

SEPTEMBER 2012

Facilitating Client Centred Learning



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Greetings from Doris Grinspun,

Chief Executive Officer (CEO) Registered Nurses' Association of Ontario

It is with great excitement that the Registered Nurses' Association of Ontario (RNAO) presents this guideline, *Facilitating Client Centred Learning*, 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; Dr. Irmajean Bajnok, Director, International Affairs and Best Practice Guidelines Centre, for her expertise and leadership in advancing the production of the BPGs; each and every Team Leader involved, and for this BPG in particular – Audrey Friedman and Theresa Harper – for their superb stewardship, commitment and, above all, exquisite expertise. Also thanks to RNAO's International Affairs and Best Practice Guidelines (IABPG) Program Managers for their intense work to see that this BPG moved from concept to reality: Sheila John, who started the development of this BPG and Rishma Nazarali, who completed the development of this BPG. 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 interprofessional 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!

A handwritten signature in black ink that reads "Doris Grinspun". The signature is written in a cursive style and is underlined with a long, horizontal stroke.

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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. 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 guideline. 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:

1. Assess current nursing and health-care practices using the recommendations in the guideline.
2. Identify recommendations that will address identified needs or gaps in services.
3. 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 are available through the RNAO website to assist individuals and organizations to implement best practice guidelines.

Purpose and Scope

Best practice guidelines are systematically developed statements to assist practitioners' and clients' decisions about appropriate health care (Field & Lohr, 1990).

To facilitate their own learning and enable them to navigate the complexities of health-care systems, clients have the right to accessible information, tools and supports to actively participate in their care. As health-care professionals it is our responsibility to facilitate client centred learning in a way that clients can understand and that respects their perspective, needs and values. While the provision of accurate and understandable information is necessary for client safety, facilitating client centred learning effectively has the potential to improve and enhance the client experience as outlined in The Excellent Care for All Act, (Bill 46) legislated by the Ministry of Health and Long-Term Care, Ontario (2010).

Nurses are uniquely positioned to facilitate structured and informal learning opportunities for their clients (Coster & Norman, 2009). The aim of this guideline is to provide evidence-based recommendations for Registered Nurses, Registered Practical Nurses and other health-care providers to facilitate client centred learning that promotes and enables clients to take action for their health.

Regardless of how client centred learning is framed (self-care, self-management, client teaching, client education, health teaching) the recommendations and related strategies can be used in any setting across the continuum of care. However, this best practice guideline focuses on adults over the age of 18. The needs of children and youth, related to developmental stages and learning, is beyond the scope of this guideline. Specific strategies to facilitate learning in special populations and accommodation to disabilities are also beyond the scope of this guideline.

The clinical questions addressed by this guideline are:

1. How can nurses effectively facilitate client centred learning?
2. What are effective teaching delivery methods/strategies for client centred learning?
3. How do nurses assess client learning?

In the summer of 2009, an interprofessional panel of experts in practice, education and research was convened under the auspices of the RNAO. This panel discussed the purpose of their work and came to a consensus of the scope of this best practice guideline. See [Appendices B and C](#) for the guideline development process and systematic review process.

Summary of Recommendations

Practice Recommendations

RECOMMENDATION		Level of Evidence
1	Create a safe, shame- and blame-free environment to assess client learning.	Ib
2	Use a universal precautions approach for health literacy to create a safe, shame- and blame-free environment.	Ib
3	Assess the learning needs of the client.	Ia
4	Tailor your approach and educational design by collaborating with the client and the interprofessional team.	Ia
5	Engage in more structured and intentional approaches when facilitating client centred learning.	Ia
6	Use plain language, pictures and illustrations to promote health literacy.	Ia
7	Use a combination of educational strategies for effective learning: <ol style="list-style-type: none"> 1. Printed Materials 2. Telephone 3. Audiotapes 4. Video 5. Computer-based technology and multimedia presentations 	Ia
8	Assess client learning.	IIa
9	Communicate client centred learning effectively with: <ol style="list-style-type: none"> a. The client; and b. The interprofessional team 	Ib

Education Recommendations

RECOMMENDATION		Level of Evidence
10	Introduce the L.E.A.R.N.S. Model into nursing programs and continuing education courses.	IV
11	Reflect on the integration of the L.E.A.R.N.S. Model into everyday practice.	IV

Organization and Policy Recommendations

RECOMMENDATION		Level of Evidence
12	Commit adequate resources to support structured approaches to facilitate client centred learning.	IV
13	Integrate the L.E.A.R.N.S. Model in the delivery of care and services through inclusion in strategic plans and organizational goals.	IV
14	Develop documentation tools to support effective communication of client centred learning	IV
15	Implement nursing best practice guidelines where there is adequate planning, strategies, resources, organizational and administrative support and appropriate facilitation of guideline uptake among clinicians.	IV

Interpretation of Evidence

Levels of Evidence

Ia	Evidence obtained from meta-analysis or systematic review of randomized controlled trial.
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 Context

Facilitating client centred learning to promote health is a foundational competency of all nurses. It is unrealistic to expect clients to take action for their health if they do not have the knowledge, skills and social supports needed to do so.

Nurses care for diverse clients in many settings across the life span. They are uniquely positioned to develop partnership relationships (World Health Organization [WHO], 2008) and facilitate structured and informal learning opportunities (Coster & Norman, 2009) with their clients. Nurses prepare and support their clients by encouraging them to tell their stories so that we understand their circumstances, needs and unique learning styles.

Caring requires the assessment of the unique goals and needs of clients, goal facilitation and client advocacy (College of Nurses of Ontario [CNO], 2009b). Ethical values guiding the facilitation of client centred learning include: client well being; client choice; respect for life; maintaining commitments; truthfulness; and fairness (CNO, 2009b).

From Patient Education to Facilitating Client Centred Learning

Traditional patient education is a broad concept often defined within a limited scope and is often interchanged with self-management and self-care (Coster & Norman, 2009). In practice, patient education is often referred to as health teaching or patient teaching. Regardless of the chosen term, a client [learner] centred approach shifts the focus from nurses teaching to nurses supporting client learning. *Client centred learning involves not only gaining new knowledge, but includes opportunities for clients to apply their values, needs, past experiences and cultural realities to the actions they are considering.*

Facilitating Client Centred Learning

In our complex and ever-changing health-care environment, there has been a shift from the traditional expert model of care to a client-partnership model. Clients are becoming more activated and responsible for decisions about their health. Facilitating client centred learning is an interactive, holistic and social process. The guiding principles of primary health care, specifically the principle of public participation, clarify the importance of working in partnership with clients (WHO, 2008). Nurses must be skilled at assessing learning needs in collaboration with the client. This leads to planning, implementing and evaluating learning strategies that are tailored to meet the diverse learning needs of their clients. Several reports from both Canada and the United States (Canadian Council on Learning [CCL] 2008; Institute of Medicine of National Academies [IOM], 2004; Rootman & Gordon-El-Bihbety, 2008; U.S. Department of Health and Human Services, 2010) support that strategies to promote health literacy and client understanding should be included within health professional curricula and continuing education.

Promoting Health

Promoting health is a key competency of all nurses. Nurses promote health by advocating for healthy public policy and use their knowledge and expertise to promote health literacy with individual clients, families, groups and communities. Nurses engaged in promoting health and facilitating client centred learning have a key teaching/educational role that is based upon sound educational theory.

Assessment of Learning

While there are many learning theories, this best practice guideline is based upon a specific learning theory – social constructivism. This theory argues that people create their own understandings by integrating their previous experience/knowledge with new learning, within specific contexts, including crucial social contexts (Beck & Kosnik, 2006). As Peters (2000) states, “*constructivism values socio-cultural influences in the learning process and endorses the building of knowledge on previous learning, as opposed to the dismissal of that knowledge often seen in traditional formal learning settings*” (p. 1-2). This is consistent with the principles of client centred care.

Social constructivism promotes effective assessment (Beck & Kosnik, 2006). In health-care settings, this assessment is about how well the client understands the knowledge, the implications for safety/health, how supported they are to adopt healthy behaviours, and the availability of resources to follow-up and continue to engage actively in learning to care for themselves and maintain their health. Nurses assess client learning regularly, taking into account the challenges of health literacy, incorporating holistic analysis of client learning (Griffin, 1988, 1993) and building on client strengths. See **Table 1** for a comparison of educational theories.

Table 1: Comparison of Educational Theories

Traditional Expert Model	Facilitates Client-Partnership Model Social Constructivism
The goal of teaching is for the expert to provide content to clients, thus teachers have power over learners (Weimer, 2002).	Knowledge is constructed by an engaged client who shares power in a client/nurse partnership relationship (Fits with primary health care) (Blumberg, 2009; Weimer, 2002).
New knowledge is memorized as distinct, and not related to prior knowledge, leading to surface learning (Weimer, 2002).	New knowledge must be linked to previous knowledge to be effective. Learners actively construct new knowledge connections, leading to deeper learning and meaning (Weimer, 2002).
Once aware of new information and directives for actions, clients can easily implement them (Macdonald, 2002).	A period of facilitated unlearning is needed and precedes the client’s ability to accept new ideas and adopt new actions to promote health; this remains a struggle for many (Macdonald, 2002).
Clients need to be given all content information related to a health topic of concern immediately by an expert teacher (Weimer, 2002).	Content is only part of the new learning and needs to be focused and limited initially. It can be supported with additional references/learning opportunities over time (Weimer, 2002).
Learning is primarily an individual, autonomous client activity (Knowles, 1975).	Learning is social and involves dialogue with peers, professionals, and perhaps interaction with social networking sites, and sound health information internet sites (Blumberg, 2009; Weimer, 2002).
Health messages are ‘one size fits all’. Information is often communicated in a way that clients cannot understand (IOM, 2004; US Department of Health and Human Services, 2010).	Health messages are tailored to match the diverse needs of the client to promote health literacy (IOM, 2004; US Department of Health and Human Services, 2010).
Learning is primarily cognitive in nature (Weimer, 2002).	Holistic learning involves relational, cognitive, affective, spiritual, metaphoric, and physical learning; learning can be influenced by any prior life experiences (Griffin, 1988, 1993).

See **Appendix D** for more information on social constructivism.

Client Learning in the Health Care Context

Nurses are faced with the challenges of facilitating learning for clients in an increasingly complex health-care system. There are many reasons why clients may struggle with health information. Clients are faced with health information and services that are often unfamiliar, complicated and technical. Clients must also navigate this complex system, manage their health and act on demands such as:

- An earlier discharge from hospitals;
- Understanding complicated treatment plans;
- Making informed decisions;
- Maintaining a healthy lifestyle;
- Communicating their perspective, needs and values;
- Living within difficult socio-economic conditions;
- Managing chronic conditions;
- Accessing community resources; and/or
- Interacting with many health-care professionals.

How well clients understand and manage these demands is often referred to as health literacy. Health literacy has been defined as the ability to access, understand, evaluate, and communicate information as a way to promote, maintain and improve health in a variety of settings across the life-course (Rootman & Gordon-El-Bihbety, 2008).

Why Health Literacy Matters

While general literacy skills are a necessary foundation for health literacy, health literacy is more than just being able to read health information and complete medical forms. Health literacy involves the integration of a wide variety of individual skills, health-care professional communication skills, health-care practices and system processes (CCL, 2008; IOM, 2004; Rootman & Gordon-El-Bihbety, 2008). Given the challenges of navigating a complex system and the difficulty to be actively engaged and learn about health when sick, anxious, and/or overwhelmed with information, nurses must be mindful that all clients may struggle with the demands of managing their health.

Data from the International Adult Literacy and Life Skills Survey estimated that limited health literacy skills affect 55% of Canadian adults over 16 years of age and 88% of seniors (Rootman & Gordon-El-Bihbety, 2008). Segments of the population that are more vulnerable to the risks associated with low health literacy include seniors, immigrants and the unemployed. Also of note, there are higher average health literacy scores among adults who reported excellent health, compared to those who reported poor or fair health status (CCL, 2008; Rootman & Gordon-El-Bihbety, 2008).

Limited Health Literacy and Poor Health

The link between limited health literacy and poor health has been well documented in reports by the Agency for Healthcare Research and Quality [AHRQ] (2004), CCL (2008), IOM (2004) and the U.S. Department of Health and Human Services (2010).

“Health literacy matters because it can have an impact on the social and economic well-being of individuals and of Canada” (Rootman & Gordon-El-Bihbety, 2008, p15).

Most recently, AHRQ (2011) in an update to their 2004 report found that differences in health literacy and poor health were consistently associated with:

- Medication errors;
- Decreased ability to interpret labels and health messages;
- Increased hospitalization;
- Greater use of emergency services;
- Lower use of preventative services such as mammography and vaccination; and
- Poorer overall health status and higher risk of mortality for seniors.

Health Literacy as an Evolving Field of Study and Practice

Health literacy continues to gain momentum related to its meaning and significance as evidenced by an increasing literature and research database (Paasche-Orlow, Wilson & McCormack, 2010). Further research into strategies and interventions to promote health literacy is needed. The guideline development panel supports the continued evolution of the meaning of health literacy from a narrow view of an individual’s ability to read health information to a much broader holistic view centred on the complex demands of health-care systems, the health-care professional’s skills to communicate effectively and socioeconomic realities. This evolving meaning supports the partnership model in facilitating client centred learning.



Key Assumptions

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

1. A client is defined as a person, persons, group, aggregate or community with whom the nurse is engaged in a professional, therapeutic partnership relationship in any setting.
2. Clients have the right to assume responsibility for their own learning or to delegate this responsibility to others.
3. Collaborative partnership relationships with clients are critical to the success of client centred learning
4. Nurses must know their learner.
5. Communication is central to client centred learning. It is the responsibility of nurses to actively listen to their clients and align their conversations accordingly.
6. Information, resources and support for clients should promote care that is evidence informed and respects clients' preferences.
7. Client understanding of the information is needed for effective learning.
8. Nurses are reflective practitioners, and continue to grow and learn in their role as facilitators of learning.
9. Given the complexities of health care, strong health literacy skills of nurses and clients can have overall benefits for the health-care system.

L.E.A.R.N.S. Model

Facilitating client centred learning is based on the foundation of four pillars (see Figure 1). These four pillars support client centred learning and encourage self-efficacy and decision-making. Standing on this foundation, the client and nurse are surrounded by a safe environment which is shame- and blame-free. Creation of a safe, shame- and blame-free environment fosters a therapeutic partnership relationship in which the learner and the nurse are able to work together as partners. This partnership relationship is depicted by the intertwining circles, indicating that the nurse and client are equals.

L.E.A.R.N.S. (Listen, Establish, Adopt, Reinforce, Name and Strengthen) is the acronym for the interactions that take place where the client and nurse circles intersect. The L.E.A.R.N.S. Model also signifies the nursing process. By listening to the client's needs, the nurse is able to understand the client's perspective, see the client as a whole and begin to build a partnership relationship that is therapeutic and respectful of autonomy, voice and self-determination. Facilitation of client learning is an intentional intervention which recognizes that learning requires information, opportunity to practice new skills, ability to translate new knowledge and skills into the client's context, assessment of the learning, and the opportunity to enhance comprehension or mastery of the skill which promotes self-efficacy and self-management.

The bidirectional arrows in this conceptual model indicate that learning is not a single event, but an ongoing process which is iterative and shared between the health-care professional and the client. This interaction may also begin in one setting and continue across one or more additional settings such as home, clinic or community. The tenets of the social constructivist theory are interwoven and create the background context for the conceptual model. This model is original and created by the guideline development panel members.

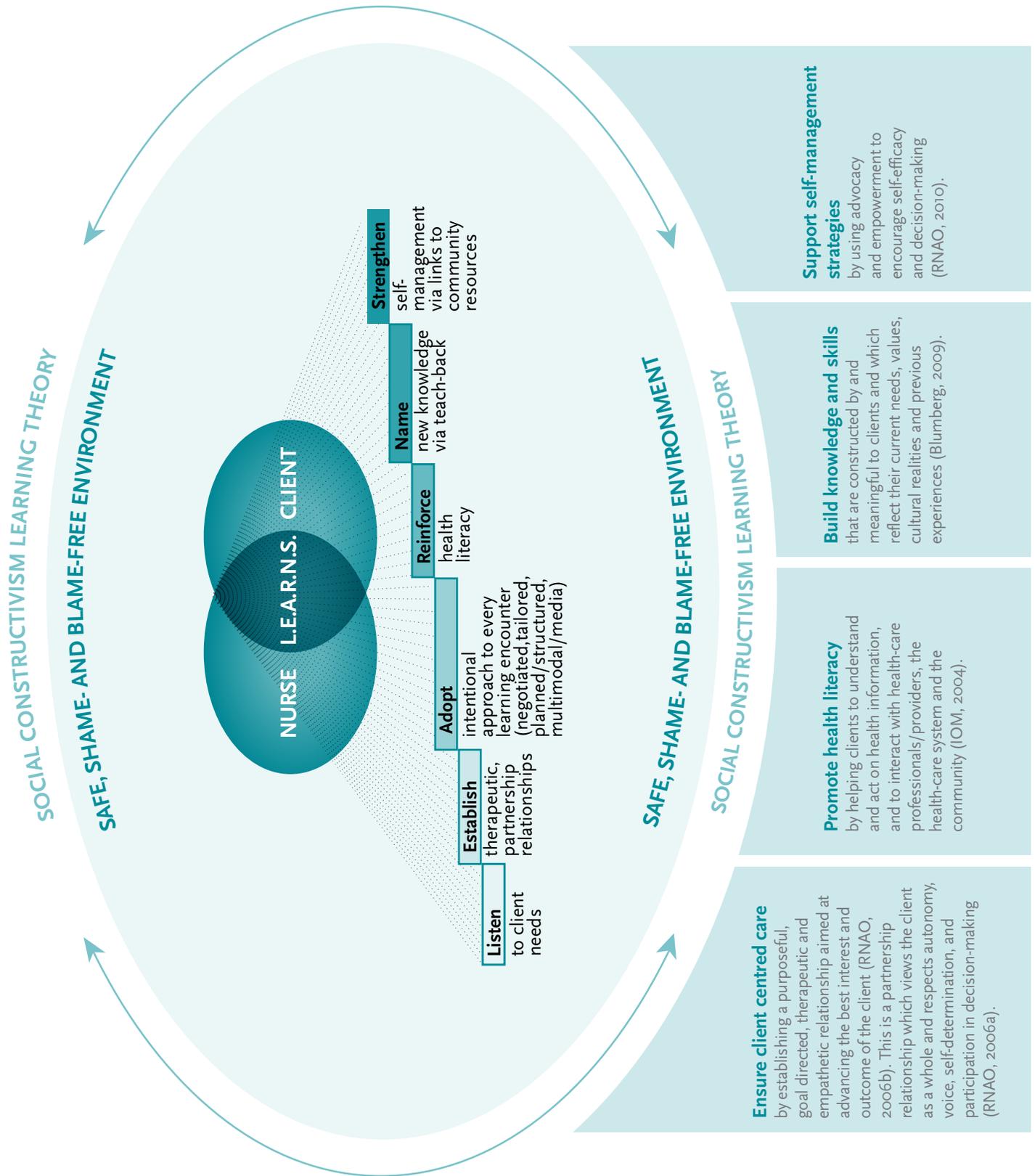


Figure 1: L.E.A.R.N.S. Model Developed by the expert panel

Practice Recommendations

RECOMMENDATION 1:

Create a safe, shame- and blame-free environment to assess client learning.

Level of Evidence = Ib

Discussion of Evidence

Q: What is a safe, shame- and blame-free environment to assess client learning?

A: A safe, shame- and blame-free environment is a culture in which:

- Clients can ask questions and seek help without feeling stigmatized;
- Clients feel comfortable bringing someone with them to their appointments or clinical interactions; and
- Health-care professionals are aware that some clients are anxious and ashamed when they do not understand.

(Brown et al., 2004; Parikh, Parker, Nurss, Baker & Williams, 1996; Sudore & Schillinger, 2009)

Many individuals, in addition to those individuals with low literacy and the associated shame, may hide or not admit their difficulties with health information. The stigma associated with low literacy may lead clients to pretend that they can read and understand health information, and may prevent them from asking questions to improve their understanding of their own health conditions (Parikh et al., 1996). A safe, shame- and blame-free environment removes these barriers and stigma associated with low literacy and creates an empowering environment for all individuals who may struggle with health information, regardless of their literacy level. This type of environment, where clients are not subjected to the humiliation associated with low literacy, encourages a more balanced partnership with the health-care professional (Brown et al., 2004; Parikh et al., 1996; Sudore & Schillinger, 2009) and, subsequently facilitates client centred learning.

PRACTICE BOX

The level of health literacy is affected by more than the level of literacy. Strategies that are effective in facilitating learning for all clients include:

1. Universal precautions approach for health literacy (See recommendation 2); and
2. Creation of a safe, shame- and blame-free environment for client learning.

Q: What are some barriers that hinder a safe, shame- and blame-free environment for client learning?

A: Removing the barriers from accessing, understanding and using health information minimizes risk for everyone.

Many of these barriers are related to written and verbal communication such as:

- Too much information;
- Medical and technical jargon;
- Complicated forms and brochures;
- Relying just on words;
- Failing to check for understanding;
- Poor signage;
- Difficult systems to navigate; and
- Lack of reinforcement and support.

(Sudore & Schillinger, 2009).

Q: How can a nurse create a safe, shame- and blame-free environment?

A: The four pillars in the L.E.A.R.N.S. Model (see Figure 1) describe and support the creation of a safe, shame- and blame-free environment, which welcomes dialogue between client and nurse and invites the client to ask questions. By creating a welcoming environment that invites questions and opportunities for dialogue, the nurse is able to also assess client understanding of health information and self-management regimes/care instructions and/or the ability to perform skills and tasks related to health-care management (Sudore & Schillinger, 2009; Wolff et al., 2010).

Ensure client centred care

Establish a purposeful, goal-directed, therapeutic and empathetic relationship aimed at advancing the best interest and outcome of the client (RNAO, 2006b). This is a partnership relationship that views the client as a whole, respects autonomy, voice, self-determination and participation in decision-making (RNAO, 2006a).

PRACTICE BOX

Creating a therapeutic partnership with your client that is also safe, shame- and blame-free begins with planning your learning session. Reflect on what is known about the client:

- Are you aware of your client's knowledge and beliefs regarding their illness/condition, care and treatment?
- How might this impact them or their family?
- Do you need to gather more information?

A randomized controlled trial by Anderson, Mizzari, Kain & Webster (2006) found that learning is enhanced when the client's values, needs and goals guide your learning plan (Estabrooks, et al., 2005; Stacey, Samant, & Bennett, 2008; Vallance, Courneya, Plotnikoff, & Mackey, 2008).

Promote health literacy

Health literacy is defined as the ability to access, understand, evaluate and communicate information as a way to promote, maintain and improve health in a variety of settings across the life-course (Rootman & Gordon-El-Bihbety, 2008).

Promote health literacy by helping clients to understand and act on health information, and to interact with health-care professionals/providers, the health-care system and the community (IOM, 2004).

PRACTICE BOX

To promote health literacy, use strategies and techniques such as:

- Avoiding jargon;
- Focusing on knowledge gaps identified by (or negotiated with) the client; and
- Inviting the client to ask questions or request clarification.

(IOM, 2004)

Once you and your client have identified the learning needs, plan where and when the learning session will take place. Create a relaxed setting where there are few interruptions and sufficient time to cover the material, check for understanding, provide clarification and follow up (Hibbard & Peters, 2003).

Build knowledge and skills

Build knowledge and skills that are constructed by, and meaningful to, clients and that reflect their current needs, values, cultural realities and previous experiences (Blumberg, 2009). Creating a welcoming environment that invites questions and opportunity for dialogue to understand the client's reality fosters client centred learning, and encourages continued opportunity for clarification (Wolff et al., 2010). In creating a welcoming environment, phrasing conversations is often an important aspect of all client centred learning encounters.

PRACTICE BOX

The following conversation starters invite the client to express feelings, concerns, and questions in open dialogue with the nurse. From this needs assessment, the nurse is able to identify barriers to learning, what the client already knows or believes, knowledge and/or skill gaps. This then creates a basis for partnering with the client to identify priorities and timing of learning sessions.

Use the following questions as guides for your teaching and interviewing techniques:

- How are you feeling right now? (invites client to indicate pain, fatigue or other barriers to learning, or to express confusion/fear/anger/frustration, etc.)
- Can you please tell me what you know about...?
- What questions do you have...?
- How do you like to learn something new?
- What do you do to help you learn something new?

Support self-management

Utilize advocacy and empowerment to encourage self-efficacy and decision-making (RNAO, 2010).

PRACTICE BOX

Some resources that may support self-management strategies are:

- “It’s Safe to Ask” (Manitoba Institute for Patient Safety);
- It’s Good to Ask (BC Patient Safety and Quality Council);
- Ask-Tell-Ask (RNAO, 2010); and
- “Ask Me 3” (National Patient Safety Foundation).

For website information and more resources, see Appendix E.

RECOMMENDATION 2:

Use a universal precautions approach for health literacy to create a safe, shame- and blame-free environment.

Level of Evidence = Ib

Discussion of Evidence

Q: What is a universal precautions approach for health literacy?

A: A universal precautions approach is an approach for clear communication within the field of health literacy. Given that low health literacy is prevalent and individuals may struggle with health information for a variety of reasons, Sudore & Schillinger (2009) recommend that interventions to support clear communication to decrease these barriers are necessary for clients of all literacy levels.

Since it is impossible to tell by looking if a client is affected by low health literacy, a universal precautions approach for health literacy should be explored, meaning taking specific actions that minimize risk for everyone (Brown et al., 2004). This concept is similar to using universal precautions with infectious diseases. By adopting a universal precautions approach for health literacy, nurses assume that all clients may have difficulty understanding health information and navigating the health-care system. It is important to note that when using a universal precautions approach in every client encounter, nurses are not required to complete an in-depth analysis of client health literacy status (Paasche-Orlow & Wolf, 2007).

Since many clients rely on verbal instructions exclusively, a universal precautions approach for health literacy includes the use of clear communication in every client encounter. A randomized control trial by Rothman et al. (2004) identified several strategic actions for clear communication:

1. Decrease the complexity of the information provided (clear health communication);
2. Use concrete examples during learning sessions;
3. Limit the number of topics covered in one session;
4. Avoid (medical) jargon;
5. Use “teach back” to ensure comprehension (refer to Recommendation 8); and
6. Focus on selected critical behaviours.

(Rothman et al., 2004, p 1715.)

PRACTICE BOX

As a member of a partnership, nurses match their vocabulary to that of their client: slowing down; using less medical jargon and more common words; and targeting a small number of key educational points (three or less) during the encounter (Sudore & Schillinger, 2009). In addition, nurses must clarify understanding and any misconceptions with clients strategically during a client learning encounter to ensure that comprehension is evident.

Refer to [Appendix E](#) for more resources on a universal precautions approach to health literacy.

RECOMMENDATION 3:

Assess the learning needs of the client.

Level of Evidence = 1a

Discussion of Evidence**Q: Why does a nurse assess the learning needs of the client when planning to facilitate learning?**

A: The challenge of developing an evidence-based, tailored, educational design begins with assessing the relevant social determinants of health and continues with the assessment of the learning needs of the client and his/her individual characteristics, such as life experiences and self-direction. The literature reports that client's needs and learning preferences are not always taken into consideration when teaching methods or programs are being developed (Trento et al., 2004). Assessment of the client prior to delivery of education information sets the foundation for the client to engage in the process of receiving and understanding the information presented to them.

PRACTICE BOX

The initial assessment identifies the client characteristics including, but not limited to:

- Level of formal education;
- Gender;
- Age;
- Cultural background;
- Language spoken;
- Religious preference;
- Family patterns of decision-making; and
- Health practices and beliefs about medical care.

(Deyirmenjian, Karam, & Salameh, 2006; Fredericks, 2009a)

Assessing the client's learning needs requires nurses to recognize and understand that learning needs are unique to each client's situation. The focus should be on the client and not on the health issue. The nurse and the client should mutually negotiate an understanding regarding the client's perceived ideas about the nature of the problem and possible solutions (Kinnersley et al., 2007). A systematic review by Fredericks (2009) found that the client needs to be an active participant in reporting what his/her learning needs are as well as determining what information is important to his/her particular situation and what is not. The client's characteristics and personal experiences assist the client in determining both the level of importance and specifically what his/her learning needs are (Deyirmenjian et al., 2006; Fredericks, 2009a). As well, the client must be psychologically ready in order to determine both perceived learning needs and the teaching offered (Deyirmenjian et al., 2006).

To determine if the client is psychologically ready, the nurse can assess the client's anxiety level and ensure that the client is capable of determining their learning needs and the level of importance for learning about a particular topic. If the client's anxiety level is assessed to be a barrier to his/her becoming an active participant in the education process, interventions should be carried out to reduce anxiety levels (Deyirmenjian et al., 2006; Fredericks, 2009a).

Q. Why is it important to understand the client's learning preferences when assessing his/her learning needs?

A: Clients have diverse learning preferences that may or may not align with the nurse's personal preference and every client should be given the opportunity to learn in his/her preferred manner. Research has demonstrated that clients have voiced concerns regarding the amount and quality of the information they receive from nurses. Clients reported that either they did not receive enough information or that the information that they did receive did not fulfill their perceived learning needs (Kinnersley et al., 2007). Furthermore, it was reported that health-care professionals tend to either undervalue or underestimate the information needs of the client (Kinnersley et al., 2007). Nurses must come to an understanding with the client regarding their perceived learning needs and adapt the learning session accordingly. For the client to become an empowered partner in learning, the nurse encourages the client to decide what is important to learn at that time (Fredericks, 2009a). The nurse supports the client's decision about what is important to learn during the learning session.

Q. How does a nurse identify different learning preferences?

A: Forming a therapeutic, partnership relationship allows the nurse to collaborate directly with the client and understand their learning preferences. The nurse can:

- Ask the client how they prefer to learn;
- Invite the client to consider a range of options that can be provided such as dialogue, reviewing pamphlets/posters together, self-directed web-based learning, viewing videos/films, attending group-based health information sessions or support groups, and referring to health support groups in the community; and
- Develop facilitation skills in order to support client centered learning.

(Fredericks, 2009b)

Nurses should focus efforts on tailoring the message to the client (see Recommendation 4), checking for understanding (see Recommendation 8) and their ability to perform the required skills, i.e. universal precautions approach for health literacy.

RECOMMENDATION 4:

Tailor your approach and educational design by collaborating with the client and the interprofessional team.

Level of Evidence = 1a

Discussion of Evidence

Q: What is the role of the nurse in collaborating with the interprofessional team and the client?

A: Nurses are expected to have sound facilitation skills (Fredericks, 2009b) and to work collaboratively with clients and interprofessional colleagues to ensure they have up-to-date knowledge of the client, the client’s learning preferences, the roles and responsibilities of interprofessional colleagues, and that they work collaboratively to ensure the most effective facilitation possible for the client. The nurse and client complete goal setting collaboratively to support self-management (RNAO, 2010). A systematic review by Costner and Norman (2009), found that when planning structured educational sessions the nurse collaborates with the appropriate interprofessional team members and the client and considers the nature of the material, the characteristics of the clients, the client valuing of peers, and the potential for a group educational session.

PRACTICE BOX

Example #1:

The Early Years program in the community offers a “Snack and Chat” program for parents and children, aged 0 to 6 years old on a weekly basis with the community nurse. Within this group setting of diverse participants, the nurse takes the time to focus on facilitating clients learning by working in partnership with the group to select the topics and presenters for the weekly discussions. In addition, when planning each session the nurse includes information and educational design materials that fit the content and context of the topics in order to promote and facilitate understanding and learning of healthy child development or common childhood illness/injury.

Example #2:

During a well-child visit to the community health center, the primary care nurse focuses the interaction on facilitating client centred learning by presenting the client with cue cards or pictures with varying topics and allowing the client to select the topic that they wish to discuss, that they require information on or that they need resources for at the present time or at a future visit. This allows the client to guide the learning and tailoring of information and resources to meet their unique situation.

RECOMMENDATION 5:

Engage in more structured and intentional approaches when facilitating client centred learning.

Level of Evidence = 1a

Discussion of Evidence

Q: Why are nurses being encouraged to engage in more structured and intentional approaches when facilitating client centred learning?

A: The evidence clearly promotes structured approaches to facilitating client centred learning as these do lead to positive client health outcomes (McGillion et al., 2008).

Q: Are there specific approaches to take when planning learning activities with clients?

A: Structured, intentional approaches support client learning best (McGillion et al., 2008). There is no clear evidence to support or refute the benefit of talking to a client on an ad hoc basis. Nurses are encouraged to anticipate the learning needs of their clients and plan structured, intentional approaches to meet these learning needs.

Q: What are 'structured approaches' to facilitate client centered learning?

A: Structured learning is not spontaneous, spur of the moment dialogue, nor is it a rapid response to a client's question. The common components of structured learning include:

- The learning is identified as a need by the client;
- The client is engaged in creating a structured plan collaboratively with the nurse and has input into the plan;
- The nurse is well prepared for the facilitation role, and is confident and competent facilitating client learning;
- The facilitation takes place over time with more than one interaction;
- Client understanding is assessed; and
- The nurse engages in thoughtful self-reflection at the conclusion of the structured facilitation.

(Fan & Sidani, 2009).

There are many examples of structured approaches to learning that are effective. A meta-analysis by Fan and Sidani (2009) looked at the effectiveness of diabetes self-management education intervention elements stating that teaching methods have now shifted from, “didactic presentations to mixed didactic and patient-provider interactive programs that facilitate patients’ active involvement” (Fan & Sidani, 2009, p. 24). This meta-analysis clarified that:

- Mixed teaching has proven to be more effective than didactic presentations;
- Face-to-face interventions were most effective “for enhancing knowledge and metabolic control” (Fan & Sidani, 2009, p. 24);
- Phone contact was effectively utilized in some studies as it potentially overcame some barriers and is “convenient, simple and less costly” (Fan & Sidani, 2009, p. 24);
- Dose mattered with more sessions over longer duration having the biggest impact on knowledge and metabolic control but not for self-management behaviours, and
- Booster sessions increased effectiveness (Fan & Sidani, 2009).

PRACTICE BOX

Examples of structured approaches for individuals:

- Nurse/client dialogue along with written information that is clear, brief and repetitive (Fernandez, Evans, Griffiths & Mostacchi, 2006);
- Provision of written and verbal information and incorporating a 5 minute opportunity for clients to ask questions of physician/nurse (Herschorn, Becker, Miller, Thompson & Forte, 2004);
- Use of a flipchart with main points listed and pictures illustrating the health challenge; information sheets personalized for the client’s use in a prominent place in the home; delivered in a quiet setting, short session; one-on-one with nurse/client (McKinley et al., 2009); and
- A 7 session, 2 hour, every 2 weeks educational session, including strength training exercise and self-management (Rooks et al., 2007).

Examples of structured approaches for groups:

- An assessment of client’s understanding and building upon it over five group sessions, plus a six month follow-up (Hermanns, Kulzer, Kubiak, Krichbaum & Haak, 2007);
- A 6 week program, delivering a standardized psychoeducational program given in two hour sessions weekly, delivered by a registered nurse using a group format, in a comfortable classroom setting, with choices of attending in the day or evening and encouragement to bring a family member/friend (McGillion et al., 2008); and
- A 5 day structured teaching program (Tankova, Dakovska & Koev, 2004).

Q: What does this mean for point of care nurses who are caring for clients one-on-one in predominantly staff nurse positions?

A: Point of care nurses such as nurses practicing in acute care institutions, home care, public health nursing, community health centres, long-term care, ambulatory care centres, and self-employed nurses will continue to ensure that they have the knowledge, skills, attitudes and judgment to facilitate one-on-one and/or group client learning in their practice. Much of their facilitation may remain informal or unstructured ‘teachable moments’; however, at this time nurses are encouraged to try to move towards more structured approaches to facilitating learning in their practice settings.

Q: How do nurses move towards more structured approaches to facilitate learning in their practices?

A: Guided by social constructivism, nurses are encouraged to create a ‘learning community’ in their practice environment to consider this challenge. Collectively, nurses, interprofessional team members and clients can consider their local contexts, client needs and available resources. Then consider opportunities or options to shift nursing practice towards more structured/intentional approaches to facilitate client learning. Start with small changes and create a plan to evaluate client responses. Keep in mind the importance of implementing a universal precautions approach to support health literacy and incorporate a combination of educational strategies to promote effective learning and improved health. See Recommendation 7 for multimodal educational strategies.



PRACTICE BOX	
Action	Rationale
On a busy floor, the nurses agree that midmorning for three mornings in a row, they will dedicate five minutes of their care-giving to support client learning.	Ad hoc teaching made more intentional.
During their a.m. care, prior to the learning session, the nurses in partnership with the client determine the topics to be addressed that day and a mutually acceptable time for the learning session.	Partnering with the client and naming the learning that will occur enable both the nurse and client to prepare for the session.
Before the learning session, the nurses gather additional resources to support the client's learning (e.g. multimedia resources, booklets or pamphlets, posters or diagrams, etc.).	Use of teaching aids, multimedia resources and teaching booklets enhance client learning. Referring clients to valid internet and community resources supports ongoing client learning in the community.
During the learning session, the nurses engage the client by providing several opportunities for clarification, questions and practice.	Checking for understanding ensures the nurses presented the material/demonstrated the skill clearly and in a manner that enables the client to use the information effectively.
After the sessions, the nurses document the content covered, client's responses, what the clients mastered, areas that still require reinforcement or additional learning and document any difficulties encountered or techniques/strategies that worked well.	Documenting the details of the session enables other health-care professionals to support and reinforce new learning and address any gaps or challenges.
The nurses share their experiences with each other and discover that their clients had the same learning needs. They discuss the possibility of future group sessions.	Moving towards group facilitation may make better use of scarce resources.

Q: What positive health outcomes and/or behaviour changes have been identified with structured approaches to facilitation?

A: There are a range of positive health outcomes and behaviour changes that have been identified in the literature. Table 2 lists these health outcomes.

Table 2: Health Outcomes Related to Structured Approaches to Facilitation.

Category	Outcome
Mental Health	<ul style="list-style-type: none"> • Short-term knowledge gains for mental health consumers (Fernandez et al., 2006) • Improved knowledge, but not necessarily health outcomes, in mental health consumers receiving psychotropic medication (Fernandez et al., 2006) • Decreased depression and improved self-care efficacy in end stage renal clients (Tsay & Hung, 2004) • Improving psychological readiness for successful HIV medication adherence and reducing depression (Balfour et al., 2006) • Positive self-perception for clients with overactive bladders (Herschorn et al., 2004)
Diabetes	<ul style="list-style-type: none"> • Treating hypoglycemia problems (Hermanns et al., 2007) • Enhancement of diabetic control, knowledge and reduced need for diabetes medications (Deakin, McShane, Cade & Williams, 2005) • Slow progression of cardiovascular and micro vascular sequelae of type 2 diabetes (Rachmani, Slavachevski, Berla, Frommer-Shapira & Ravid, 2005) • Improved care for those with type 2 diabetes (Loveman, Frampton, & Clegg, 2008) • Improved well-being a year after their educational session for clients with type 1 diabetes, including improved glycemic control, reduction in depression and anxiety and an increase in positive well-being (Tankova et al., 2004) • Improved learning, problem-solving and quality of life in people with type 2 diabetes managed by group care (Trento et al., 2004) • Improvement of metabolic control and self-management skills in elderly clients with diabetes (Braun et al., 2009)
Pain	<ul style="list-style-type: none"> • Short-term improvements in health-related quality of life and self-efficacy, including stability of pain symptoms in angina clients (McGillion et al., 2008) • Improved pain management for clients with co-occurring psychosocial problems (Ahles et al., 2006) • Improved cancer pain management in ambulatory care settings (Yates et al., 2004)

Heart Disease	<ul style="list-style-type: none"> • More timely treatment for acute coronary syndrome in individuals with coronary heart disease and significantly increased knowledge, attitudes and beliefs about ACS (McKinley et al., 2009) • Improved quality of life for men and increased knowledge for women and men with chronic heart failure (Stromberg, Dahlstrom & Fridlund, 2006) • Improved self-management for clients with heart failure (Kline, Scott, & Britton, 2007)
Medications	<ul style="list-style-type: none"> • Improved antiretroviral medication adherence (Reynolds et al., 2008) • Improved control over health care for adult surgical clients and improved adherence with medication treatment (Suhonen & Leino-Kilpi, 2006)
Asthma	<ul style="list-style-type: none"> • Improved self-regulation in women with asthma, specifically annual reductions in the number of nights with asthma symptoms (Clark et al., 2007)
Knowledge	<ul style="list-style-type: none"> • Improved knowledge, attitudes and beliefs about responses to acute myocardial infarction symptoms (Buckley et al., 2007) • Improved knowledge related to medications and insight into illness (Fernandez et al., 2006) • Improved knowledge, reasoning and decision-making in emergency situations for asthma clients (Magar et al., 2005) • Improved health education of clients in emergency departments (Szpiro, Harrison, Van Den Kerkhof & Loughheed, 2008) • Improved knowledge about osteoporosis (Nielsen et al., 2008)
Other	<ul style="list-style-type: none"> • Self-management of women with fibromyalgia (Rooks et al., 2007) • Reducing anemia linked to post partum haemorrhaging and death in pregnancy in Nepalese women (Adhikari, Liabsuetrakul, & Pradhan, 2009) • Improved breastfeeding of premature infants in Egypt (Ahmed, 2008)

RECOMMENDATION 6:

Use plain language, pictures and illustrations to promote health literacy.

Level of Evidence = 1a

Discussion of Evidence

Q: What is plain language?

A: Throughout the literature, the terms ‘plain language’ and ‘clear language’ are often interchanged. It is the basic foundation of clear communication. Plain language is a way of writing information so that it is easy for most people to read, understand and use. Clients with low health literacy often rely heavily on verbal communication (Sudore & Schillinger, 2009). It is important for clinicians to avoid jargon and use plain or “living room language” (Sudore & Schillinger, 2009). Successful communication includes attempting to match the client’s vocabulary (for example using the words heart attack and not myocardial infarction), prioritizing key messages, and limiting messages to three key points.

Q: How do pictures and illustrations promote health literacy?

A: Pictorial aids have been shown to improve recall, comprehension and adherence in low-literacy clients and are particularly useful for conveying timing of medication doses, the importance of completing a course of therapy and may help to reduce medication errors and adverse outcomes (Katz, Kripalani & Weiss, 2006; Kripalani et al., 2007; Yates et al., 2005).

Additionally, pictorial aids have been shown to enhance client understanding of how medication should be taken and have resulted in increased satisfaction, particularly when pictures are used in combination with written or oral instructions (Katz et al., 2006).

Clients indicated finding pictures most helpful for obtaining information about a medication name, daily dose and times to take the medication, but found them less useful for portraying drug interactions (Katz et al., 2006). Kripalani, Yao, and Haynes (2007) found that clients who used pictorial aids tended to have higher self-efficacy when using medications. See Recommendation #7 for effective multimodal strategies.

Q: Are there populations that find it more challenging to interpret illustrations?

A: Older adults may find it more challenging to interpret illustrations as found in Liu, Kemper & McDowd (2009) where older adults performed better on word recognition, but did not perform as well on the illustrated material. Measuring eye movement, the researchers reported that the older adults spent more time than their younger counterparts reading the illustrations; however, they had less comprehension of the illustrations.

See [Appendix E](#) for resources that may be useful for plain language, pictures and illustrations.

RECOMMENDATION 7:

Use a combination of educational strategies for effective learning:

1. Printed Materials
2. Telephone
3. Audiotapes
4. Video
5. Computer-based technology and multimedia presentations

Level of Evidence = 1a

Discussion of Evidence

Q: Are multimodal strategies an effective approach for client centred learning?

A: The benefits of combining approaches are well documented (Cancer Care Ontario [CCO], 2009), but the facilitator must then tailor these multi-pronged approaches to meet the learning needs and preferences of the client.

See [Appendix E](#) for resources highlighting the use of combining educational strategies for effective learning.

1. Printed Materials

Q: Can printed materials, such as booklets or pamphlets, facilitate client learning?

A: Written materials are effective client education strategies with respect to satisfaction and information recall; written information in the form of new client information packages or booklets can improve client knowledge and reduce confusion (CCO, 2009).

Printed material can facilitate client learning either on its own, or in addition to other sources, and in some cases, may be superior to those methods using technology. Intervention booklets that are designed to promote healthy living can be applied successfully to hospital settings and have been shown to initiate cognitive and behavioural changes, and encourage action by prompting goal setting (Kelley & Abraham, 2004). Yildirim, Cicek & Uyar (2009) found that a client education program for oncology clients that included both a pamphlet and a slide show was more effective than a slide show alone. Kroeze, Oenema, Campbell & Brug (2008) found that material in print form demonstrated higher use by clients compared to presentation of identical material by CD-ROM.

Q: How can printed materials adapt to clients with specific literacy issues, such as those with English as a second language?

A: In a study by Yin and colleagues (2008), use of pictograms resulted in decreased medication dosing errors and improved adherence among multiethnic, low socio-economic status parents and caregivers of children who were prescribed liquid medications. Illustrations that reinforced and drew attention to written information were particularly helpful for clients with low literacy (Hartman, Bena, McIntyre & Albert, 2009).

2. Telephone

Q: How do interactions over the telephone compare to face-to-face interactions?

A: In a study by Jansa and colleagues (2006), an intensive telecare follow-up among clients with type 1 diabetes was found to be comparable or better in relation to face-to-face follow-up, with potential cost savings and shorter appointment duration. In a study with a community-based sample of middle- and older-aged adults, using an automated system achieved similar, but temporary results. The automated system achieved significant physical activity increases that were comparable to those achieved by trained health educators at 6 months. However, by 12 months the effectiveness of the automated system appeared to diminish relative to human advice (King et al., 2007).

3. Audiotapes

Q: What are the advantages of providing audio technologies in increasing client knowledge and adherence to self-care guidelines?

A: Use of audiotapes can lead to improved client education and increased willingness to engage in proper self-care behaviours, while maintaining cost-effectiveness. A systematic review of the use of audiotapes in client education concluded that most studies of audiotapes of client consultations did result in an increase in client knowledge, though this was not always sustained (Santo, Laizner & Shohet, 2005). Information is most effective when it is tailored to the specific situation, respects health literacy standards and does not overload the client with information (Santo et al., 2005; Williams & Schreier, 2004, 2005).

Audiotapes developed at a 5th grade level of understanding were successfully used to increase self-care behaviours among women undergoing chemotherapy (Williams & Schreier, 2004). In this study, clients who used audiotapes demonstrated effective self-care behaviours, reported symptom improvements and demonstrated lower anxiety compared to the control group.

Goepfinger and colleagues (2009) studied clients with multiple arthritic conditions and demonstrated the usefulness of client education materials with an audio and a visual component in improving health status, behaviour and self-efficacy variables. Audiotapes of specific client education that are delivered via mail to clients may be useful for organizations with limited financial or programmatic resources for dissemination (Goepfinger et al., 2009).

There are multiple newer forms of audio technologies available today. The literature reviewed within this guideline did not identify any of these technologies.

4. Video

Q: Do video instructions support learning?

A: Video instruction can offer many of the same advantages as computer-based learning, such as increased client satisfaction and the ability to adapt information to better serve those with literacy difficulties. Video may also be effective in a client's ability to recall and report side effects of treatment. In a study of individuals with cancer, randomized to receive standard pre-chemotherapy education or standard education plus the addition of a video, the video group demonstrated trends towards higher retention of information regarding management of chemotherapy side effects and reporting of treatment-related symptoms (Kinnane, Stuart, Thompson, Evans & Schneider-Kolsky, 2008). The use of an informative video in cardiology departments proved to be highly recommended as an instrument to lower anxiety levels and increase significantly the level of satisfaction (Ruffinengo, Versino & Renga, 2009). Finally, animated videos that are developed using a 6th grade level of understanding improve long-term knowledge retention compared with the use of a pamphlet alone (Schnellinger et al., 2010).

5. Computer-based technology and multimedia presentations

Q: Is computer-based learning an effective tool for client education in client centred learning?

A: Yes, computer interventions can be remarkably useful in client instruction, improving knowledge retention and increasing the likelihood that guidelines will be followed. Marsch and Bickel (2004) compared computer-delivered education to therapist-delivered HIV/AIDS education among injection drug users. This investigation found that participants who received the computer-based intervention learned significantly more information about HIV prevention, retained significantly more information at a three-month follow-up, liked the teaching medium significantly more, and requested additional information about HIV/AIDS at the end of the intervention with greater frequency than did the comparison group (Marsch & Bickel, 2004).

In a randomized controlled trial, a multimedia educational computer program was as effective as usual nurse counseling in educating clients about fecal occult blood testing (FOBT) and in achieving adherence to FOBT screening (Miller, Kimberly, Case & Wofford, 2005). A review of randomized controlled trials evaluating the effects of multimedia tools (computer-based or video-based) to improve client or caregiver knowledge about medical evaluation or management revealed that nearly two-thirds of the studies (23/37) reported that multimedia educational aids produced better understanding of information for clients compared to routine methods (Jeste, Dunn, Folsom & Zisook, 2008). Similarly, other studies have shown significant increases in client knowledge and understanding about their condition from using computer-based interactive programming (Meyer, Fasshauer, Nebel & Paschke, 2004) and interactive multimedia tools (Leung et al., 2004; Linne & Liedholm, 2006).

Q: What improvements can be made in the delivery of information by computer?

A: One major enhancement is to tailor computer-based information to a client's needs, which evidence suggests could produce better health outcomes and help clients adopt a healthier lifestyle. In a study of people with diabetes, web-based interventions were effective in enhancing the levels of physical activity and improved glycemic control. Participants also reported satisfaction with the intervention program and attributed this to the specific and selective nature of the individualized information they were receiving (Kim & Kang, 2006).

In a review of 30 studies that used computer-tailored interventions to change physical activity and dietary behaviours, the majority of studies strongly supported tailored computer interventions in promoting healthy diets (Kroeze, Werkman, & Brug, 2006). Three of the 11 physical activity studies and 20 of the 26 nutrition behaviour studies found significantly positive effects from the tailored interventions (Kroeze et al., 2006).

Q: How does the use of computer instruction alter the interaction between clients and health-care professionals?

A: The use of electronic interventions appears to enhance, rather than degrade, communication between clients and health-care professionals. A number of studies have reported moderate success in improving client-physician relationship outcomes through computer-based technologies, including:

- Enhanced communication (Jeste et al., 2008; Keulers, Welters, Spauwen & Houpt, 2007);
- A better understanding of health information among clients (Jeste et al., 2008; Keulers et al., 2007);
- Active client engagement in health maintenance (Jeste et al., 2008); and
- A proactive response to health challenges (Kirsch & Lewis, 2004).

Other studies have demonstrated that computer-based client education before a clinical visit can lead to more efficient use of clinical time and shared decision-making (Keulers et al., 2007; Kim & Kang, 2006; Kim, Yoo & Shim, 2005).

Q: What about clients with little experience with computers or other technologies?

A: Programs which are respectful of the range of clients' technical abilities do not detract from the advantages of computer education. A review of computer-based software use for educating clients with coronary heart disease found that even when clients had no previous computer experience or were elderly, computer-based programs were easy to use, received high levels of satisfaction from client reports, and resulted in a significant increase in knowledge compared to standard education. This knowledge remained high, even at 6 month follow-up (Beranova & Sykes, 2007). Once again, improvement in education can be enhanced when adapting computer-based teaching programs to clients' needs as well as their skills, as was shown in a study of people with diabetes that measured the effect of computer-based teaching on hypoglycemic control (Nebel et al., 2004).

Q: Can multimedia presentations assist those with literacy issues?

A: There is evidence that computer-based technology (with a health literacy focus) demonstrates improved outcomes in clients with low literacy. In a randomized controlled trial of educated clients who had low literacy levels, and who received HIV pretesting information, watching a video on a hand held tablet personal computer (where the information was tailored to their low literacy levels) was found to be an acceptable substitute to pretest information delivered by an HIV test counselor (Merchant et al., 2009). In another study, a multimedia client education program on colorectal cancer screening that was developed with community input and designed to present important health messages using graphics and audio was found to reach Hispanic/Latino adults across literacy levels and ethnic backgrounds. This multimedia education program significantly increased knowledge of anatomy and key terms, primary screening options and risk information, as well as enhanced willingness to consider screening among Hispanic/Latino clients (Makoul et al., 2009).

Q: Is using social media an effective strategy for client centred learning?

A: At the time of writing this best practice guideline, the search did not locate literature on the use of social media as an effective strategy for client centred learning.

RECOMMENDATION 8:

Assess client learning.

Level of Evidence = IIa

Discussion of Evidence**Q: Why should the nurse assess client learning?**

A: The nurse should confirm understanding of the client's learning as this is a basic universal precautions approach and a clinical best practice (Paasche-Orlow, Schillinger, Greene & Wagner, 2006; Schillinger et al., 2003).

Q: How does the nurse assess client learning?

A: In order to assess learning in a safe, shame- and blame-free manner, phrasing the conversation is an important consideration. The goal is to remove the examination aspect that encourages clients to try to hide lack of ability or knowledge and instead focus on creating an environment where the client is able to express uncertainties or state they have forgotten without censure. One strategy to encourage this open dialogue is to use language that is less judgmental such as assessment of learning rather than evaluation of learning. Furthermore, the assessment can be focused on the nurse's ability to be clear and thorough.

PRACTICE BOX

Conversations should be geared toward the nurse gaining understanding of the client's knowledge, skills gaps, or what he/she is struggling with, instead of testing and/or evaluating the client. To ensure the nurse has clearly explained and/or demonstrated to the client, the nurse may start the conversation by:

- So that I am certain I explained this clearly, please tell me what you think I said about...
- So that I know that I demonstrated this well, please show me what you think I did/how you think I did this...
- How do you think this will affect/impact the way you do things each day/change how you live/act?
- What benefit do you see?
- How will this help you?
- What risks do you see/what will be hardest for you? Why?
- What will work for you?
- What support do you need to enable you to do...?

Client learning can be assessed in a number of ways such as ‘teach back/closing the loop’, ‘teach to goal’, ‘ask-tell-ask’ and ‘show me’ techniques. Sudore & Schillinger (2009) found that using ‘teach back/closing the loop’, ‘teach to goal’ or ‘show me’ techniques in every client encounter led to best outcomes. Each technique is a circular process of: providing information or demonstrating skills; checking for understanding; and clarifying until the skill is mastered or the knowledge can be restated in the client’s own words and the client is able to describe how the knowledge will be incorporated into the client’s lifestyle. [Appendix F](#) provides two scenarios highlighting the differences between ‘teach back/closing the loop’ and ‘ask-tell-ask’ techniques.

For example, to check that a client understands and is able to describe his/her medication regimens, the nurse will ask how the client plans to take the medication. If a client is unable to explain or demonstrate, then the nurse can tailor teaching to either provide the explanation/demonstration in a different manner or to fill in gaps in knowledge and skill. The nurse can then reassess comprehension until the client has exhibited mastery. This iterative approach attends to a wide range of factors (e.g. literacy, anxiety, culture and distracting symptoms) that can influence a client’s understanding. Figure 2 exemplifies how checking for understanding enables the nurse to continuously assess client learning.



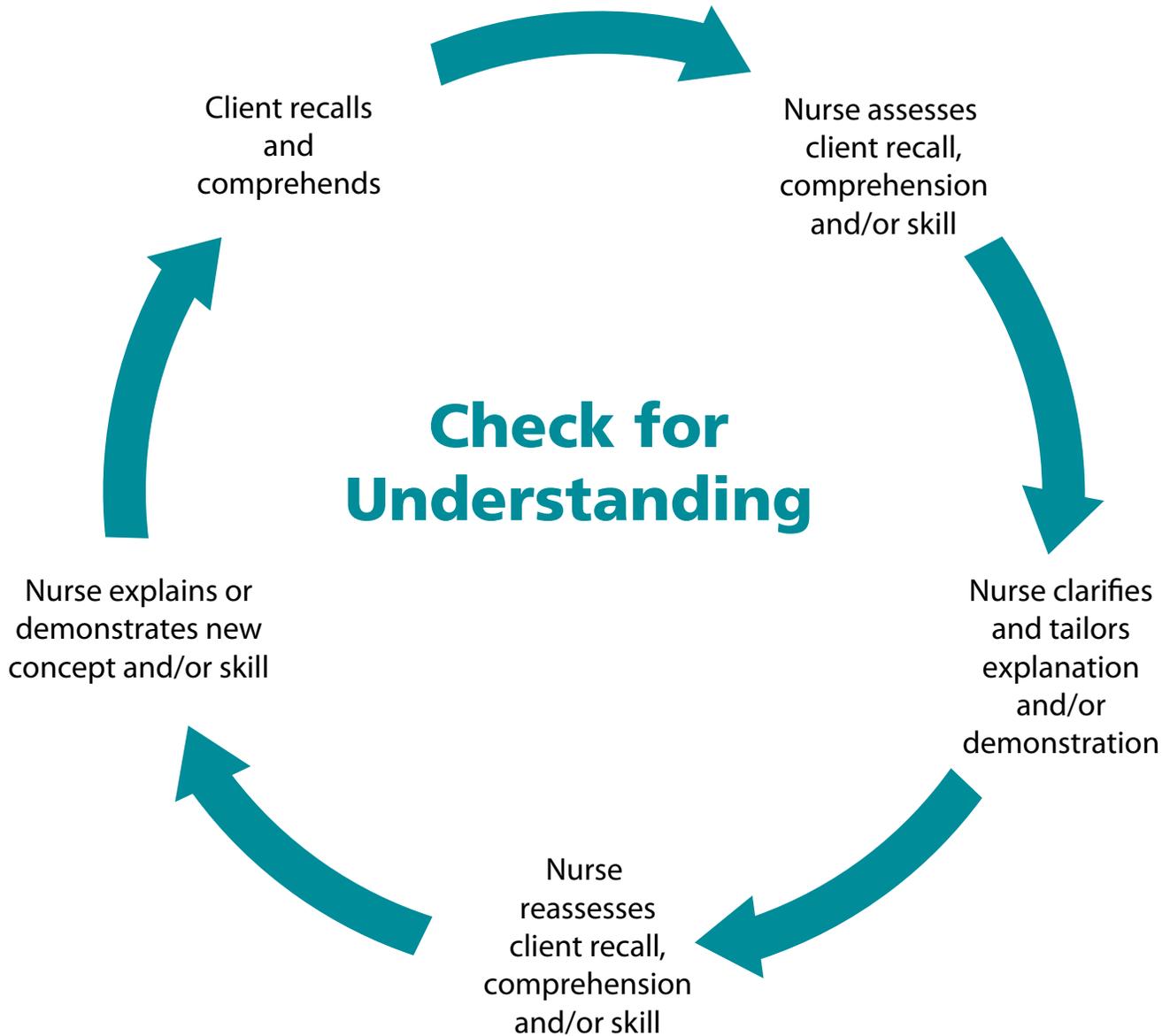


Figure 2: Check for Understanding (adapted from Schillinger et al., 2003).

RECOMMENDATION 9:

Communicate client centred learning effectively with:

- a. The client; and
- b. The interprofessional team.

Level of Evidence =1b

Discussion of Evidence

Q: Why is effective communication important to the client and the interprofessional team?

A: (a) The client will benefit from resources which will reinforce verbal messaging and information from the session. In a survey conducted at the Mayo Clinic, only 42% of clients could state their diagnosis, and fewer were able to recall their medications or common adverse effects (Paasche-Orlow, Parker, Gazmararian, Nielsen-Bohlman & Rudd, 2005). Furthermore, it is important for the client to have tailored messages to refer to as clients tend to recall only a portion of the session once it has ended. In a randomized, trial Henry et al (2007) found, that memory is improved with checking for understanding (see Figure 2) and further enhanced by documenting the tailored messages (Paasche-Orlow et al., 2005).

(b) All health-care professionals who encounter a client are accountable for documenting their interactions with clients. Communicating details of the client learning sessions to the other health professionals within the circle of care (clinic, emergency room, pharmacy, community or inpatient) enables each professional to reinforce and expand client learning at every encounter, not only within settings but also across settings. This leads to enhanced continuity of care and increased client safety (CNO, 2009a; National Asthma Education and Prevention Program, 2007).

Q: How can a nurse communicate client centred learning effectively with:

- a) **The client; and**
- b) **The interprofessional team?**

A: (a) The client: Clear communication with the client includes:

- Using the facilitating client centred learning model (see Figure 1);
- Checking for understanding (Figure 2); and
- Providing some form of ‘take away’ message that summarizes the key information (Sudore & Schillinger, 2009).

(b) The interprofessional team: The first step in effective communication is to document the episode or encounter. Documentation should include:

- The key educational points or skills addressed with the client;
- Concerns expressed by the client;
- Actions the client agrees to take;
- How you assessed the learning and the results of your assessment;
- Any topics or items not covered or that were difficult for the client to assimilate;
- The client response to the session; and
- What the plan for follow up is.

(CNO, 2009a; National Asthma Education and Prevention Program, 2007)

The second step is to unite the client's network of health-care professionals by ensuring each one has access to the documentation. This will inform the health-care professionals as to what was taught/learned, what was difficult for the client, what areas they should reassess or where to provide support and carry on with the next steps in teaching the client. This approach is particularly useful as gaps in education are avoided, previous learning is supported and enhanced, and time is not wasted on unnecessary repetition (CNO, 2009a; National Asthma Education and Prevention Program, 2007). **Appendix G** provides an example of a communication tool that may be used by health-care professionals to ensure effective communication in the delivery of asthma education.

PRACTICE BOX

Reflecting on the concepts of a universal precautions approach and, in reviewing the communication tool in **Appendix G**, how can the nurse change, keep or improve this communication tool in order to effectively communicate with the interprofessional team?

Q: Why does the nurse need to document client learning?

A: Nursing documentation is an important component of nursing practice and a practice standard that all nurses must comply with (CNO, 2009a). All aspects of client centered learning must be documented as part of professional accountability in support of safe, effective and ethical nursing care (CNO, 2009a). Clear documentation between care providers will enhance care and safety for the client by allowing other providers to reinforce and support learning across the continuum of care.

Documentation is also a requirement at the micro and macro levels of all organizations in relation to strategic planning, service evaluation and budget allocation. The absence of documentation endangers the organization's ability to validate target outcomes, monitor trends and secure nursing funds and resources.

Education Recommendations

RECOMMENDATION 10:

Introduce the L.E.A.R.N.S. Model into nursing programs and continuing education courses.

Level of Evidence = IV

Discussion of Evidence

Q: What is the value of nurses being prepared to facilitate client centred learning effectively?

A: The L.E.A.R.N.S. Model (Figure 1) identifies the process recommended to facilitate client centred learning effectively. When nurses facilitate learning they support the overall goal of many educational and self-management interventions, to empower clients in the management of their own health (RNAO, 2010).

Q: What evidence supports the use of the L.E.A.R.N.S. Model for successful facilitation of learning?

A: The L.E.A.R.N.S Model is an original model for facilitating client centred learning, developed by the expert panel for this best practice guideline. Therefore there is no evidence at the time of writing this guideline that using the L.E.A.R.N.S Model is successful in facilitating client centred learning.

However, there is evidence that suggests that components of the framework are successful in facilitating client centred learning. A meta-analysis of education interventions for diabetes self-management concluded that interactive strategies involving health-care providers and client interactions (face-to-face or by telephone) were the most effective (Fan & Sidani, 2009). Interventions that incorporate booster sessions enhanced effectiveness over time (Fan & Sidani, 2009). A systematic review of heart failure interventions concluded that education strategies should include individualized educational interventions to reflect the learning needs at the time, use of multimedia and teaching on a one-to-one basis (Fredericks et al., 2010).

Q: What evidence supports the importance of adopting a universal precautions approach to health literacy in nursing education programs?

A: As the field of health literacy evolves, nurses need to pay attention to its emerging impact on health outcomes. Various reports (outside of the literature review for this best practice guideline: CCL, 2008; Canadian Public Health Association [CPHA], 2007; IOM, 2004; U.S. Department of Health and Human Services, 2010) recommended that health literacy be incorporated into health professional schools and continuing education. Further research is needed to better understand the training of health-care professionals who facilitate learning with clients with health literacy challenges (Cutilli, 2007). According to Sudore & Schillinger (2009), professional interventions to address limited health literacy include medical education credits, clear health communication while clinicians are training and requirements for board examinations.

See Recommendation 2 for more information on universal precautions approach for health literacy. [See Appendix E](#) for resources to support health literacy.

RECOMMENDATION 11:

Reflect on the integration of the L.E.A.R.N.S. Model into everyday practice.

Level of Evidence = IV

Discussion of Evidence

Q: Why encourage and support nurses to reflect on the integration of the L.E.A.R.N.S. Model into their day-to-day practice?

A: Reflection provides an opportunity for nurses to think about their educator role and shift the direction of their care from simply providing information to facilitating client centred learning (Wilkinson & Whitehead, 2009). As health care becomes increasingly complex and shifts more responsibility to the client, nurses must reflect on how their practice encourages client involvement. To do this effectively, nurses must be mindful of creating partnerships and environments that respect client's choices and promote client centred learning. As part of professional practice, nurses are required to participate in reflection on their skills and practices (CNO, 2008).

The College of Nurses of Ontario quality assurance program (CNO, 2008) provides an opportunity for structured reflective nursing practice. Nurses can use the self-assessment learning plan to determine strengths and areas for improving knowledge and skills in facilitating a client centred learning approach, consistent with the L.E.A.R.N.S. Model.

PRACTICE BOX

To foster professional growth in integrating the L.E.A.R.N.S. Model in your day-to-day practice, consider reflecting on how you can improve.

Examples:

Listening to client needs: How can I improve my listening skills?

Establishing partnerships: How do I engage and build a partnership relationship with my client?

Adopting an intentional approach to learning: How do I shift to a more formal, structured and interactive approach to facilitating learning?

Reinforcing health literacy: How can I communicate in a way that my client can understand?

Naming new knowledge: How do I incorporate intentional 'checking for understanding' in my practice?

Strengthening self-management: How does my practice promote or strengthen my client's capacity for self-management?

Organization and Policy Recommendations

RECOMMENDATION 12:

Commit adequate resources to support structured approaches to facilitate client centred learning.

Level of Evidence = IV

Discussion of Evidence

Q: What resources should organizations provide that support the structured approaches to facilitate client centred learning?

A: To facilitate client centred learning effectively, organizations need to commit to creating and maintaining a client centred learning environment. This entails that leadership, within the organization, commit the necessary resources for client centred learning. These resources include: nurses (facilitators) in the planning and implementation of educational programmes, finances, dedicated space, equipment and multi-media materials (including the assessment and development of such materials). See [Appendix E](#) for additional online resources.

RECOMMENDATION 13:

Integrate the L.E.A.R.N.S. Model in the delivery of care and services through inclusion in strategic plans and organizational goals.

Level of Evidence = IV

Discussion of Evidence

Q: How should organizations integrate the L.E.A.R.N.S. Model in strategic plans and organizational goals?

A: Successful integration of the values and principles of client centred learning requires organizational commitment through: (1) accountability by senior administrators; (2) inclusion of the client centred learning pillars in strategic plans and organizational goals; and (3) evidence of client centred learning pillars in the delivery of care and services by all health-care providers. This integration would ensure long-term sustainability of client centred learning.

PRACTICE BOX

Examples of where to integrate client centred learning pillars include, but are not limited to:

- Quality indicators (score card, dashboard);
- Documentation;
- Competency-based orientation;
- Collaborative partnerships;
- Client safety initiatives; and
- Performance review processes.

Q: Why should organizations create a safe, shame- and blame-free culture in the delivery of care and services?

A: With organizational commitment to creating a safe, shame- and blame-free culture, all clients and health-care providers are made aware of the pillars of client centred learning. Clients are welcomed into a partnership relationship with their health-care professionals and all health-care professionals deliver care and services based on the pillars of client centred learning. See Recommendation #1 for more information on creating a safe, shame- and blame-free environment. See Appendix E for resources on how to create a safe, shame- and blame-free culture.

RECOMMENDATION 14:

Develop documentation tools to support effective communication of client centred learning.

Level of Evidence = IV

Discussion of Evidence**Q: Why should organizations develop documentation tools to support effective communication of client centred learning?**

A: Development of effective communication tools will assist nurses and the interprofessional team to:

- Document in a timely and efficient manner;
- Provide details required to enable other nurses to provide continued support for learning that the client is finding difficult or is too tired or ill to effectively absorb;
- Avoid inadvertently skipping important information or skills; and
- Avoid unnecessary repetition of information already learned.

Refer to Recommendation #9 for more information on effective client centred learning communication.

In addition, documentation tools may provide a vehicle for accreditation purposes, i.e. to identify gaps in provision of client centred learning and to enable development of additional supports and/or programs to enhance provision of client centred learning opportunities.

RECOMMENDATION 15:

Implement nursing best practice guidelines where there is adequate planning, strategies, resources, organizational and administrative support and appropriate facilitation of guideline uptake among clinicians.

Level of Evidence: IV

Discussion of Evidence

Q: How can organizations successfully implement best practice guidelines?

A: The RNAO (through a panel of nurses, researchers and administrators) has developed the Toolkit: Implementation of *Best Practice Guidelines (2012)*, based on available evidence, theoretical perspectives and consensus.

The *Toolkit* is recommended for guiding the implementation of the RNAO best practice guideline *Facilitating Client Centred Learning*.

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;
- On-going 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; and
- Opportunities for reflection on personal and organizational experience in implementing guidelines.

Successful implementation of 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 (2012)* provides a structured model for implementing practice change.

Please refer to [Appendix H](#) for a description of the *Toolkit*.

Research Gaps and Future Implications

The guideline development panel, in reviewing the evidence that informed the development of this guideline, has identified several gaps in the research literature related to client centred learning. In considering these gaps, the panel has identified the following priority research questions:

1. Client outcomes:
 - How are health outcomes (individual, population and system) impacted by client centred learning?
 - How does effective client centred learning impact on client experience?
2. Nurse knowledge/skill:
 - How are nurses integrating “teach back” into their practice?
 - How are academic institutions integrating these skills into their curriculums?
 - How does the educational preparation of the nurse impact the effectiveness of client centred learning?
 - What skills are needed to effectively provide client centred learning?
3. Financial impact:
 - What is the cost effectiveness of client centred learning?
 - What is the cost impact of not facilitating client centred learning?
4. Approaches to support implementation:
 - How is client centred learning best implemented in different health settings (i.e. long term care)?
5. Practice:
 - What methods, other than “teach back” and “teach to goal”, are effective in assessing client centred learning?
 - What is the effectiveness of the L.E.A.R.N.S. Model?
 - How are nurses using the L.E.A.R.N.S. Model in practice?

The above list, although in no way exhausts the research opportunities, is an attempt to identify and prioritize some of the research gaps in this area.

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 best practice guidelines (2012)*, illustrates some specific indicators for monitoring and evaluation of the guideline *Facilitating Client Centred Learning*.

Level of Indicator	Structure	Process	Outcome
Organization	<p>To evaluate the supports available in the organization that allow nurses to facilitate client centred learning.</p> <p>Review of best practice recommendations by organizational committee(s) responsible for policies/procedures.</p>	<p>To evaluate changes in practice that lead towards improved facilitation of client centred learning.</p> <p>Modification to policies and/or procedures consistent with the values and beliefs of client centred learning.</p>	<p>To evaluate the impact of recommendations.</p> <p>Policies and procedures related to client centred learning are consistent with the recommendations in this guideline.</p>
	<p>Client centred learning approaches are integrated into strategic plans for the care of clients within organizations.</p>	<p>Development and delivery of professional development activities and orientation programs integrating evidence-based client centred learning strategies.</p>	<p>Client centred learning strategies are integrated into the process of care, i.e. documentation of client learning needs.</p>
Nurse/Provider	<p>Availability of educational opportunities for nurses and the interprofessional team related to implementation of client centred learning strategies.</p>	<p>Percent of nurses and/or interprofessional team attending education sessions (orientation, organization professional development opportunities) on client centred learning.</p>	<p>Nurses and/or the interprofessional team are competent at facilitating client centred learning.</p>
	<p>Evaluation structures are in place to monitor effectiveness of educational programs.</p>	<p>Nurses' self-assessed knowledge of:</p> <ul style="list-style-type: none"> • Assessing learning needs; and • Engaging in more structured approaches. 	<p>Documentation of client centred learning.</p> <p>Nursing practice demonstrates client centred learning approaches.</p>

<p>Client</p>	<p>Availability of educational interventions using client centred learning strategies.</p>	<p>Percentage of clients attending/participating in structured learning sessions.</p>	<p>Clients report increased satisfaction with the learning sessions.</p> <p>Clients demonstrate enhanced self- management skills.</p>
<p>Financial Costs</p>	<p>Provision of adequate financial resources to provide staff with professional development opportunities focusing on integrating client centred learning strategies into learning sessions.</p>	<p>Cost for required education and other resources should be identified and included in operating budget.</p>	<p>Finances required for facilitating client centred learning are clearly identified and available for staff and clients.</p>

RECOMMENDATIONS



Implementation Strategies

The Registered Nurses' Association of Ontario and the guideline development panel have compiled a list of implementation strategies to assist health-care organizations or health-care disciplines that are interested in implementing this guideline. A summary of these strategies 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 also have good interpersonal, facilitation and project management skills.
- Conduct an organizational needs assessment related to facilitating client centred learning 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 interprofessional members committed to lead the change initiative. Identify short- and long-term goals. Keep 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 (e.g. 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, orientation of the staff to the principles of client centred learning must be provided and regular refresher training planned.
- Teamwork, collaborative assessment and treatment planning with the client, family and interprofessional 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 H**. A full version of the document in PDF format is also available at the RNAO website <http://rnao.ca/bpg>.

Process For Update and Review of Guideline

The Registered Nurses' Association of Ontario 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 five years, following the last set of revisions.
2. During the period between development and revision, RNAO program staff will regularly monitor for new systematic reviews, randomized controlled trials and other relevant literature in the field.
3. Based on the results of the monitoring, program staff will recommend an earlier revision plan. Appropriate consultation with team members comprising of original panel members and other specialists in the field will help inform the decision to review and revise the guidelines earlier than the targeted milestone.
4. Three months prior to the 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 site representatives regarding their experience.
 - 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 detailed work plan with target dates and deliverables.
5. The revised guideline will undergo dissemination based on established structures and processes.

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While only articles and reports used within this document have been cited in the reference list, additional literature was reviewed in the process of creating this best practice guideline. For a complete bibliography, please check www.RNAO.ca/bpg.

Appendix A: Glossary of Terms

Activated Client: A client with the skills, knowledge and motivation to participate as an effective member of the team. 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 (RNAO, 2010).

Ad Hoc: Impromptu, improvised, off the cuff, or unplanned teaching.

Client: A person, persons, group, aggregate, or community with whom the nurse is engaged in a professional, therapeutic partnership relationship in any setting.

Clinical Practice Guidelines or Best Practice Guidelines: Systematically developed statements to assist practitioner and client decisions about appropriate health care for specific clinical (practice) circumstances (Field & Lohr, 1990).

Consensus: A process for making policy decisions, not a scientific method for creating new knowledge. Consensus development makes the best use of available information, be that scientific data or the collective wisdom of the participants (Black et al., 1999).

Education Recommendations: Statements of educational requirements and educational approaches/strategies for the introduction, implementation and sustainability of the best practice guideline.

Health Literacy: The ability to access, understand, evaluate and communicate information as a way to promote, maintain and improve health in a variety of settings across the life-course (Rootman & Gordon-El-Bihbety, 2008).

Holistic Learning: An approach that encompasses a belief in the whole learner, incorporating cognitive, physical, relational, affective, spiritual and intuitive/metaphorical capacities (Griffin, 1988, 1993).

Literacy: The ability to understand and use reading, writing, speaking and other forms of communication as ways to participate in society and achieve one's goals and potential (Rootman & Gordon-El-Bihbety, 2008).

Organization and Policy Recommendations: Statements of conditions required for a practice setting that enables the successful implementation of the best practice guideline. The conditions for success are largely the responsibility of the organization, although they may have implications for policy at a broader government or societal level.

Patient: See “Client” description.

Plain Language: The primary goal of plain language is to organize and present information in a way that is easy to read for your intended audience (CPHA, 2012). Plain language is a way of writing information so that it is easy for most people to read, understand and use. Plain language uses familiar words, not jargon and a conversational style to convey information clearly (Wizowski, Harper & Hutchings, 2008).

Practice Recommendations: Statements of best practice directed at the practice of health-care professionals that are ideally evidence-based.

Randomized Controlled Trials: Clinical trials that involve at least one test treatment and one control treatment, concurrent enrollment and follow-up of the test- and control-treated groups, and in which the treatments to be administered are selected by a random process.

Social Constructivism: Founded upon key principles including that knowledge is constructed by learners, is experience-based, learner-centered, social in nature, and people are assumed to be holistic, with connections between the different components of the person (Beck & Kosnik, 2006). Vygotsky (1978) is often identified as a key originator of social constructivism, although the edited interpretations of his original Russian writing remain open to challenge.

Stakeholder: An individual, group or organization with a vested interest in the decisions and actions of organizations that may attempt to influence decisions and actions (Baker et al., 1999). Stakeholders include all individuals or groups who will be directly or indirectly affected by the change or solution to the problem.

Systematic Review: An application of a rigorous scientific approach to the preparation of a review article (National Health and Medical Research Centre, 1998). Systematic reviews establish where the effects of health care are consistent and research results can be applied across populations, settings and differences in treatment (e.g. dose), and where effects may vary significantly. The use of explicit, systematic methods in reviews limits bias (systematic errors) and reduces chance effects, thus providing more reliable results upon which to draw conclusions and make decisions (Higgins & Green, 2008).

Appendix B: Guideline Development Process

The Registered Nurses' Association of Ontario, 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 for uptake. One of the areas of emphasis is on nursing interventions related to facilitating client centred learning. A panel of nurses and other health professionals convened by the RNAO developed this guideline. This work was conducted independent of any bias or influence from the Ontario Government. Panel members volunteered their time and expertise, and were supported to participate by their employer.

In March 2009, a series of focus groups of subject matter experts and key opinion leaders were hosted by the RNAO for the purposes of exploring the scope and purpose of this guideline as well as panel composition. Areas of key resources, gaps and key themes were identified.

Subsequently, an interprofessional panel of nurses and allied health-care professionals with expertise in practice, education and research on client education from a range of practice settings was convened under the auspices of the RNAO. This panel discussed the purpose of their work and came to a consensus on the scope of this best practice guideline.

Two searches to identify literature were performed: first, a structured website search was performed looking for guidelines on this topic area; and second, a literature search for systematic reviews and relevant research studies. As part of the rigorous guideline development process for clinical best practice guidelines, a systematic review was conducted. See [Appendix C](#) 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 was divided into three groups, based on the clinical questions, and developed 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 final draft was submitted to a set of stakeholders for review and feedback - an acknowledgement of these reviewers is provided on page 10. The stakeholders represented health-care professionals and clients, from across Canada and internationally. Stakeholders were provided with specific questions to comment on, as well as given the opportunity to provide 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.

Appendix C: Process for Systematic Review/ Search Strategy

The search strategy utilized during the development of this guideline occurred in three parts: first, a structured website search to identify guidelines published on the topic of facilitating client centred learning; second, a literature search to identify primary studies, meta-analyses and systematic reviews published in this area from 1999 to 2010; and third, panel contributions.

Part 1: Guideline Search

One individual searched an established list of websites for content related to the topic area in July 2009. This list of sites was compiled based on existing 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 redirected to another website or source for guideline retrieval. Guidelines were either downloaded if full versions were available or were ordered by phone/email.

The following is a list of websites searched for this best practice guideline:

- Alberta Heritage Foundation for Medical Research: <http://www.aihealthsolutions.ca>
- Alberta Medical Association Clinical Practice Guidelines: <http://www.albertadoctors.org>
- American Medical Association: <http://www.ama-assn.org/>
- Annals of Internal Medicine: <http://www.annals.org/>
- Bandolier Journal: <http://www.medicine.ox.ac.uk/bandolier/journal.html>
- British Columbia Council on Clinical Practice Guidelines: <http://www.bccguidelines.ca/>
- Campbell Collaboration: <http://www.campbellcollaboration.org/>
- Canadian Coordinating Office for Health Technology Assessment: <http://www.ccohta.ca/>
- Canadian Council on Learning: <http://www.ccl-cca.ca/>
- Canadian Institute for Health Information: <http://www.cihi.ca>
- Canadian Literacy and Learning Network: <http://www.literacy.ca/>
- Canadian Public Health Association: <http://www.cpha.ca>
- Cancer Care Nova Scotia: <http://www.cancercare.ns.ca>
- Cancer Care Ontario: <https://www.cancercare.on.ca/>
- Cancer Patient Education Network: <http://www.cancerpatienteducation.org/>
- Center for Health Communications Research: <http://chcr.umich.edu/>
- Centre for Literacy Quebec: <http://www.centreforliteracy.qc.ca/>
- Centre for Reviews and Dissemination: <http://www.crd.york.ac.uk/crdweb/>
- Canadian Medical Association Infobase: [Clinical Practice Guidelines: http://www.cma.ca/](http://www.cma.ca/)
- Crestni: <http://www.crestni.org.uk/>
- Evidence-Based On-Call: <http://www.eboncall.org/>
- European Observatory on Health Care for Chronic Conditions, World Health Organization: <http://www.who.int/chp/en/>
- Guidelines Advisory Committee: <http://www.gacguidelines.ca/>
- Guidelines International Network: <http://www.g-i-n.net/>
- Hablamos Juntos: <http://www.hablamosjuntos.org/>
- Harvard School of Public Health: <http://www.hsph.harvard.edu/>
- Health Canada: <http://www.hc-sc.gc.ca/>
- Health Care Education Association: <http://www.hcea-info.org/>

- Health-Evidence.ca: <http://health-evidence.ca/>
- Institute for Clinical Evaluative Sciences: <http://www.ices.on.ca/>
- Institute for Clinical Systems Improvement: http://www.icsi.org/guidelines_and_more/
- Institute of Medicine: <http://www.iom.edu/>
- International Patient Decision Aid Standards: <http://ipdas.ohri.ca/resources.html>
- Joanna Briggs Institute for Evidence-Based Nursing & Midwifery (Australia): <http://www.joannabriggs.edu.au/>
- Mohash University Centre for Clinical Effectiveness: <http://www.med.monash.edu.au/>
- National Adult Literacy Database: <http://www.nald.ca/>
- National Cancer Institute: <http://www.cancer.gov/>
- National Center for the Study of Adult Learning and Literacy: <http://www.ncsall.net/>
- National Guideline Clearinghouse: <http://www.guidelines.gov/>
- National Institute for Health and Clinical Excellence: <http://www.nice.org.uk/guidance/index.jsp>
- National Patient Safety Foundation: <http://www.npsf.org/>
- New Zealand Guidelines Group: <http://www.nzgg.org.nz/>
- National Institute of Health Consensus Development Program: <http://consensus.nih.gov/ABOUTCDP.htm>
- Ottawa Hospital Research Institute: Decision Aids: <http://decisionaid.ohri.ca/>
- PEDro Physiotherapy Evidence Database: <http://www.pedro.org.au/>
- Pfizer Clear Health Communication Initiative: <http://www.pfizerhealthliteracy.com/>
- Royal College of General Practitioners: <http://www.rcgp.org.uk/>
- Royal College of Nursing: <http://www.rcn.org.uk/>
- Sarah Cole Hirsh Institute: <http://fpb.case.edu/Centers/Hirsh/>
- Scottish Intercollegiate Guidelines Network (SIGN): <http://www.sign.ac.uk/>
- Society of Critical Care Medicine: <http://www.sccm.org>
- The Joint Commission: <http://www.jointcommission.org/>
- The Qualitative Report: <http://www.nova.edu/ssss/QR/>
- Trip Database: <http://www.tripdatabase.com/>
- University of British Columbia Centre for Health Services and Policy Research: <http://www.chspr.ubc.ca/>
- Virginia Henderson International Nursing Library: <http://www.nursinglibrary.org>
- Women's Health Matters: <http://www.womenshealthmatters.ca/>

In addition, a website search for existing practice guidelines on facilitating client centred learning was conducted via the search engine “Google”. One individual conducted this search, noting the results.

The panel members were asked to review personal archives to identify guidelines not previously found through the above mentioned search strategy.

This search strategy resulted in several guidelines identified as relating to facilitating client centred learning. It was determined that a critical appraisal of these guidelines would serve to inform the development of this guideline. A total of five guidelines on the topic area of client centred learning were identified that met the following initial inclusion criteria:

- Published in English;
- Developed 2009 or earlier;
- Strictly on the topic of client centred learning;
- Evidence-based; and
- Available and accessible for retrieval.

Members of the development panel critically appraised these five guidelines using the *Appraisal of Guidelines for Research and Evaluation Instrument* (AGREE Collaboration, 2001). After panel discussion on the results of the AGREE review, a decision was made to include three guidelines to inform the development process of this guideline. These three guidelines were:

1. National Institute for Clinical Excellence. (2004). *Improving Supportive and Palliative Care for Adults with Cancer*. National Institute for Clinical Excellence (NICE). Retrieved from: <http://www.nice.org.uk/nicemedia/pdf/csgspmanual.pdf>
2. Agence Nationale d'Accréditation et d'Évaluation en Santé. (2001). *Therapeutic education for patients with asthma: Adults and Adolescents*. Agence Nationale d'Accréditation et d'Évaluation en Santé. Retrieved from: http://www.has-sante.fr/portail/upload/docs/application/pdf/asthma_education.pdf
3. National Asthma Education and Prevention Program. (2007). *Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma*. NHLBI: National Heart, Lung, and Blood Institute. Retrieved from: <http://www.nhlbi.nih.gov/guidelines/asthma/asthgdln.htm>

Part 2: Literature Search

A health sciences librarian conducted a literature search for existing evidence related to facilitating client centred learning. An initial search of the Medline, CINAHL, and PsychInfo databases was conducted for literature published between 1999 and 2009. This search was structured to answer the following three clinical questions:

1. How can nurses effectively facilitate client centred learning?
2. What are effective teaching delivery methods/strategies for client centred learning?
3. How do nurses assess client learning?

The literature search described above resulted in several thousands of abstracts on the topic of client centred learning. These abstracts were screened for inclusion/exclusion by two research assistants, based on criteria as identified by the panel. The included articles were then quality appraised by the research assistants. Data tables and summary documents were created for panel use.

Upon receipt of the data tables, the panel identified that the issue of health literacy was not included in the literature review. A second literature search was conducted, using the same databases and all search terms, extending the timeline to October 2010. This second search resulted in hundreds of abstracts. Once again, these abstracts were screened for inclusion/exclusion using the same criteria as previously. A second set of data tables and summary documents were created for panel use. The recommendations in this document are based upon this literature.

Part 3: Panel Contributions

Panel members were also asked to review personal archives to identify guidelines and research studies not previously found through the above-mentioned search strategies. One guideline was identified, met the inclusion criteria (as stated previously) and critically appraised using the AGREE (2001) tool. After panel discussion on the results of the AGREE review, a decision was made to include this fourth guideline to inform the development process. This guideline is:

Cancer Care Ontario [CCO] (2009). *Effective teaching strategies and methods of delivery for patient education*. Retrieved from <https://www.cancercare.on.ca/common/pages/UserFile.aspx?fileId=60065>

Eight articles were identified by the guideline development panel. Six of these articles passed the relevance screening and were critically appraised and included in the data extraction tables.

Appendix D: Guiding Learning Theory: Social Constructivism

While there are many educational theories, this best practice guideline is based upon one specific educational theory: social constructivism. This theory argues that people create their own understandings by integrating their previous experience/knowledge with new learning, within specific contexts, including crucial social contexts (Beck & Kosnik, 2006). As Peters (2000) argues “constructivism values socio-cultural influences in the learning process and endorses the building of knowledge on previous learning, as opposed to the dismissal of that knowledge often seen in traditional formal learning settings” (Peters, 2000, p. 1-2).

Constructivism is not a traditional learning theory; rather, it challenges the traditional assumptions of teachers being central and in power positions. Constructivism commits to a learner centered approach to facilitating learning (Blumberg, 2009; Weimer, 2002). As Blumberg (2009) states in a learner centered teaching, the focus is on the learner and the “process of learning” (Blumberg, 2009, p. 4).

Social constructivism is founded upon key principles including that knowledge is constructed by learners, is experience-based, is social in nature and people are assumed to be holistic, with connections between the different components of the person (Beck & Kosnik, 2006). Social constructivism is holistic, it is “a passionate approach, involving the whole person: thought, emotion and action” (Beck & Kosnik, 2006, p. 8). This guideline advocates that social constructivist theory be used by nurses to guide their facilitation of client centred learning with diverse clients, in diverse clinical settings, and in diverse environments.

There are five key changes to explore in the practice of a nurse with a constructivist approach: 1) power relations; 2) content; 3) role of the facilitator; 4) responsibility for learning; and 5) assessment of learning.

Power Relations

Power relations between the client and the nurse need to be balanced. The nurse is not the expert in the client’s life – the client is the expert. As Blumberg (2009) argues, the focus is on the learner. The nurse as teacher is a facilitator, one who seeks to promote a positive learning environment, beginning by listening carefully to the client’s story of their life including power relations.

Content

Constructivism seeks to move beyond surface learning to a deeper learning, one where the learner constructs meaning; “the focus shifts from covering content to using the content to develop unique ways of understanding the content and creating meaning” (Weimer, 2002, p. 12). Facilitators need to encourage questions (Weimer, 2002), and encourage learners to use many strategies to locate the content knowledge that is important to them including using the Internet, literature, cultural knowledge and peer informed knowledge.

Role of the facilitator

The authority of the nurse/facilitator is challenged by a constructivist approach. The facilitator's expertise is not negated but rather recedes into the background. The more active/interactive role is that of the client who is trying to learn about health. The nurse/facilitator encourages the client to be an active learner, and promotes client engagement in an interactive way with the learning materials, media, Internet, and seeking their own knowledge sources (Weimer, 2002).

Responsibility for learning

Ideally, nurses are facilitating learning with autonomous, self-directed learners who “assume responsibility for their own learning” (Weimer, 2002, p. 15). However, this may not always be the case. Nurses must assess the learning needs of the learner and work collaboratively to negotiate an approach to learning that promotes learner responsibility but still guides and facilitates that independence.

Assessment of Learning

In a constructivist approach the approaches to assessment must be clear (Weimer, 2002). For the most part, this assessment is about how well the client understands the knowledge, the implications for safety/health, how supported they are to adopt healthy behaviours, and the resources to follow-up and continue to engage actively in learning to care for themselves and maintain their health. Nurses should plan to assess client learning regularly, taking into account the challenges of health literacy, incorporating a holistic analysis of client learning (Griffin, 1988, 1993) and building on client strengths.

Appendix E: Resources

While the following list of resources is not an exhaustive list of all available websites related to client centred learning, universal precautions, and plain language, the guideline development panel reviewed these resources as part of the guideline development process, and has therefore included them as examples.

Websites:

Accessibility for Ontarians with Disabilities: Ontario Ministry of Community and Social Services

<http://www.mcsc.gov.on.ca/en/mcsc/programs/accessibility/>

American Medical Association (AMA) Health Literacy Program

<http://www.ama-assn.org/ama/pub/about-ama/ama-foundation/our-programs/public-health/health-literacy-program/health-literacy-kit.page?>

British Columbia-BC Patient Safety & Quality Council “It’s Good to Ask” program

<http://www.bcpsqc.ca/public/ask-facts.html>

Cancer Care Ontario: Patient Education Evidence-based Series

<https://www.cancercare.on.ca/toolbox/qualityguidelines/clin-program/patient-ed-ebs/>

Health Literacy Connection

www.healthliteracyconnection.ca

Health Literacy Universal Precautions Tool Kit

<http://www.ahrq.gov/qual/literacy/healthliteracytoolkit.pdf>

Manitoba Institute for Patient Safety: “It’s Safe to Ask” Program

<http://www.safetoask.ca/>

North Carolina Program on Health Literacy

<http://www.nchealthliteracy.org/hfselfmanage.html>

Regina Health Region Safe to Ask

http://www.rqhealth.ca/diy_pubhealth/view.cgi?cmd=page&key=666

Registered Nurse’s Association of Ontario: Strategies to support self-management in chronic conditions: Collaboration with clients.

<http://rnao.ca/bpg/guidelines/strategies-support-selfmanagement-chronic-conditions-collaboration-clients>

Society for Participatory Medicine

<http://participatorymedicine.org/>

United States National Patient Safety Foundation: “Ask Me 3” Program

<http://www.npsf.org/for-healthcare-professionals/programs/ask-me-3/>

Resources specific to plain language

Classic text related to teaching clients with low literacy skills:

Doak, C., Doak, L. & Root, J. (1996). *Teaching patients with low literacy skills*. 2nd ed. Philadelphia, PA: Lippincott. The book is out of print but can be accessed online: <http://www.hsph.harvard.edu/healthliteracy/resources/doak-book/index.html>

“How to” book on writing health information for clients and families:

Wizowski, L., Harper, T. & Hutchings, T. (2008). *Writing health information for patients and families*. 3rd edition. Hamilton, ON: Hamilton Health Sciences.

Guidelines for Creating Materials:

Rudd, R. E. (no date). Online resources for developing and assessing materials. Harvard Health Literacy Studies. http://www.hsph.harvard.edu/healthliteracy/files/resources_for_creating_materials.pdf (accessed May 2, 2012)

An article that describes and dispels the myths of plain language and provides references on the research behind plain language strategies:

Stableford, S. & Mettger, W. (2007). Plain language: A strategic response to the health literacy challenge. *Journal of Public Health*, 5, 395-404.

Appendix F: Client Assessment Techniques

The following two scenarios demonstrate the difference between ‘teach back/closing the loop’ assessment technique and ‘ask-tell-ask’ assessment technique:

Scenario 1: Teach back/Closing the loop

Nurse: Hi Mrs. S. I understand you had a PICC line put in before you left the hospital so that you can receive your antibiotics. There are a number of things that are important to know about when you have a PICC line: (1) how to keep it free from infection; (2) how to keep it running well so that you can receive your medication; and (3) how to give your medication. However, I thought we could start with your questions. Is that OK with you?

Mrs. S.: I did wonder about when I could take a bath?

Nurse: While the PICC is in place, you won’t be able to put your arm in water. You can take a bath as long as the dressing does not go under the water. I suggest you cover the dressing with plastic so that it is protected. Do you have some plastic wrap and tape that you could use to protect the dressing?

Mrs. S.: Yes, I have all that.

Nurse: What other questions or concerns do you have about your PICC line Mrs. S.?

Mrs. S.: None, not that I can think of.

Nurse: Good. Of the things I mentioned that are important to know about if you have a PICC line (keeping it free from infection, keeping it running well, giving the antibiotic) I thought today we could start with reviewing how you can tell if your PICC is infected and what you would do if you thought it was infected. The main reason we recommend to cover the dressing and not put your arm under water is so the line doesn’t become infected.

Mrs. S.: I can see why it’s important to know.

Nurse: And then before I leave, I will give you your medication and ‘flush’ the line which is what you do to keep it running. While I do it, I’ll talk aloud so that you can understand what I am doing. Does that sound OK?

Mrs. S.: Yes, that sounds like a good plan. A bit at a time.

Nurse: If your skin becomes red or hot, swollen or sore in the area where the PICC goes into the skin, this can be a sign of the PICC becoming infected. I’d like you to do two things: first, take your temperature; and second, if you have a temperature above 37 degrees Celsius, go to the clinic or to the emergency room. If you don’t have a temperature, call the clinic and describe what you see. Does that make sense? Have I been able to make it clear for you?

Mrs. S.: Yes

Nurse: So, just to make sure that I was clear in what I said, would you please tell me what you would see that tells you the PICC might be infected? There are four things to look for.

Mrs. S.: That it’s red, hot, sore and swollen and I might not feel well.

Nurse: That’s right – and what would you do?

Mrs. S.: I would take my temperature, if it’s more than 37 degrees Celsius, I would go to the emergency. If my temperature is not high, I would call the clinic. Did I get it all right?

Nurse: You remembered it all. To help you remember after I leave, I have a handout for you (note: if a handout is not available, have the client or the nurse write down the information). It's important to keep your PICC healthy. The other important thing is to make sure it doesn't get blocked. As I mentioned, today, I thought I'd do the "flushing" and talk out loud as I do it. Next week, we can talk about what steps you would be comfortable doing yourself. Is this plan OK with you?

Scenario 2: Ask-tell-ask

Ask:

Nurse: Hi Mrs. S. I understand you had a PICC line put in before you left the hospital so that you can receive your antibiotics. There are a number of things that are important to know about when you have a PICC line – how to keep it free from infection, how to keep it running well so that you can receive your medication, how to give your medication. However, I thought we could start with your questions. What you were told about your PICC when you were in hospital?

Tell:

Mrs. S.: I was told not to tug on it, to cover it when I shower or bathe and that you would come and take care of it so that it doesn't get blocked.

Ask:

Nurse: That's right. You don't want to move it by tugging, plus it's very important that it doesn't get blocked so that you can continue your treatments. Did they speak about what the PICC looks like if it becomes infected and what you should do?

Mrs. S.: They said something about it getting red and calling the hospital. I am not too clear on that.

Tell:

Nurse (Pointing to the insertion site): If your skin becomes red or hot, swollen or sore in the area where the PICC goes into the skin, it is possible the PICC might be infected. If that happens, I'd like you to do two things: first, take your temperature; and second, go to the clinic or to the emergency room if you have a temperature above 37 degrees Celsius. Even if you do not have a temperature, it's important to call the clinic and let them know what you see. Does that make sense? (Note: Reinforce the teaching with a handout, or having the client or nurse write the information down).

Mrs. S.: Yes, I'm sure I can do that.

Appendix G: Communication Tool

The following is an example of a communication tool that can be used by various health-care professionals. This example is focused on asthma care. It illustrates how education can be delivered across initial client visits and follow-up visits, promoting self-management education in asthma care. In reflecting on the following tool, how can it be used and/or adopted to effectively communicate with the interprofessional team in different practice settings?

Figure 3 – 13. Delivery of Asthma Education by Clinicians During Patient Care Visits		
Assessment Questions	Information	Skills
Recommendations for Initial Visit		
<p>Focus on:</p> <ul style="list-style-type: none"> • Expectations of visit • Asthma control • Patients' goals of treatment • Medications • Quality of life <p>“What worries you most about your asthma?”</p> <p>“What do you want to accomplish at this visit?”</p> <p>“What do you want to be able to do that you can't do now because of your asthma?”</p> <p>“What do you expect from treatment?”</p> <p>“What medicines have you tried?”</p> <p>“What other questions do you have for me today?”</p> <p>“Are there things in your environment that make your asthma worse?”</p>	<p>Teach in simple language:</p> <ul style="list-style-type: none"> • What is asthma? Asthma is a chronic lung disease. The airways are very sensitive. They become inflamed and narrow; breathing becomes difficult. • The definition of asthma control: few daytime symptoms, no nighttime awakenings due to asthma, able to engage in normal activities, normal lung function. • Asthma treatments: two types of medicines are needed: <ul style="list-style-type: none"> ▪ Long-term control: medications that prevent symptoms, often by reducing inflammation. ▪ Quick relief: short-acting bronchodilator relaxes muscles around airways. • Bring all medications to every appointment. • When to seek medical advice. Provide appropriate telephone number. 	<p>Teach or review and demonstrate:</p> <ul style="list-style-type: none"> • Inhaler (see figure 3–14) and spacer or valved holding chamber (VHC) use. Check performance. • Self-monitoring skills that are tied to a written action plan: <ul style="list-style-type: none"> ▪ Recognize intensity and frequency of asthma symptoms. ▪ Review the signs of deterioration and the need to reevaluate therapy: <ul style="list-style-type: none"> - Waking at night or early morning with asthma - Increased medication use - Decreased activity tolerance • Use of a written asthma action plan (See figure 3–10.) that includes instructions for daily management and for recognizing and handling worsening asthma.

Assessment Questions	Information	Skills
Recommendations for First Followup Visit (2 to 4 weeks or sooner as needed)		
<p>Focus on:</p> <ul style="list-style-type: none"> • Expectations of visit • Asthma control • Patients' goals of treatment • Medications • Patient treatment preferences • Quality of life <p>Ask relevant questions from previous visit and also ask:</p> <p>“What medications are you taking?”</p> <p>“How and when are you taking them?”</p> <p>“What problems have you had using your medications?”</p> <p>“Please show me how you use your inhaled medications.”</p>	<p>Teach in simple language:</p> <ul style="list-style-type: none"> • Use of two types of medications. • Remind patient to bring all medications and the peak flow meter, if using, to every appointment for review. • Self-assessment of asthma control using symptoms and/or peak flow as a guide. 	<p>Teach or review and demonstrate:</p> <ul style="list-style-type: none"> • Use of written asthma action plan. Review and adjust as needed. • Peak flow monitoring if indicated (See figure 3–11.) • Correct inhaler and spacer or VHC technique.
Recommendations for Second Followup Visit		
<p>Focus on:</p> <ul style="list-style-type: none"> • Expectations of visit • Asthma control • Patients' goals of treatment • Medications • Quality of life <p>Ask relevant questions from previous visits and also ask:</p> <p>“Have you noticed anything in your home, work, or school that makes your asthma worse?”</p> <p>“Describe for me how you know when to call your doctor or go to the hospital for asthma care.”</p> <p>“What questions do you have about the asthma action plan?” “Can we make it easier?”</p> <p>“Are your medications causing you any problems?”</p> <p>“Have you noticed anything in your environment that makes your asthma worse?”</p> <p>“Have you missed any of your medications?”</p>	<p>Teach in simple language:</p> <ul style="list-style-type: none"> • Self-assessment of asthma control, using symptoms and/or peak flow as a guide. • Relevant environmental control/avoidance strategies (See figure 3–15.): <ul style="list-style-type: none"> ▪ How to identify home, work, or school exposures that can cause or worsen asthma ▪ How to control house-dust mites, animal exposures if applicable ▪ How to avoid cigarette smoke (active and passive) • Review all medications 	<p>Teach or review and demonstrate:</p> <ul style="list-style-type: none"> • Inhaler/spacer or VHC technique. • Peak flow monitoring technique. • Use of written asthma action plan. Review and adjust as needed. • Confirm that patient knows what to do if asthma gets worse.

Assessment Questions	Information	Skills
Recommendations for All Subsequent Visits		
<p>Focus on:</p> <ul style="list-style-type: none"> • Expectations of visit • Asthma control • Patients' goals of treatment • Medications • Quality of life <p>Ask relevant questions from previous visits and also ask:</p> <p>“How have you tried to control things that make your asthma worse?”</p> <p>“Please show me how you use your inhaled medication.”</p>	<p>Teach in simple language:</p> <ul style="list-style-type: none"> • Review and reinforce all: <ul style="list-style-type: none"> ▪ Educational messages ▪ Environmental control strategies at home, work, or school ▪ Medications ▪ Self-assessment of asthma control, using symptoms and/or peak flow as a guide 	<p>Teach or review and demonstrate:</p> <ul style="list-style-type: none"> • Inhaler/spacer or VHC technique. • Peak flow monitoring technique. • Use of written asthma action plan. Review and adjust as needed. • Confirm that patient knows what to do if asthma gets worse.

Reproduced with permission from National Asthma Education and Prevention Program (2007). Expert Panel Report 3: *Guidelines for the Diagnosis and Management of Asthma*. NHLBI: National Heart, Lung, and Blood Institute. Retrieved from: <http://www.nhlbi.nih.gov/guidelines/asthma/asthgdln.htm>

Appendix H: 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 published the *Toolkit: Implementation of best practice guidelines* (second edition) (2012) 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. These steps reflect a process that is dynamic and iterative rather than linear; therefore, at each phase preparation for the next phases and reflection on the previous phase is essential. Specifically, the *Toolkit* addresses the following key steps, as illustrated in the “Knowledge to Action” framework (RNAO, 2012), in implementing a guideline:

1. Identify problem; identify, review, select knowledge (best practice guideline).
2. Adapt knowledge to local context.
 - Assess barriers and facilitators to knowledge use; and
 - Identify resources.
3. Select, tailor and implement interventions.
4. Monitor knowledge use.
5. Evaluate outcomes.
6. Sustain knowledge use.

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 <http://rnao.ca/bpg>.

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INTERNATIONAL
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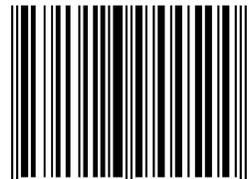
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