOMMENDATIONS

RECOMMENDATION 3.1

Organizations provide self-management support education through a variety of ongoing professional development opportunities to support nurses in effectively developing skills in self-management support.

Type of Evidence = IV

Discussion of Evidence

Nurses should reflect on their practice regularly and consider whether they are providing support to their clients using self-management support strategies (CNO, 2010). Nurses should also consider participating in self-management support strategy courses to gain the client and family perspective regarding managing chronic conditions.

Professional organizations, academic institutions and health-care organizations must recognize that self-management support strategies are an essential component of nursing practice, and thus should integrate a variety of professional development opportunities to support nurses and other health-care professionals in effectively developing knowledge and skills in self-management strategies. Health-care professionals require access to a variety of internal and external educational workshops, and in-services. Flexible scheduling and paid educational time should be available to allow staff the opportunity to attend these sessions. Organizations need to: include self-management support strategies in the orientation of new staff; and provide collaborative learning opportunities on self-management support strategies, such as tool kits, computer education, coaching or mentoring, case studies and group exercises.

Organization and Policy Recommendations

RECOMMENDATION 4.0

Organizations provide opportunities for nurses to take leadership roles in the provision of self-management support.

Type of Evidence = IV

As members of integrated, interdisciplinary teams, nurses play an important role in providing self-management support, as they are:
    a) usually the first and most consistent point of contact;
    b) in the optimal position of collecting client and family information;
    c) able to use their skills to engage clients to develop strategies and use community resources;
    d) skilled at assessment, ongoing care, education and family support; and
    e) advocates for, and with their clients.
(Canadian Nursing Association, 2005).

Nurse case or care managers can provide the key coordination for the team approach (CNA ,2005; Funnell et al, 2007; Mensing et al., 2006; Sadur et al., 1999; Wagner et al., 1999). A written care plan based on client and family needs that specifies the roles of all care team members, including the client and family, may be useful in organizing the efforts of multiple team members (Bodenheimer et al., 2005; Jayasuriya, et al., 2001; Mensing et al., 2006; Wagner et al., 1999). Similarly, standardized documentation of client encounters will help guide medical and educational process, and enhance communication among care team members (Wagner et al., 1999). Numerous studies (Holland et al., 2003; Mensing et al., 2006; Sadur et al., 1999; Dickey, Gemson & Carney, 1999), have found that nurses may be particularly effective in the role of coordinating of the team approach, particularly during phases of care change or intensification, such as initiation of insulin therapy.

RECOMMENDATION 4.1

Organizations integrate self-management support values and principles related to fostering client-centered care and therapeutic relationships in the delivery of care and services, through inclusion in strategic plans and organizational goals.

Type of Evidence = IV

Discussion of Evidence

These values and principles are based on the recognition of a need for collaborative relationships between health-care professionals, clients and families that reflect the individual clients' and families roles in managing chronic conditions and improving the quality of client-centred care.

Successful integration of self-management strategies requires organizational commitment. This entails endorsement of self-management support strategies in client education and delivery of care across the lifespan and continuum of care by senior administrators. All health-care providers, both directly and indirectly involved with clients, should be educated in the principles of self-management care.

> *"The effectiveness of clinicians in promoting healthy behaviours and the quality of their service are probably maximized when practices have systems in place to support this entire counseling sequence – all of the 5 A's – rather than simply components of the process"*
>
> (Glasgow et al., 2004 as cited in Woolf et al., 2005, pg S20).

Self-management principles should be built into the organization's mission and vision statements, policies and be evident in the clinicians' approach to the delivery of care. Champions for self-management should be identified at all organizational levels to:

- support the strategy as an integral part of primary care; and
- sustain a process that assists clients in their problem solving and decision making related to their chronic disease (Glasgow et al., 2003).

RECOMMENDATION 4.2

Decision makers (Chief Executive Officers, Directors, Managers, Stakeholders) within organizations ensure adequate funding is available for self-management support initiatives such as technology to provide education to clients and nurses.

Type of Evidence = IV

Discussion of Evidence

Organizations and regional health authorities should consider the provision of self-management support as integral to quality nursing practice. Implementation of successful self-management support requires organizational backing and development of a sustainable infrastructure. Assessment of resources required for effective implementation of self-management support should be completed to accurately identify financial requirements for self-management support. This assessment may involve client surveys, client interviews, focus groups, satisfaction surveys, chart audits, identification of behavioural and clinical outcomes; team utilization and efficiencies, technology use and needs; and community linkages.

RECOMMENDATION 4.3

Nursing best practice guidelines can be successfully implemented where there are adequate planning strategies, resources, organizational and administrative support and appropriate facilitation of guideline uptake among clinicians. An effective organizational plan for implementation includes:

- An assessment of organizational readiness and barriers to implementation, taking into account local circumstances.
- Involvement of all members (whether in a direct or indirect supportive function) who will contribute to the implementation process.
- Ongoing opportunities for discussion and education to reinforce the importance of best practices.
- Dedication of a qualified individual to provide the support needed for the education and implementation process.
- Ongoing opportunities for discussion and education to reinforce the importance of best practices.
- Opportunities for reflection on personal and organizational experience in implementing guidelines.

Type of Evidence = IV

Discussion of Evidence

The RNAO (through a panel of nurses, researchers and administrators) has developed the *Toolkit: Implementation of Clinical Practice Guidelines* (RNAO, 2006), based on available evidence, theoretical perspectives and consensus. The *Toolkit* is recommended for guiding the implementation of the RNAO best practice guideline *Strategies to Support Self-Management in Chronic Conditions with Clients*. Successful implementation of the best practice guidelines requires the use of a structured, systematic planning process and strong leadership from nurses who are able to transform the evidence-based recommendations into policies , procedures and nursing related practices that impact on care within the organization. The RNAO Toolkit (2006) provides a structured model for implementing practice change.

Please refer to Appendix J for a description of the *Toolkit*.

Research Gaps and Future Implications

The expert development panel, in reviewing the evidence for this guideline, has identified several gaps in the research literature related to self-management support. In considering these gaps, the panel has identified the following priority areas for further substantive longitudinal research greater than one year:

- The link between mental illness and co-morbidity of chronic physical conditions
- The effectiveness of individual self-management strategies
- The link between depressive disorders and chronic conditions
- The evaluation of interventions used in treating depression and chronic conditions
- The effectiveness of record keeping by clients
- The effectiveness of client follow up through the use of e-mail
- The effectiveness of peer support groups within the community

The above list, although in no way exhaustive, is an attempt to identify and prioritize research gaps in this area. Some of the recommendations in this guideline are based on evidence gained from qualitative or quantitative research, while others are based on consensus or expert opinion. Further substantive research is required in some areas to validate the expert opinion and impact knowledge that will lead to improved practice and outcomes related to self-management support strategies.

RECOMMENDATIONS

Evaluation/Monitoring of Guideline

Organizations implementing the recommendations in this nursing best practice guideline are advised to consider how the implementation and its impact will be monitored and evaluated. The following table, based on a framework outlined in the RNAO *Toolkit: Implementation of Clinical Practice Guidelines* (2006), illustrates some specific indicators for monitoring and evaluation of the guideline *Strategies to Support Self-Management in Chronic Conditions: Collaboration with Clients*

OBJECTIVE: EVALUATE THE SUPPORTS NEEDED, THE PROCESS INVOLVED AND THE IMPACT OF THE RECOMMENDATIONS RELATED TO SELF-MANAGEMENT SUPPORT.			
Level of Indicator	**Structure**	**Process**	**Outcome**
Organization	Supports are available in the organization that allows nurses to participate in the development and delivery of self-management support programs.	Nurses, interprofessional team and clients are involved in the creation of policies.	Policies and procedures related to self-management support are consistent with the recommendations in this guideline.
	Self-management support approaches are integrated into strategic plans for the care of adults with chronic diseases.	Development and delivery of continuing professional development activities, orientation and clinical mentorship programs integrating evidence-based client self-management support strategies.	Self-management support strategies are integrated into the process of care (i.e., documentation of client-identified chosen treatment plan).
	Availability of accessible resources and in-services.	Access to follow-up services that include a range of appointment times, ease of access (parking, location) and culturally appropriate self-management education and support.	Increased rates of utilization of follow-up services.
Nurse	Availability of educational opportunities for nurses related to self-management support strategies and support.	Percentage of nurses attending educational sessions on self-management support.	Nurses display increased ability to facilitate client behavioural changes using self-management support strategies.
	Evaluation structures are in place to monitor effectiveness of educational programs for nurses	Nurses self-assessed knowledge of: ■ Chronic conditions ■ Self-management support strategies	Documented evidence in clients' health record reflects evidence of client receiving education regarding self-management support Nursing practice demonstrates the inclusion of related to self-management support. Completion of educational programs by nurses related to self-management support

Level of Indicator	Structure	Process	Outcome
Client	Availability of client educational opportunities related to chronic disease self-management.	Percentage of clients attending/participating in educational opportunities.	Clients demonstrate knowledge regarding ■ their chronic condition ■ the purpose of their medication, appropriate medication schedules, lifestyle modifications ■ need for regular follow-up ■ improve self-efficacy ■ health behaviour outcome, ■ improved quality of life ■ improved client/famiy satisfaction.
Resources	Provision of adequate financial resources for appropriate categories and levels of staffing necessary to support the implementation of self-management. Provision of designated individual to coordinate and support the self-management initiatives within the organization.	Cost for required education and other resources should be identified and budgeted. Costs for implementation and evaluation of guideline should be identified and budgeted. Assessment of required systems and supports should be identified and supplied according to timeline plan within the project management structure.	Financial resources required for SMS are clearly identified and specifically allocated for staffing, supplies, associated costs for implementation and sustainability.

RECOMMENDATIONS

Implementation Strategies

The RNAO and the guideline development panel have compiled a list of implementation strategies to assist health-care organizations or health-care disciplines who are interested in implementing this guideline. A summary of these strategies is as follows:

- Have at least one dedicated person such as an advanced practice nurse or a clinical resource nurse who will provide support, clinical expertise and leadership. The individual should demonstrate good interpersonal, facilitation and project management skills.

- Conduct an organizational needs assessment related to chronic disease management to identify current knowledge base and further educational requirements.

- Initial needs assessment may include an analysis approach, survey and questionnaire, group format approaches (e.g., focus groups), and critical incidents.

- Establish a steering committee comprised of key stakeholders and interdisciplinary members committed to lead the change initiative. Identify short and long-term goals. Maintain a work plan to track activities, responsibilities and timelines.

- Create a vision to help direct the change effort and develop strategies for achieving and sustaining the vision.

- Program design should include:
  - target population;
  - goals and objectives;
  - outcome measures;
  - required resources (human resources, facilities, equipment); and
  - evaluation activities.

- Design educational sessions and ongoing support for implementation. The education sessions may consist of presentations, facilitator's guide, handouts and case studies. Binders, posters and pocket cards may be used as ongoing reminders of the training. Plan education sessions that are interactive, include problem solving, address issues of immediate concern and offer opportunities to practice new skills (Davies & Edwards, 2004).

- Provide organizational support such as having the structures in place to facilitate the implementation. For example, hiring replacement staff so participants will not be distracted by concerns about work and having an organizational philosophy that reflects the value of best practices through policies and procedures. Develop new assessment and documentation tools (Davies & Edwards, 2004).

- Identify and support designated best practice champions on each unit to promote and support implementation. Celebrate milestones and achievements, acknowledging work well done (Davies & Edwards, 2004).

- Organizations implementing this guideline should adopt a range of self-learning, group learning, mentorship and reinforcement strategies that will, over time, build the knowledge and confidence of nurses in implementing this guideline.

- Beyond skilled nurses, the infrastructure required to implement this guideline may include access to specialized equipment and treatment materials. Orientation of the staff to the use of specific products and technologies must be provided and regular refresher training planned.

- Teamwork, collaborative assessment and treatment planning with the client and family and interdisciplinary team are beneficial in implementing guidelines successfully. Referral should be made as necessary to services or resources in the community or within the organization.

In addition to the strategies mentioned above, the RNAO has developed resources that are available on the website. A toolkit for implementing guidelines can be helpful if used appropriately. A brief description about this toolkit can be found in Appendix J.

RECOMMENDATIONS

Process For Update and Review of Guideline

The RNAO proposes to update this best practice guideline as follows:

1. Each nursing best practice guideline will be reviewed by a team of specialists (Review Team) in the topic area every three years following the last set of revisions.

2. During the three-year period between development and revision, RNAO program staff will regularly monitor for new systematic reviews and randomized controlled trials and other relevant literature in the field.

3. Based on the results of the monitor, program staff may recommend an earlier revision period. Appropriate consultation with a team of members comprising original panel members and other specialists in the field will help inform the decision to review and revise the guidelines earlier than the three-year milestone.

4. Three months prior to the three-year review milestone, the program staff will commence the planning of the review process by:

   a) Inviting specialists in the field to participate in the Review Team; the Review Team will be comprised of members from the original panel as well as other recommended specialists.

   b) Compiling feedback received, questions encountered during the dissemination phase as well as other comments and experiences of implementation sites.

   c) Compiling new clinical practice guidelines in the field, systematic reviews, meta-analysis papers, technical reviews, randomized controlled trial research and other relevant literature.

   d) Developing a detailed work plan, including target dates and deliverables.

5. The revised guideline will undergo dissemination based on established structures and processes.

RECOMMENDATIONS

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Appendix A:
Glossary of Terms

TERM	DEFINITION
Action Planning	Action planning consists of identifying a menu of options for achieving a goal, choosing one option, developing specific implementation plans, foreseeing obstacles, and making a commitment to put the plan into effect (Von Korff et al., 1997)
Activated client	Activated clients are those with the skills, knowledge and motivation to participate as effective members of the care team (Von Korff et al., 1997).
	The activated client self-manages symptoms and problems, engages in activities that maintain functioning and reduce health decline, is involved in treatment and diagnostic choices, collaborates with providers, selects providers and provider organizations based on performance or quality, and navigates the health-care system (Hibbard et al., 2007).
Arthritis Self-Management Program (ASMP)	Developed by Stanford University and the first self-management program, it is currently offered by The Arthritis Society across Canada. ASMP is the most widely known self-management intervention in arthritis. it is led by lay leaders and/or health-care professionals.
Ask-Tell-Ask (also known as Elicit-Respond-Elicit or Elicit-Provide-Elicit)	Part of a self-directed learning process, this technique ensures clients understand information presented to them. It is especially effective with low literacy populations, and involves asking clients a question (e.g., "What do know about your condition?" or "What would you like to know?"). After providing the information to the client, the clinician asks if the client has further questions or wants more information. It attempts to provide information to the client (thus addressing a lack of knowledge) in a manner directed by them (thus addressing the excess of information problem). (Bodenheimer et al., 2005)
Assessing readiness to change (collaborative decision-making)	This is done before trying to negotiate a behaviour change. The caregiver needs to assess a client's readiness to change and tailor further discussion to that degree of readiness.
	Primary motivational interviewing techniques involve assessing the client's readiness to change by estimating the levels of importance and confidence, through the use of an importance and confidence scale of 0 to 10. If the level of importance is high (7 or above), then the caregiver moves on to confidence. If the level of importance is low, it might help to provide more information about the risks of not changing the behaviour. If the level of confidence is medium (e.g., 4), the caregiver asks why it is 4 and not 1. The client is thus in a position to speak positively about why there is some level of confidence. Asking what it would take to change from a level of 4 to 8 makes the client think creatively about how to make a behaviour change. This leads to an action plan. (Bodenheimer et al., 2005).
Chronic Disease Self-Management Program (CDSMP)	The Chronic Disease Self-Management Program (CDSMP) is a lay-led patient education program offered in communities throughout British Columbia. Participants are adults experiencing chronic health conditions (e.g., hypertension, arthritis, heart disease, stroke, lung disease, diabetes, etc), their family members, friends and caregivers. The program provides information and teaches practical skills on managing chronic health problems. Most importantly, the CDSMP gives people the confidence and motivation they need to manage the challenges of living with a chronic health condition. (University of Victoria, 2010).

TERM	DEFINITION
Client empowerment	Empowerment is *"the discovery and development of one's inherent capacity to be responsible for one's own life."* (Glasgow & Anderson, 1999).
	While you cannot empower a client, nurses can use strategies that will assist clients in this process. These include providing education for informed decision-making, assisting clients to weigh the costs and benefits of various treatment options, setting self-selected behavioural goals, and providing information about the importance of their role in self-management (Anderson & Funnell, 2005). The skills needed by nurses include asking questions in order to understand the clients' fears, concerns, and priorities, listening to responses, and educating and supporting clients for on-going self-management.
	In the empowerment approach, health-care professionals feel responsible to, rather than for, clients, and act as collaborators who provide clients with information, expertise and support to make the best possible self-management decisions based on their health priorities and goals (Anderson & Funnell, 2005).
Closing the loop	A technique used to assess the client's understanding. A health-care provider asks the client to repeat back information provided to ensure they understood what had been said. It is related to the ask-tell-ask[G] process (Bodenheimer et al., 2005).
Establishing the agenda (collaborative decision-making)	An agenda for the visit is negotiated between the client and caregiver, but the client has the last word. If the caregiver wishes to discuss an issue with the client, the client's permission for that discussion should be sought (Bodenheimer et al., 2005).
Follow-up	Regular and sustained follow-up to action plans. Goal setting and action planning will not be successful without regular and sustained follow-up with problem-solving. Follow-up can be conducted by telephone, email, or via internet-based interactive programs, and can be done individually or in groups. Follow-up includes problem-solving related to barriers to success in carrying out action plans. Lack of success on an action plan is translated into lessons learned, rather than be perceived as failure (Bodenheimer et al., 2007).
Goal setting	A collaborative process in which clients choose a behaviour-change goal. An interaction between caregiver and client resulting in the client agreeing to a concrete, usually short-term, goal. A goal is something that one wishes to accomplish in a particular time frame (e.g., the next three to six months).
	An example of a question to initiate a goal-setting discussion could be: *"Is there anything you would like to do this week to improve your health?"* (Bodenheimer & Laing, 2007)
	Goal setting is an interaction between caregiver and client resulting in the client agreeing to a concrete, usually short-term goal. Goal setting is accomplished by formalizing an action plan. Goal setting is the process, and the action plan is the result of the process.
Group visits	Clients receive their health care through visits with other clients who have chronic health condition. Group visits were developed in the early 1990s as an alternative to multi-agenda 10-15 minute visits (Bodenheimer & Grumbach, 2007). One model (Cooperative Health Care Clinic) involves groups of 10 to 20 older adults with a variety of chronic conditions meeting once a month for 90 minutes. The format includes a presentation about a health problem followed by the physician addressing each client individually for five to 10 minutes, while other clients converse. Individual appointments can be scheduled if needed.
	Another model involves persons with the same condition(s) but includes specific client education and behavioural change counselling, and could involve prescribing medications.
HbA1c	The HbA1c (glycosylated hemoglobin) test measures the average glycemia over the preceding two-three months and, thus, assesses glycemic control. When the HbA1c is done every three months, it can detect whether glycemic control has been reached and maintained within the target range and also reflects departures from the target range (RNAO, 2005).
Healthy coping	Healthy coping involves the identification of the individual's motivation to change behavior, then helping set achievable behavioral goals and guiding the patient through multiple obstacles. (American Association of Diabetes Educators, 2010).

APPENDICES

TERM	DEFINITION
Problem-solving	Problem-solving is an essential component of the feedback process in reviewing how well clients complete their action plans. Problem-solving is related to barriers to success in carrying out action plans. Lack of success is translated into "lessons learned" instead of failure. (Bodenheimer et al., 2005). Almost all models or conceptualizations of the core aspects of self-management support include problem-solving ability as a central feature (Glasgow et al., 2007). It is used as part of the feedback process in making an action plan/goal setting (D'Zurilla, 1986).
Readiness to change	Readiness to change refers to how prepared individuals are to make changes to their behaviour. Interventions guided by this theory focus on individuals' motivation to change, and adapt their approach according to differences in participants' motivation to change a behaviour (Newman et al., 2004).
Reflective listening	Helps to clarify dilemmas by mirroring the patient's experience, Reflective listening involves responding to a patient by concisely restating the patient's own statements. (Levensky, Forcehimes, O'Donohue & Beitz, 2007).
Self-care	Self-care refers to the behaviours that clients use to maintain physiologic stability, such as taking medication and responding to symptoms when they occur. (Adams et al., 2004).
Self-directed goal-setting	Self-directed goal setting is an effective intervention to facilitate and support behavior change while maintaining participants' interest in the education program and providing necessary knowledge and skills for personal goal attainment (AADE, 2007).
Self-efficacy	Self-efficacy is the confidence that one can carry out a behaviour necessary to reach a desired goal (Bandura, 1997). Self-efficacy theory holds that successful achievement of the action plan is more important than the plan itself. Self-efficacy refers to the expectation that one can attain a "desired outcome through specific courses of action."
Self-management	Self-management is defined as the tasks that individuals must undertake to live well with one or more chronic conditions. These tasks include having the confidence to deal with medical management, role management and emotional management of their conditions. (Adams et al., 2004).
Self-monitoring	Periodic measurement that guides the management of a chronic or recurrent condition. (Glasziou, Irwig, & Mant, 2005).
Skill-building	A paradigm that needs to begin with assessment of the level of tactical skill needed for self-care and any unique circumstances that need to be considered in teaching these skills. *"Skills-building exercise focus on skill deficits and managing unique situations"* (Meleis, 2010, p.324).
Social cognitive theory	Behaviour is thought to be affected by expectations, with the individual's confidence in their ability to perform a given behaviour (self-efficacy) of particular importance. This idea has been used in self-management intervention through the use of teaching of skills such as problem-solving and goal-setting to increase self-efficacy (Newman et al., 2004).
Social-ecological model	The social–ecological model is based on the premise that changes in individual behavior will come about through a combination of societal, community, organizational, interpersonal and individual efforts (Yee et al., 2006).
Stress management	Stress management refers to the use of various relaxation and behavioral techniques and programs for helping individuals gain control of, and manage their stress. Techniques may include cognitive-behavioral therapy, breathing exercises, progressive muscle relaxation, group support sessions, biofeedback and yoga. Increasing numbers of hospitals, health-care facilities and corporations offer stress-management programs for their patients and employees to meet the unique needs of people with chronic medical conditions (Hart, 2009).

APPENDICES

Appendix B:
Process for Systematic Review/Search Strategy

The search strategy utilized during the development of this guideline focused on two key areas. One was the identification of clinical practice guidelines published on the topic of self-management support strategies. The second was the identification of systematic reviews and primary studies published in this area, from 1995 to 2006. A subsequent targeted literature search focused on new publications from 2006-2010.

STEP 1 – Database Search

A database search for existing evidence related to self-management support strategies was conducted by a university health sciences librarian. An initial search of the MEDLINE, Embase and CINAHL databases for guidelines and studies published from 1995 to 2006 was conducted in August 2006. This search was structured to answer the following questions:

Practice Recommendations:

1. Assessment: What are the strategies, techniques and tools to assess a client and family's ability to self-manage a chronic illness?

2. Delivery: What are the strategies, techniques and tools for:
   a. Providing self-management support?
   b. Providing self-management support for clients with comorbidities?
   c. Providing self-management support across the continuum of an illness?
   d. Including families and caregivers in the provision of self-management support?

3. Coordination of care: What are the strategies, techniques and tools for coordinating self-management support across the continuum of care?

4. Evaluation: What are the evaluation tools used to measure the effectiveness of self-management support or client outcomes?

Education Recommendations:

5. What are the knowledge and skills needed by nurses to engage in self-management support strategies and techniques?

Organization and Policy Recommendations:

6. What are the administrative and organizational supports needed to support the delivery of self-management support?

7. What are the health-care system and government policy needed to support the deliver of self-management support?

8. What are the cost implications (fiscal and human resource) for the delivery of self-management support?

STEP 2 – Structured Website Search

One individual searched an established list of websites for content related to the topic area in March 2006. This list of sites, reviewed and updated in April 2006,] was compiled based on existing knowledge of evidence-based practice websites, known guideline developers, and recommendations from the literature. Presence or absence of guidelines was noted for each site searched as well as date searched. The websites at times did not house guidelines, but directed to another website or source for guideline retrieval. Guidelines were either downloaded if full versions were available or were ordered by phone/email.

- Agency for Healthcare Research and Quality: http://www.ahcpr.gov
- Alberta Heritage Foundation for Medical Research - Health Technology Assessment: http://www.ahfmr.ab.ca//hta
- Alberta Medical Association - Clinical Practice Guidelines: http://www.albertadoctors.org
- American College of Chest Physicians: http://www.chestnet.org/guidelines
- American Medical Association: http://www.ama-assn.org
- Bandolier Journal: http://www.jr2.ox.ac.uk/bandolier
- British Columbia Council on Clinical Practice Guidelines: http://www.hlth.gov.bc.ca/msp/protoguides/index.html
- British Medical Journal - Clinical Evidence: http://www.clinicalevidence.com/ceweb/conditions/index.jsp
- Canadian Centre for Health Evidence: http://www.cche.net/che/home.asp
- Canadian Cochrane Network and Centre: http://cochrane.mcmaster.ca
- Canadian Coordinating Office for Health Technology Assessment: http://www.ccohta.ca
- Canadian Institute of Health Information: http://www.cihi.ca
- Canadian Task Force on Preventive Health Care: http://www.ctfphc.org
- Centers for Disease Control and Prevention: http://www.cdc.gov
- Centre for Evidence-Based Mental Health: http://cebmh.com
- Centre for Evidence-Based Nursing: http://www.york.ac.uk/healthsciences/centres/evidence/cebn.htm
- Centre for Evidence-Based Pharmacotherapy: http://www.aston.ac.uk/lhs/teaching/pharmacy/cebp
- Centre for Health Evidence: http://www.cche.net/che/home.asp
- Centre for Health Services and Policy Research: http://www.chspr.ubc.ca
- Clinical Resource Efficiency Support Team (CREST): http://www.crestni.org.uk
- CMA Infobase: Clinical Practice Guidelines: http://mdm.ca/cpgsnew/cpgs/index.asp
- Cochrane Database of Systematic Reviews: http://www.update-software.com/cochrane
- Database of Abstracts of Reviews of Effectiveness (DARE): http://www.york.ac.uk/inst/crd/darehp.htm
- Evidence-based On-Call: http://www.eboncall.org
- Guidelines Advisory Committee: http://gacguidelines.ca
- Institute for Clinical Evaluative Sciences: http://www.ices.on.ca
- Institute for Clinical Systems Improvement: http://www.icsi.org/index.asp
- Institute of Child Health: http://www.ich.ucl.ac.uk/ich
- Joanna Briggs Institute: http://www.joannabriggs.edu.au
- Medic8.com: http://www.medic8.com/ClinicalGuidelines.htm
- Medscape Women's Health: http://www.medscape.com/womenshealthhome

- Monash University Centre for Clinical Effectiveness:
  http://www.med.monash.edu.au/healthservices/cce/evidence
- National Guideline Clearinghouse: http://www.guidelines.gov
- National Institute for Clinical Excellence (NICE): http://www.nice.org.uk
- National Library of Medicine Health Services/Technology Assessment Test (HSTAT):
  http://hstat.nlm.nih.gov/hq/Hquest/screen/HquestHome/s/64139
- Netting the Evidence: A ScHARR Introduction to Evidence-Based Practice on the Internet:
  http://www.shef.ac.uk/scharr/ir/netting
- New Zealand Guidelines Group: http://www.nzgg.org.nz
- NHS Centre for Reviews and Dissemination: http://www.york.ac.uk/inst/crd
- NHS Nursing & Midwifery Practice Dev. Unit: http://www.nmpdu.org
- NHS R & D Health Technology Assessment Programme: http://www.hta.nhsweb.nhs.uk/htapubs.htm
- NIH Consensus Development Program: http://consensus.nih.gov/about/about.htm
- PEDro: The Physiotherapy Evidence Database: http://www.pedro.fhs.usyd.edu.au/index.html
- Queen's University at Kingston: http://post.queensu.ca/~bhc/gim/cpgs.html
- Royal College of General Practitioners: http://www.rcgp.org.uk
- Royal College of Nursing: http://www.rcn.org.uk/index.php
- Royal College of Physicians: http://www.rcplondon.ac.uk
- Sarah Cole Hirsh Institute – Online Journal of Issues in Nursing: http://fpb.cwru.edu/HirshInstitute
- Scottish Intercollegiate Guidelines Network: http://www.sign.ac.uk
- Society of Obstetricians and Gynecologists of Canada Clinical Practice Guidelines:
  http://www.sogc.medical.org/sogcnet/index_e.shtml
- SUMSearch: http://sumsearch.uthscsa.edu
- The Qualitative Report: http://www.nova.edu/ssss/QR
- Trent Research Information Access Gateway: http://www.shef.ac.uk/scharr/triage/TRIAGEindex.htm
- TRIP Database: http://www.tripdatabase.com
- U.S. Preventive Service Task Force: http://www.ahrq.gov/clinic/uspstfix.htm
- University of California, San Francisco: http://medicine.ucsf.edu/resources/guidelines/index.html
- University of Laval – Directory of Clinical Information Websites: http://132.203.128.28/medecine

STEP 3 – Search Engine Web Search

In addition, a website search for existing practice guidelines on self-management support strategies was conducted via the search engine "Google," using key search terms. One individual conducted this search, noting the results, websites reviewed and date, and summarized the results. The search results were further reviewed by a second individual, who identified guidelines and literature not previously retrieved.

STEP 4 – Hand Search/Panel Contributions

Panel members were asked to review their personal archives to identify guidelines not previously found through the above search strategy.

Search Results:

The search strategy described above resulted in the retrieval of approximately 4,800 abstracts on the topic of self-management support strategies. These abstracts were then screened by a research assistant in order to identify duplications and assess for inclusion/exclusion criteria.

Appendix C:
The Five A's

THE FIVE A'S	
Assess	Clinician assesses the client's level of behaviour, beliefs and motivation. Three activities can take place: ■ Collaboratively establishing the agenda ^G for the interaction (an agenda for the visit is negotiated between the client and health-care provider, but the client has the last word; ■ Gathering health behaviour information (e.g., through a questionnaire such as a Health Risk Appraisal) and assessing the client's readiness for change); and/or ■ The caregiver assesses a client's readiness to make a change and tailors the discussion to that degree of readiness.
Advise	Involves advising clients based on their personal health risks: ■ Provide clear, specific and personalized behaviour change advice. ■ Include information about personal health harms and benefits . ■ Include personally relevant, specific recommendations for behaviour change.
Agree	Collaboratively setting goals and developing short-term action plan: ■ The client and health-care provider select appropriate treatment goals together. ■ Methods based on the client's interest in, and willingness to change a specific behaviour. ■ A standard question asked by the health-care provider is, *"Is there anything you would like to do this week to improve your health?"*
Assist	Refers to health-care provider activities that address barriers to change: ■ Increase the client's motivation and self-help skills. ■ And/or help the client secure the needed supports for successful behaviour change (Whitlock et al., 2002).. ■ Teaching the client to problem-solve. ■ Health-care providers can also inform clients about community self-management programs. ■ Tell clients about existing community resources such as self-help and support groups.
Arrange	Represents follow-up contact: ■ Use most appropriate follow-up approach for client; ■ Follow-up provides ongoing assistance and support; ■ Provides the opportunity for adjustment of the treatment plan as needed; and ■ Includes referral to more intensive or specialized treatment.

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Appendix D:
PHQ–2 Client Health Questionnaire

PHQ-2

Over the past two weeks, how often have you been bothered by any of the following problems?

Little interest or pleasure in doing things.

0 = Not at all

1 = Several days

2 = More than half the days

3 = Nearly every day

Feeling down, depressed, or hopeless.

0 = Not at all

1 = Several days

2 = More than half the days

3 = Nearly every day

Total point score: ....

Score Interpretation:

PHQ-2 score	Probability of major depressive disorder (%)	Probability of any depressive disorder (%)
1	15.4	36.9
2	21.1	48.3
3	38.4	75.0
4	45.5	81.2
5	56.4	84.6
6	78.6	92.9

Figure 1. Patient Health Questionnaire (PHQ-2). This questionnaire is used as the initial screening test for major depressive episode.

Information from Kronenke, K., Spitzer, R.L., & Williams, J.B. (2003). The Patient Health Questionnaire-2: validity of a two-item depression screen. *Med Care*, 41: 1284-91; Thibault, J.M. & Steiner, R.W. (2004). Efficient identification of adults with depression and dementia. *American Family Physician*, 70: 6.

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Appendix E:
Screening Tool for Depression

Screening Questions:

The U.S. Preventive Task Force (USPSTF)[3] reports that a positive response to either of the two questions below are as effective in screening for depression as other longer screening instruments.

1. Over the past two weeks have you felt down, depressed or hopeless?

2. Over the past two weeks have you felt little interest or pleasure in doing things?

If There is a Positive Screen for Depression:

If a client answers yes to either screen question (1 or 2 above), he or she will be screened for intent to inflict self-harm. The USPSTF finds insufficient evidence for routine screening to detect suicide risk[4]; however, the following questions will be asked to of any client who answers yes to 1 or 2 above so that the best referral for additional help can be determined.

1. Have you had any thoughts of harming yourself or others?

2. Do you have a plan to harm yourself or another?

3. Do you think you will harm yourself or another?

Adapted from Mayo Clinic Tobacco Treatment Specialist Course.

Additional depression screening tools are available at:

Beck Depression Inventory
Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry*, 4, 561-571.

Hamilton Depression Inventory
Hamilton, M. (1960). A rating scale for depression. *Journal of Neurology, Neurosurgery and Psychiatry*, 23, 56-62.

[3] US Preventive Services Task Force. Screening for depression: recommendations and rationale. *Ann Intern Med* 2002. May 21; 136(10): 760-4.

[4] Screening for suicide risk: recommendation and rationale. *Ann Intern Med*. May 18; 140(10):820-1.

Appendix F:
Tools for Establishing an Agenda

## a) Pre-visit questionnaires

DIABETES CONCERNS ASSESSMENT FORM

Please answer the following questions before your visit. Your answers will help ensure that your concerns are addressed.

1. What is hardest or causing you the most concern about caring for your diabetes at this time? (e.g., Following a diet, medication, stress)

   _____

   _____

   _____

2. Please write down a few words about what you find difficult or frustrating about the concern you mentioned above.

   _____

   _____

   _____

3. How would you describe your thoughts of feelings about this issue? (e.g., confused, angry, curious, worried, frustrated, depressed, hopeful)

   _____

   _____

4. What would you like us to do during your visit to help address your concern? (Please circle the letters in front of all that apply)

   A. Work with me to come up with a plan to address this issue.

   B. I don't expect a solution. I just want you to understand what it is like for me.

   C. Refer to another health professional or other community services

5. I would like answers to the following questions at this visit:

   _____

   _____

   _____

6. I would like answers to these future questions at some future visit:

   _____

   _____

7. Other (Please Explain)

   _____

   _____

   Thank You

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b) Bubble Sheet completed by client before the visit.

IF YOU HAVE DIABETES, HERE ARE SOME THINGS YOU CAN TALK ABOUT WITH YOUR *HEALTH CARE PROVIDER*

Choose to talk about changing any of these and add other concerns in the blank circles

Blood Pressure monitoring

Taking medications to help control blood pressure

Skin care

Avoiding strokes or heart disease

Diet

Losing weight

Depression

Daily foot care

Smoking
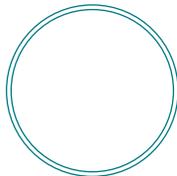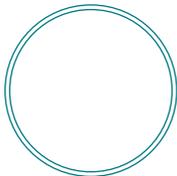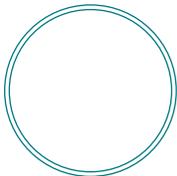
Copyright 1996. Modified from The MacColl Institute. Improving Chronic Illness Care Program: Supported by The Robert Wood Johnson Foundation, with direction and technical assistance provided by Group Health's MacColl Institute for Healthcare Innovation.

c) Client/health professional interaction

"Good morning Susan, my name is Sonia and I will be your nurse today. We have about 20 minutes in this visit. I need to talk to you about the medication you are taking and if you are having any problems with them. What would you like to talk to me about?

Note – In the script the nurse:
1) Informs the client how much time they have in the visit;
2) Specifies what she needs to talk to Susan about (she models the process); and
3) Asks Susan what she would like to talk about.

d) Ottawa Personal Decision Guide*

OTTAWA PERSONAL DECISION GUIDE	*For Health or Social Decisions*

The Ottawa Personal Decision Guide is for people who are facing tough decisions. It will help you identify your personal needs, plan the next steps, track your progress, and communicate your views to others involved in the decision. The skills you learn here will also help you make other decisions in the future.

You will be guided through 5 steps:

> **1. Clarify the decision.**
>
> **2. Identify your role in decision making.**
>
> **3. Assess your decision making needs.**
>
> **4. Weigh the options.**
>
> **5. Plan the next steps.**

The guide can be used more than once to track your progress in decision making. The first time you use the guide, please place your answers in the first column. The next time, please use the second column.

1. Clarify the decision.

What is the decision you face?

_____

_____

What is your reason for making this decision?

_____

When does this decision have to be made? Date _____

How far along are you with your decision? (Check √ the box that applies to you)	First Time Date_____ mm/dd/yy	Changes Date_____ mm/dd/yy
a. I have not yet thought about options	☐	☐
b. I am considering the options	☐	☐
c. I am close to choosing an option	☐	☐
d. I have already made a choice	☐	☐
Are you leaning toward a specific option?	☐ Yes ☐ No	☐ Yes ☐ No
If yes, which one? Specify:		

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2. Identify your role in decision-making.
(Check √ the box that applies to you)

	First Time Date_____ mm/dd/yy	Changes Date_____ mm/dd/yy
a. I prefer to decide on my own or after considering the options of others.	☐	☐
b. I prefer to share the decision with:	☐	☐
c. I prefer that someone else decides for me, namely:	☐	☐

3. Assess your decision-making needs.

People make better decisions if they feel confident in four areas. 1. Knowing the options; 2. Feeling clear about what is important to them; 3. Having enough help from others in deciding; and 4. Feeling sure that they are making the best choice.

The questions below can help you see how confident you are in the four areas. Please circle your answers to the questions and date each column.

AREAS		First Time Date_____		Changes Date_____	
What I know	Do you know which options you have?	☐ Yes	☐ No	☐ Yes	☐ No
	Do you know the good and bad points of each option?	☐ Yes	☐ No	☐ Yes	☐ No
What's important to me	Are you clear about which good and bad points are most important to you?	☐ Yes	☐ No	☐ Yes	☐ No
How others help	Do you have enough support from others to make a choice?	☐ Yes	☐ No	☐ Yes	☐ No
	Are you choosing without pressure from others?	☐ Yes	☐ No	☐ Yes	☐ No
How sure I feel	Do you feel sure about the best choice for you?	☐ Yes	☐ No	☐ Yes	☐ No

If you answer 'yes' to all of the questions in an area, this shows you feel confident. People who have answered 'no' to one or several questions are more likely to delay their decision, to have trouble sticking with their choice, or to feel regret about their choice or less satisfied with their decision. Therefore, it is important to work through steps **4** and **5** to gain more confidence in each area.

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4. Weigh the options.

Use the balance scale below to help you compare the options and, if you wish, show others involved in the decision.

What I know

> A. Please list and review the options you are considering on the balance scale below.
>
> B. List the pros and cons of each option.
>
> C. Underline the pros and cons you think are most <u>likely</u> to happen.

What is important to me

> D. Show how <u>important</u> each pro and con is to you by placing one star (*) to five stars (*****) beside each item. More stars show more importance

How sure I feel

> E. Circle the option with the pros that are most important to you and most likely to happen. Avoid the option with the cons that are most important to avoid and most likely to happen.

	PROS REASON TO CHOOSE OPTION	PERSONAL IMPORTANCE ADD * TO *****	**CONS** REASONS TO AVOID OPTION	PERSONAL IMPORTANCE ADD * TO *****
Option #1 is:				
Option #2 is:				
Option #3 is:				

How others help me

> F. Complete the table below to keep track of others involved in this decision.

LIST THE PERSONS WHOSE HELP OR OPTIONS MATTER MOST TO YOU	CIRCLE THEIR OPINION ON THE BEST CHOICE FOR YOU				THINGS THEY CAN DO TO HELP YOU IN THIS DECISION
1.	Neutral	Option #1	Option #2	Option #3	
2.	Neutral	Option #1	Option #2	Option #3	
3.	Neutral	Option #1	Option #2	Option #3	

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5. Plan the next steps

√ Things making the decision difficult	√ Things you are willing to try
☐ **Not enough information about options, pros and cons**	Having enough information makes if easier to participate in decision-making: ☐ List your questions. ☐ List the sources you will use to find this information (e.g., health-care professionals, librarians at a health centre, internet, etc.).
☐ **Not enough information about the likelihood of the pros and cons**	People make decisions based on their perception of what might happen: ☐ Get advice from your health-care professional or counselor about how likely the pros and cons are happen in your situation.
☐ **Unsure about which pros and cons are most important to me**	Finding out what was most important to others who made this decision may help clarify what is important for you: ☐ Talk to your health-care professional or councilor about other people who made this decision. ☐ Review stories about others who made this decision (e.g., on the internet). Whose views match yours? ☐ Talk with people you know who have gone through this decision. Please specify who: _____
☐ **Lack of support of resources**	Support from other people or groups can help your decision-making: ☐ List the resources or practical help you still need. ☐ Get advice from a professional you feel comfortable with. ☐ Choose a trusted person who will help you work through the decision. ☐ Being someone with you to medical or other appointments to take notes
☐ **Pressure from others to make a specific choice**	Focus on the opinions of people who matter in this decision: ☐ Share your decision guide with others ☐ Ask others to complete a guide themselves. Identify areas of agreement and differences. (People usually can agree on the facts, but may differ on what they value most. It is the person who will be most directly affected by the choice whose matter most). ☐ Find a neutral person to help you and others to find solutions to the disagreement.
☐ **Other factors making the decision difficult**	List everything else you need to help you.

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If you would like to share this information with your health-care practitioner or other health-care professional, please complete this section with some information about yourself.

Current Date: _____

First Name: _____

Last Name: _____

Year of birth: _____

Sex: ☐ Male ☐ Female

Highest completed education:
☐ grade school
☐ elementary school
☐ some high school
☐ high school diploma
☐ university degree

Language most often spoken
at home: _____

Ethnic origin: _____(e.g., Caucasian, Asian, African, Hispanic)

Medical conditions that might
affect your decision: _____

Please rate your health:
☐ excellent
☐ good
☐ fair
☐ poor

Family composition:
(Who lives at home with you?) _____

_____

Address: _____

Telephone number: _____

Discuss your options and views with your health-care professional or counselor.

Before making a final decision, discuss your situation with your health-care professional or counselor. Every individual's needs and health concerns are different.

For additional copies of this decision aid/and an interactive version, visit **www.ohri.ca/decisionaid**

APPENDICES

Appendix G:
Example of Action Plan

Parts of an Action Plan

1. Something YOU want to do
2. Reasonable
3. Behaviour-specific
4. Answer the questions:
   a) What
   b) How much
   c) When
   d) How often
5. Confidence level that you will complete the ENTIRE action plan

Clinician:	So Patrick, you say that you want to lose some weight. Is that right?
Client:	*Yes, I know I am really overweight and I have to lose some.*
Clinician:	Okay, what is one thing that you would like to do between this visit and the next time we meet in two weeks time – one specific thing?
Client:	*Well, in this warm weather, I am eating a lot of ice cream cones and I know they have a lot of calories and they are fattening.*
Clinician:	Okay, so what exactly do you want to do?
Client:	*Well, I want to cut down – eat less.*
Clinician:	Okay, can we get a little more specific here? Can you tell me exactly how many cones you are going to cut down or have?
Client:	*Well, between this visit and the next time I see you in two weeks, I am only going to have three ice cream cones.*
Clinician:	So Patrick, is that something you really want to do?
Client:	*Yes, I want to do that. I know being overweight is not good when you have diabetes*
Clinician:	Is that achievable – can you really do that, only have three cones?
Client:	*Yes, that is something I want to do and I know I can do it.*
Clinician:	Okay Patrick, on a scale of "0" to "10," where "0" means you don't have any confidence that you can do this, and "10" means you are totally confident you can do this, where do you stand?
Client:	*I am an "8." I really want to do it – I know it is important.*

Note: An action plan should be time-limited (i.e., one or two weeks) and be a behaviour the person really wants to do. The person should be able to achieve the action plan and the plan should be very specific, specifying: what, how much, when, and how often. In this way the person will know if he or she has achieved it. Lastly, and importantly, the person must have a high level of confidence (i.e., "7" or higher on a scale of "0" to "10") that he or she will achieve it.

Making Action Plans with Clients

One of the most important self-management skills is goal-setting. A goal is something we would like to accomplish in the next three to six months (e.g., being able to walk a half mile, visit the grandchildren, or socialize with friends).

Goals are generally too big to work on all at once. Therefore, the goal needs to be broken into smaller, more "doable" steps or tasks. For example, a person whose goal is to improve fitness might break it into some of these steps:

- Decide what type of exercise to do;
- See if there are any swimming pools or adaptive physical education classes in the community;
- Determine what level he or she can exercise comfortably;
- Read about exercise in a book; or
- Find a friend to exercise with.

Next, we need to get started by deciding which step we are going to work on this week and exactly how we are going to do it. This is done by making a weekly action plan.

Parts of an Action Plan

1. Something YOU want to do (not what someone else thinks you should do or that you think you should do).

2. Achievable (something you can expect to be able to accomplish this week).

3. Action-specific (for example, losing weight is not a behavior, but avoiding snacks between meals is a behavior).

4. Answer the questions:
   What?
   How much? (e.g., walking four blocks).
   When? (e.g., after dinner or Monday, Wednesday, Friday or four times; try to avoid "every day").

5. Confidence level of 7 or more (0=no confidence to 10=total confidence; that you will complete the ENTIRE action plan).

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Personal Action Plan: Helping clients with chronic conditions develop a plan for learning new behaviors.

Name: _____

Date: _____

Phone: _____

The change I want to make happen is:

_____

My goal for the next month is:

_____

Action Plan:

☐ *The specific steps I will take to achieve my goal are: (include what, when, how, where, and how often):*

_____

☐ *The things that could make it difficult to achieve my goal include:*

_____

☐ *My plan for overcoming these challenges include:*

_____

☐ *Supports and resources I will need to achieve my goal include:*

_____

☐ *My confidence that I can achieve my goal is (scale of 0 to 10, with 0 meaning not confident at all, and 10 being extremely confident:*

_____

APPENDICES

UltraBrief Personal Action Planning (UBPAP)

The UltraBrief Personal Action Plan has five core elements:

1. The plan must be truly client centered, focused on what the client himself or herself actually wants to do, not on what the doctor tells him or her to do.
2. The plan must be behaviorally specific — that is, very concrete and specific about what, when, where, how long, etc.
3. The client should restate the complete plan (i.e., make a "commitment statement").
4. The plan should be associated with a level of confidence (on a scale of 1 to 10) of 7 or greater. If the confidence level is less than 7, the clinician and client should begin problem solving on strategies to modify the plan.
5. There should be a specific date and mechanism for follow up (or accountability).

UltraBrief Personal Action Planning is structured around three core questions:

1. Elicit client preferences/desires for behavior change.

"Is there anything you would like to do for your health over the next few days (weeks) before I see you again?"

- What?
- Where?
- When?
- How often?
- Elicit commitment statement (e.g., "I will walk for 20 minutes, in my neighborhood, every Monday, Wednesday and Friday before dinner").

2. Check confidence level.

"That sounds like a great plan. But changing behavior and sticking with a plan is actually very hard for most of us. If you consider a confidence scale of 1 to 10, where '10' means you are very confident you will carry out the plan and '1' means you are not at all confident, about how confident are you?"

If confidence level is less than 7, then problem solve to identify solutions.

"That's great that you feel a confidence level of 5. That's a lot higher than 1. I wonder if there are some ways we could modify the plan so you might get to a confidence level of 7 or more. Perhaps you could choose a less ambitious goal, ask for help from a friend or family member, or think of something else that might help you feel more confident about carrying out the plan?"

2. Arrange follow up.

"Great, then let's make a date for our next appointment, so we can check on how you're doing with your plan."

Used with permission from Steven Cole, MD, Professor Psychiatry, Stony Brook University.

APPENDICES

Appendix H:
Self Management Support Programs

Website Resources:

Canadian Websites on Self-Management and Self-Management Support:

- http://ahrq.hhs.gov/qual/ptmgmt/ptmgmt.pdf
- http://www.bcahc.ca/index.php?option=com_ content&view=article&id=89#PSM/LL
- http://www.centraleastlhin.on.ca/Page.aspx?id=9890
- http://www.chcf.org/documents/chronicdisease/HelpingClientsManageTheirChronicConditions.pdf
- http://www.chcf.org/documents/chronicdisease/ClientselfManagementToolsOverview.pdf
- http://www.chcf.org/documents/chronicdisease/SelfMgmtLessonsLearned.pdf
- http://www.chcf.org/documents/chronicdisease/UsingTelephoneSupportToManageChronicDisease.pdf
- http://clienteducation.stanford.edu/programs/cdsmp.html
- http://www.champlainlhin.on.ca/ Page.aspx?id=1200
- http://www.coag.uvic.ca/cdsmp/documents/What_is_Self-Management.pdf
  http://decisionaid.ohri.ca/decguide.html
- http://www.gov.mb.ca/health/phc/carelink.html
- http://www.healthylifeworkshop.ca
- http://www.ihi.org
- http://www.improvingchroniccare.org/index.php?p=ACIC_Survey&s=35
- http://www.improvingchroniccare.org/index.php?p=Steps_for_Improvement&s=37
- http://www.improvingchroniccare.org/#MacColl%20Institute
  http://www.nap.edu/openbook.php?isbn=0309093031
- http://www.newhealthpartnerships.org/
- http://www.ontpsm.net
- http://www.safetoask.ca
- http://www.selfmanagementtoolkit.ca/
- http://www.someothersolutions.ca/index.php?option=com_content&task=view&id=341&
- Itemid=70
- http://www.takingcharge.csh.umn.edu/
- http://www.toronto.ca/health/resources/tcpc/pdf/conference_lee.pdf
- http://www.euro.who.int/document/hsm/3_hsc08_epb_6.pdf

Appendix I:
Self–management Resources

http://www.motivationalinterview.org/
Website for clinicians, researchers, and trainers that contain training videos and a library abstracts, additional web links, and resources.

www.selfmanagementtoolkit.ca
A resource for health-care providers based on the manual by Gina Tomaszewski and Christina Callaghan entitled Self- Management in Theory and Practice: A Guide for Healthcare Providers.

http://solutionshealthcollaborative.ca/media/galleries/hc2010workshops/default.aspx
Contains workshop material and powerpoint slide decks from a one day conference presented by Solution: East Toronto Health Collaborative and the Canadian Research Network for Care in the Community in partnership with the Toronto Central Local Health Integration Network (TCLHIN), Ryerson University, the West End Urban Health Alliance (WEUHA), the South East Toronto Organization (SETO), and Planning for North East Toronto Seniors' Services (PLANTSS).

Appendix J:
Description of the Toolkit

Best practice guidelines can only be successfully implemented if there are: adequate planning, resources, organizational and administrative support as well as appropriate facilitation. In this light, RNAO, through a panel of nurses, researchers and administrators has developed the *Toolkit: Implementation of Clinical Practice Guidelines* based on available evidence, theoretical perspectives and consensus. The Toolkit is recommended for guiding the implementation of any clinical practice guideline in a health-care organization.

The Toolkit provides step-by-step directions to individuals and groups involved in planning, coordinating and facilitating the guideline implementation. Specifically, the Toolkit addresses the following key steps in implementing a guideline:

Chapter 1: Select your clinical practice guideline.

Chapter 2: Identifying, analysing and engaging your stakeholders .

Chapter 3: Assessing your environmental readiness .

Chapter 4: Deciding on implementation strategies.

Chapter 5: Evaluating your success.

Chapter 6: What about your resources?

Implementing guidelines in practice that result in successful practice changes and positive clinical impact is a complex undertaking. The Toolkit is one key resource for managing this process.

The Toolkit can be downloaded at www.rnao.org/bestpractices.

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Clinical Best Practice Guidelines

Strategies to Support Self-Management in Chronic Conditions: Collaboration with Clients

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