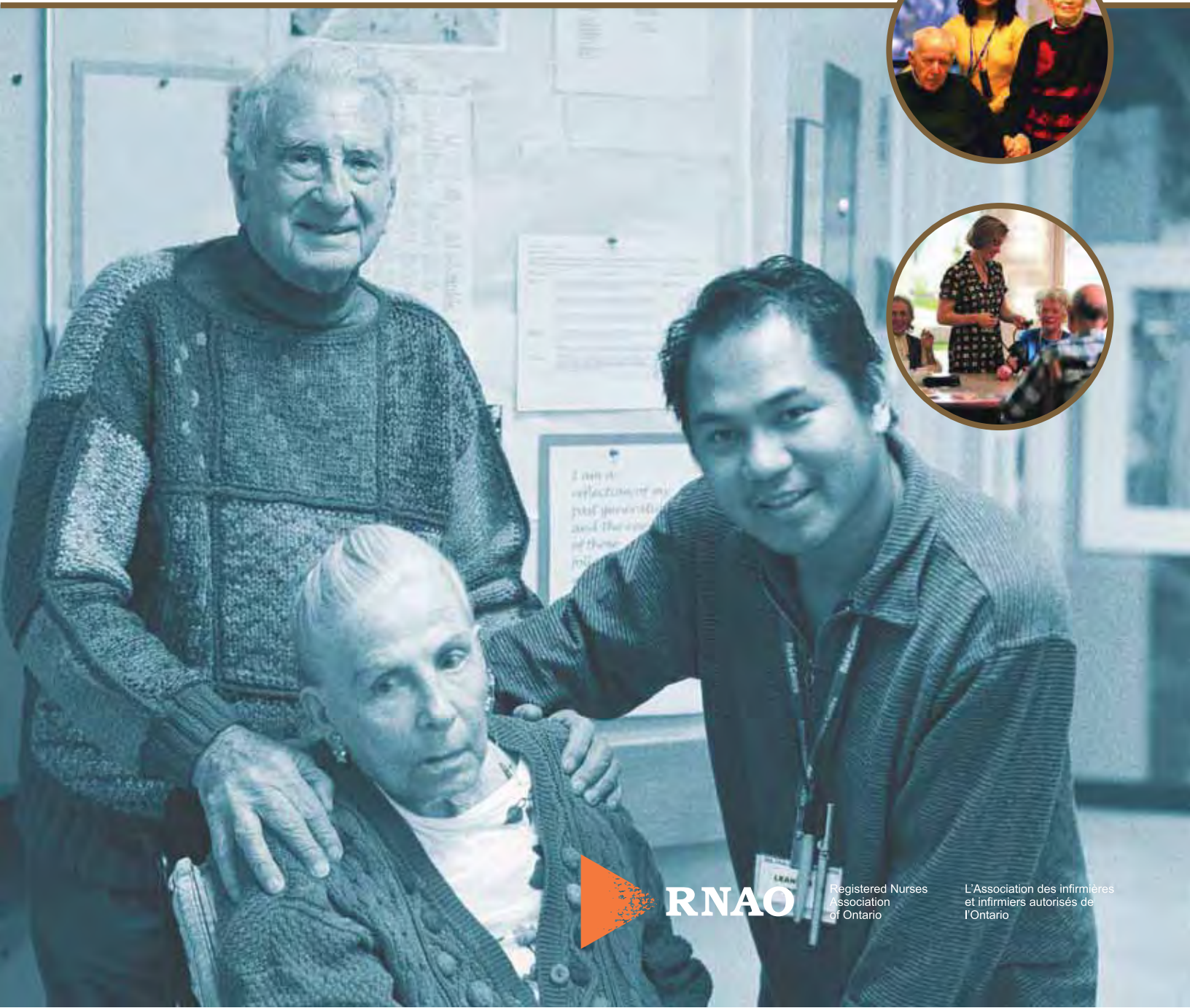


Revised  
2010  
Supplement  
Enclosed

June 2004

*Nursing Best Practice Guideline*  
*Shaping the future of Nursing*

# *Caregiving Strategies for Older Adults with **Delirium,** **Dementia and Depression***



**RNAO**

Registered Nurses  
Association  
of Ontario

L'Association des infirmières  
et infirmiers autorisés de  
l'Ontario



*Greetings from Doris Grinspun*  
*Executive Director*  
*Registered Nurses Association of Ontario*

It is with great excitement that the Registered Nurses Association of Ontario (RNAO) disseminates this nursing best practice guideline to you. Evidence-based practice supports the excellence in service that nurses are committed to deliver in our day-to-day practice.

We offer our endless thanks to the many institutions and individuals that are making RNAO's vision for Nursing Best Practice Guidelines (NBPGs) a reality. The Ontario Ministry of Health and Long-Term Care recognized RNAO's ability to lead this project and is providing multi-year funding. Tazim Virani – NBPG project director – with her fearless determination and skills, is moving the project forward faster and stronger than ever imagined. The nursing community, with its commitment and passion for excellence in nursing care, is providing the knowledge and countless hours essential to the creation and evaluation of each guideline. Employers have responded enthusiastically to the request for proposals (RFP), and are opening their organizations to pilot test the NBPGs.

Now comes the true test in this phenomenal journey: will nurses utilize the guidelines in their day-to-day practice?

Successful uptake of these NBPGs requires a concerted effort of four groups: nurses themselves, other healthcare colleagues, nurse educators in academic and practice settings, and 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 life.

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

RNAO will continue to work hard at developing and evaluating future guidelines. We wish you the best for a successful implementation!

Doris Grinspun, RN, MScN, PhD (candidate)



Executive Director  
Registered Nurses Association of Ontario

## 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 healthcare 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 guidelines. However, it is highly recommended that practice settings/environments adapt these guidelines in formats that would be user-friendly for daily use. This guideline has some suggested formats for such local adaptation and tailoring.



Organizations wishing to use the guideline may decide to do so in a number of ways:

- Assess current nursing and healthcare practices using the recommendations in the guideline.
- Identify recommendations that will address identified needs or gaps in services.
- Systematically develop a plan to implement the recommendations using associated tools and resources.

RNAO is interested in hearing how you have implemented this guideline. Please contact us to share your story. Implementation resources will be made available through the RNAO website at [www.rnao.org/bestpractices](http://www.rnao.org/bestpractices) to assist individuals and organizations to implement best practice guidelines.



## Guideline Development Panel Members

Dianne Rossy, RN, MScN, GNC(C)

**Team Leader**

Advanced Practice Nurse, Geriatrics  
The Ottawa Hospital and the Regional  
Geriatric Assessment Program  
Ottawa, Ontario

Diane Buchanan, RN, DNSc, GNC(C)

Clinical Nurse Specialist  
Nurse Researcher  
Baycrest Centre for Geriatric Care  
Toronto, Ontario

Deborah Burne, RN, BA, CPMHN(C)

Community Mental Health Nurse  
Psychogeriatrics  
Tri County Mental Health Services  
Cornwall General Hospital  
Cornwall, Ontario

Judith Lever, RN, BScN, MSc(A), GNC(C)

Clinical Nurse Specialist - Gerontology  
Hamilton Health Sciences  
Hamilton, Ontario

Katherine McGilton, RN, PhD

Research Scientist  
Toronto Rehabilitation Institute  
Toronto, Ontario

Janyth Mowat, RN, MScN, GNC(C)

Nurse Practitioner/Clinical Nurse Specialist  
Specialized Geriatric Services  
St. Joseph's Healthcare London  
London, Ontario

Colleen O'Brien, RN, MSc(A)

Clinical Nurse Specialist - Geriatrics  
Queensway Carleton Hospital  
Ottawa, Ontario

Lora Parnell, RN(EC), BScN, MEd

Primary Healthcare Nurse Practitioner  
Geriatrics Community/  
Assessment Unit/Program  
St. Joseph's Care Group Hospital  
Thunder Bay, Ontario

Athina Perivolaris, RN, MN

Professional Practice Leader/Educator  
Sunnybrook & Women's College Health  
Sciences Centre  
Toronto, Ontario

Leea Puntanen, RN(EC), BAANursing,  
MN(cand)

Primary Care Nurse Practitioner  
Mental Health Centre  
Penetanguishene, Ontario

Josephine Santos, RN, MN

Facilitator, Project Coordinator  
Nursing Best Practice Guidelines Project  
Registered Nurses Association of Ontario  
Toronto, Ontario

Sue Sebastian, RN, MN, GNC(C)

Professional Practice Leader/Educator  
Sunnybrook & Women's College Health  
Sciences Centre  
Toronto, Ontario

Ann Tassonyi, RN, BScN

Psychogeriatric Resource Consultant  
Alzheimer Society of Niagara Region and  
Niagara Geriatric Mental Health  
Outreach Program  
St. Catharines, Ontario

Gloria Viverais-Dresler, RN, MHSc

Associate Professor  
Laurentian University, School of Nursing  
Sudbury, Ontario



# *Caregiving Strategies for Older Adults with Delirium, Dementia and Depression*

## *Project team:*

***Tazim Virani***, RN, MScN  
Project Director

***Josephine Santos***, RN, MN  
Project Coordinator

***Heather McConnell***, RN, BScN, MA(Ed)  
Project Manager

***Jane M. Schouten***, RN, BScN, MBA  
Project Coordinator

***Stephanie Lappan-Gracon***, RN, MN  
Project Coordinator –  
Best Practice Champions Network

***Carrie Scott***  
Project Assistant

***Melissa Kennedy***, BA  
Project Assistant

***Elaine Gergolas***, BA  
Project Coordinator – Advanced Clinical/  
Practice Fellowships

***Keith Powell***, BA, AIT  
Web Editor

3

Registered Nurses Association of Ontario  
Nursing Best Practice Guidelines Project  
111 Richmond Street West, Suite 1100  
Toronto, Ontario M5H 2G4  
Website: [www.rnao.org/bestpractices](http://www.rnao.org/bestpractices)



## Acknowledgement

Stakeholders representing diverse perspectives were solicited for their feedback and the Registered Nurses Association of Ontario wishes to acknowledge the following for their contribution in reviewing this Nursing Best Practice Guideline.

**Faranak Aminzadeh, RN, MScN**

*Research Associate  
Regional Geriatric Assessment Program of  
Ottawa  
Ottawa, Ontario*

**Debra Bakker, RN, BNSc, MSc, PhD**

*Professor  
School of Nursing  
Laurentian University  
Sudbury, Ontario*

**Karen Boutilier, RN**

*Primary Care Nurse  
Huron Lodge  
Windsor, Ontario*

**Janice Bowman, RN, BScN**

*Staff Nurse  
Lynn Haven  
St. Catharines, Ontario*

**Gabrielle Bridle, RPN**

*Registered Practical Nurses Association of  
Ontario & Canadian Practical Nurses Association  
Waterloo, Ontario*

**Trudy Bruyns, RN, BScN, MA, CPMHN**

*Clinical Nurse Specialist  
Parkwood Hospital  
St. Joseph's Healthcare London  
London, Ontario*

**Helen Bunn, RN, PhD**

*Associate Professor  
Faculty of Health Sciences  
University of Ottawa  
Ottawa, Ontario*

**Marcia Carr, RN, BN, MSc, GNC(C), NCA**

*Clinical Nurse Specialist  
Acute Geriatrics/Geropsychiatry  
Fraser Health Authority  
Burnaby, British Columbia*

**Pam Dawson, RN, MScN**

*Consultant and Director  
Dawson Geront - Abilities Consulting  
Toronto, Ontario*

**Julie Doyon, RN, BScN, MScN, GNC(C)**

*Director of Care  
Residence St. Louis  
Sisters of Charity of Ottawa  
Ottawa, Ontario*

**Brenda Draper, RN**

*Staff Educator, Employee Health Nurse  
Elizabeth Centre  
Val Caron, Ontario*

**Linda Duffield, RN**

*Staff Nurse, Team Leader  
Queensway Carleton Hospital  
Ottawa, Ontario*

**Lynda Dunal, MSc, BScOT, OTReg.**

*Senior Occupational Therapist  
Baycrest Centre for Geriatric Care  
Toronto, Ontario*

**Mary Egan, PhD, MSc, BScOT, OTReg.**

*Associate Professor  
Occupational Therapy Program  
University of Ottawa  
Ottawa, Ontario*

**Dorothy Forbes, RN, BNSc, MN, PhD**

*Associate Professor  
College of Nursing  
University of Saskatchewan  
Saskatoon, Saskatchewan*

**Bonnie Hall, RN, MScN, GNC(C)**

*Advanced Practice Resource Nurse  
SCO Health Service  
Ottawa, Ontario*

**Marielle Heuvelmans, RN, HBSN, GNC(C)**

*Leader Client Services  
Community Care Access Centre for the  
Eastern Counties  
Cornwall, Ontario*

**Tammy Kuprijanec, RN**

*Staff Nurse  
Henley House (Long-Term Care)  
St. Catharines, Ontario*

**Sylvie Lauzon, RN, PhD**

*Associate Professor & Director  
School of Nursing  
University of Ottawa  
Ottawa, Ontario*

**Lenore Macartney, RN, GNC(C)**

*Registered Nurse  
Queensway Carleton Hospital  
Geriatric Day Hospital  
Nepean, Ontario*

**Dr. Lynn McNicoll, MD**

*Geriatrician  
Division of Geriatrics  
Rhode Island Hospital  
Providence, Rhode Island*

**Maureen Montemuro, RN, BScN, MHSc,  
GNC(C)**

*Clinical Nurse Specialist  
Behavioural Health Program  
St. Peter's Hospital  
Hamilton, Ontario*

**Sister Phyllis O'Connor, RN, BScN, GNP**

*Geriatric Nurse Practitioner  
St. Joseph's Care Group  
Thunder Bay, Ontario*

**Dr. Christopher Patterson, MD, FRCPC**

*Professor of Geriatric Medicine  
McMaster University  
Hamilton, Ontario*



Kimberly Peterson, RN, BScN, MCE

*Chief Nursing Officer*

*Cornwall General Hospital*

*Cornwall, Ontario*

Louise Plouffe, PhD

*Manager, Knowledge Development*

*Division of Aging & Seniors*

*Health Canada*

*Ottawa, Ontario*

Valerie Powell, BA, MSc

*Psychogeriatric Resource Consultant*

*Collingwood Community*

*Mental Health Services*

*Collingwood, Ontario*

Isla Richardson, RN

*Staff Nurse*

*Emergency Department*

*Henderson Hospital*

*Hamilton Health Sciences*

*Hamilton, Ontario*

Rhonda Seidman-Carlson, RN, MN

*Director*

*Nursing Placement,*

*Development & Practice*

*Baycrest Centre for Geriatric Care*

*Toronto, Ontario*

Selinah A. Sogbein, RN, BScN, BA, MHA,  
MEd, CHE, CPMNH(C)

*Assistant Administrator – Clinical*

*Services/Chief Nursing Officer*

*North Bay Psychiatric Hospital*

*North Bay, Ontario*

Vicki Strang, RN, PhD

*Professor*

*Faculty of Nursing*

*University of Alberta*

*Edmonton, Alberta*

Catherine Swimmings, RN

*Geriatric Outreach Team*

*Queensway-Carleton Hospital*

*Nepean, Ontario*

Nicolas John Verzoc, RN, BA, Psychology  
CPMHN(C), Diploma in Public Health  
Nursing

*Mental Health Resource Nurse*

*Leamington District Memorial Hospital*

*Leamington, Ontario*

The RNAO also wishes to acknowledge Pam Dawson, Consultant and Director, Dawson Geront - Abilities Consulting, and Gary Teare, Research Scientist, Toronto Rehabilitation Institute, for their contribution in the early development of this guideline.

## Contact Information

### Registered Nurses Association of Ontario

Nursing Best Practice Guidelines Project

111 Richmond Street West, Suite 1100

Toronto, Ontario

M5H 2G4

### Registered Nurses Association of Ontario

Head Office

438 University Avenue, Suite 1600

Toronto, Ontario

M5G 2K8

# *Caregiving Strategies for Older Adults with Delirium, Dementia and Depression*

## **Disclaimer**

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## Summary of Recommendations

	RECOMMENDATION	*LEVEL OF EVIDENCE
Practice Recommendations for Delirium	1.1 Nurses should maintain a high index of suspicion for the prevention, early recognition and urgent treatment of delirium to support positive outcomes.	Ila
	1.2 Nurses should use the diagnostic criteria from the <i>Diagnostic and Statistical Manual (DSM) IV-R</i> to assess for delirium, and document mental status observations of hypoactive and hyperactive delirium.	IV
	1.3 Nurses should initiate standardized screening methods to identify risk factors for delirium on initial and ongoing assessments.	Ila
	1.4 Nurses have a role in prevention of delirium and should target prevention efforts to the client's individual risk factors.	Ib
	<p>1.5 In order to target the individual root causes of delirium, nurses working with other disciplines must select and record multi-component care strategies and implement them simultaneously to prevent delirium.</p> <p><i>1.5.1 Consultation/Referral</i> Nurses should initiate prompt consultation to specialized services.</p> <p><i>1.5.2 Physiological Stability/Reversible Causes</i> Nurses are responsible for assessing, interpreting, managing, documenting and communicating the physiological status of their client on an ongoing basis.</p> <p><i>1.5.3 Pharmacological</i> Nurses need to maintain awareness of the effect of pharmacological interventions, carefully review the older adults' medication profiles, and report medications that may contribute to potential delirium.</p> <p><i>1.5.4 Environmental</i> Nurses need to identify, reduce, or eliminate environmental factors that may contribute to delirium.</p> <p><i>1.5.5 Education</i> Nurses should maintain current knowledge of delirium and provide delirium education to the older adult and family.</p> <p><i>1.5.6 Communication/Emotional Support</i> Nurses need to establish and maintain a therapeutic supportive relationship with older adults based on the individual's social and psychological aspects.</p>	III

\*See pg 14 for details regarding "Interpretation of Evidence".

RECOMMENDATION		*LEVEL OF EVIDENCE
Practice Recommendations for Delirium	<p><i>1.5.7 Behavioural Interventions</i></p> <p>Nurses are responsible for the prevention, identification and implementation of delirium care approaches to minimize disturbing behaviour and provide a safe environment. Further, it is recommended that restraints not be used.</p>	
	<p>1.6 Nurses must monitor, evaluate, and modify the multi-component intervention strategies on an ongoing basis to address the fluctuating course associated with delirium.</p>	IIb
Practice Recommendations for Dementia	<p>2.1 Nurses should maintain a high index of suspicion for the early symptoms of dementia to initiate appropriate assessments and facilitate individualized care.</p>	Ila
	<p>2.2 Nurses should have knowledge of the most common presenting symptoms of: Alzheimer Disease, Vascular Dementia, Frontotemporal Lobe Dementia, Lewy Body Dementia, and be aware that there are mixed dementias.</p>	IV
	<p>2.3 Nurses should contribute to comprehensive standardized assessments to rule out or support the identification and monitoring of dementia based on their ongoing observations and expressed concerns from the client, family, and interdisciplinary team.</p>	Ila
	<p>2.4 Nurses should create partnerships with family members or significant others in the care of clients. This is true for clients who live in either the community or in healthcare facilities.</p>	III
	<p>2.5 Nurses should know their clients, recognize their retained abilities, understand the impact of the environment, and relate effectively when tailoring and implementing their caregiving strategies.</p>	III
	<p>2.6 Nurses caring for clients with dementia should be knowledgeable about pain assessment and management in this population to promote physical and emotional well-being.</p>	IV
	<p>2.7 Nurses caring for clients with dementia should be knowledgeable about non-pharmacological interventions for managing behaviour to promote physical and psychological well-being.</p>	III
	<p>2.8 Nurses caring for clients with dementia should be knowledgeable about pharmacological interventions and should advocate for medications that have fewer side effects.</p>	Ia



	RECOMMENDATION	*LEVEL OF EVIDENCE
Practice Recommendations for Depression	3.1 Nurses should maintain a high index of suspicion for early recognition/early treatment of depression in order to facilitate support and individualized care.	IV
	3.2 Nurses should use the diagnostic criteria from the <i>Diagnostic and Statistical Manual (DSM) IV-R</i> to assess for depression.	IV
	3.3 Nurses should use standardized assessment tools to identify the predisposing and precipitating risk factors associated with depression.	IV
	3.4 Nurses must initiate prompt attention for clients exhibiting suicidal ideation or intent to harm others.	IV
	3.5 Nurses must be aware of multi-component care strategies for depression.  3.5.1 Non-pharmacological interventions 3.5.2 Pharmacological caregiving strategies	Ib
	3.6 Nurses need to facilitate creative client/family/community partnerships to ensure quality care that is individualized for the older client with depression.	IV
	3.7 Nurses should monitor the older adult for re-occurrence of depression for 6 months to 2 years in the early stages of recovery and ongoing for those with chronic depression.	Ib
Practice Recommendations for Delirium, Dementia and Depression	4.1 In consultation/collaboration with the interdisciplinary team: ■ Nurses should determine if a client is capable of personal care, treatment and financial decisions. ■ If client is incapable, nurses should approach substitute decision-makers regarding care issues. ■ Nurses should determine whom the client has appointed as Power of Attorney (POA) for personal care and finances, and whenever possible include the Power of Attorney along with the client in decision-making, consent, and care planning. ■ If there is no Power of Attorney, nurses should encourage and facilitate the process for older adults to appoint Power of Attorney and to have discussions about end of life treatment and wishes while mentally capable.	IV
	4.2 In care settings where Resident Assessment Instrument (RAI) and Minimum Data Set (MDS) instruments are mandated assessment tools, nurses should utilize the MDS data to assist with assessment for delirium, dementia and depression.	III
	4.3 Nurses should avoid physical and chemical restraints as first line care strategies for older adults with delirium, dementia and depression.	III

	RECOMMENDATION	*LEVEL OF EVIDENCE
Education Recommendation	5.1 All entry-level nursing programs should include specialized content about the older adult such as normal aging, involvement of client and family throughout the process of nursing care, diseases of old age, assessment and management of delirium, dementia and depression, communication techniques and appropriate nursing interventions.	IV
Organization & Policy Recommendations	6.1 Organizations should consider integration of a variety of professional development opportunities to support nurses in effectively developing knowledge and skills to provide care for older adults with delirium, dementia and depression.	IV
	6.2 Healthcare agencies should implement a model of care that promotes consistency of the nurse/client relationship.	IIb
	6.3 Agencies should ensure that nurses' workloads are maintained at levels conducive to care of persons with delirium, dementia and depression.	IV
	6.4 Staffing decisions must consider client acuity, complexity level, and the availability of expert resources.	III
	6.5 Organizations must consider the nurses' well-being as vital to provide care to persons with delirium, dementia and depression.	III
	6.6 Healthcare agencies should ensure the coordination of care through the appropriate processes to transfer information (e.g., appropriate referrals, communication, documentation, policies that support formal methods of information transfer, and networking between healthcare providers).	IV
	6.7 (Delirium) Brief screening questions for delirium should be incorporated into nursing histories and/or client contact documents with opportunity to implement care strategies.	IV
	6.8 (Delirium) Organizations should consider delirium programs that contain screening for early recognition and multi-component interventions for treatment of clients with, but not limited to, hip fractures, post-operation surgery, and those with complex medical conditions.	IV
	6.9 (Depression) Caregiving activities for the older adult presenting with depression and/or suicidal ideation should encompass primary, secondary and tertiary prevention practices.	IV

	RECOMMENDATION	*LEVEL OF EVIDENCE
Organization & Policy Recommendations	<p>6.10 Nursing best practice guidelines can be successfully implemented only where there are adequate planning, resources, organizational and administrative support, as well as appropriate facilitation. Organizations may wish to develop a plan for implementation that includes:</p> <ul style="list-style-type: none"> <li>■ An assessment of organizational readiness and barriers to education.</li> <li>■ Involvement of all members (whether in a direct or indirect supportive function) who will contribute to the implementation process.</li> <li>■ Dedication of a qualified individual to provide the support needed for the education and implementation process.</li> <li>■ Ongoing opportunities for discussion and education to reinforce the importance of best practices.</li> <li>■ Opportunities for reflection on personal and organizational experience in implementing guidelines.</li> </ul> <p>In this regard, RNAO (through a panel of nurses, researchers and administrators) has developed the <i>Toolkit: Implementation of Clinical Practice Guidelines</i>, based on available evidence, theoretical perspectives and consensus. The RNAO strongly recommends the use of this <i>Toolkit</i> for guiding the implementation of the best practice guideline on <i>Caregiving Strategies for Older Adults with Delirium, Dementia and Depression</i>.</p>	IV

## Interpretation of Evidence

### Levels of Evidence

**Ia** - Evidence obtained from meta-analysis or systematic review of randomized controlled trials.

**Ib** - Evidence obtained from at least one randomized controlled trial.

**IIa** - Evidence obtained from at least one well-designed controlled study without randomization.

**IIb** - Evidence obtained from at least one other type of well-designed quasi-experimental study, without randomization.

**III** - Evidence obtained from well-designed non-experimental descriptive studies, such as comparative studies, correlation studies, and case studies.

**IV** - Evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities.





# *Introduction*

## Guiding Principles - Assumptions

**It is the consensus of the guideline development panel** that the following assumptions are critical starting points for any nurse working with the older adult, and were used as a framework for the development of this best practice guideline.

1. Older adults are the single largest group of consumers in the healthcare system. Elder friendly programs and services should be developed reflecting their unique needs including the family and caregivers.
2. Caregiving strategies will focus on the highest level of functioning and abilities of all older adults, with specialized support and services, implemented to optimize their participation in life.
3. Every older person (65 years and over) has a right to timely, accurate, and thorough comprehensive geriatric assessments and related caregiving strategies as indicated.
4. Caregiving strategies for older persons with delirium, dementia and depression are complex and multi-faceted. Changes in mental status should guide the selection, administration and appropriate interpretation of assessment tools. Hence, it is highly recommended by the development panel to implement this guideline in conjunction with the RNAO (2003) Best Practice Guideline (BPG) entitled *Screening for Delirium, Dementia and Depression in Older Adults*. This guideline is available to download at [www.rnao.org/bestpractices](http://www.rnao.org/bestpractices).
5. Delirium, dementia and depression are not synonymous with aging, but prevalence increases with chronological age.
6. Caregiving strategies for delirium, dementia and depression should honour the older person's uniqueness, preferences, values and beliefs, and involve the individual in decision-making. This guiding principle is in keeping with the client centred care approach. (See the RNAO (2002) guideline entitled *Client Centred Care* available at [www.rnao.org/bestpractices](http://www.rnao.org/bestpractices).)
7. Caregiving strategies are most comprehensive when conducted from an interdisciplinary approach and when family/significant others are welcomed as partners in the process.

8. Age, educational level, and cultural background should be considered in the selection of care strategies.
9. The assessment and development of caregiving strategies must be an individualized and dynamic process that responds to the changing needs of the older person.
10. Pivotal to all care strategies is the knowledge that all behaviour is meaningful and requires skilled evaluation of the physiological, emotional, psychological, social and environmental antecedents that are contributing factors.
11. Current and ongoing knowledge of evidence-based pharmacological interventions regarding the classification, dosage, interaction and side effects of medication used in the treatment of delirium, dementia and depression is required to support positive outcomes for older adults.
12. The outcomes of caregiving strategies will be monitored by nurses. Caregiving strategies will be revised to meet the individual needs of the older adult.

## *Putting Together Delirium, Dementia and Depression*

**When the guideline development panel initially met**, there was much discussion about the size of these “3 Geriatric Giants”, particularly the evidence-based knowledge, the amount of literature that would need to be reviewed and whether each of these should be divided into three separate guidelines. The panel consensus was that all three topic areas should be kept together because of the overlap in symptomatology. The complex older adults seen in all care settings may present with one, two, or even all three of these conditions simultaneously. Hence, many of the assessment instruments need to be used together and intervention strategies for these conditions also overlap.

An effort has been initiated in this section to weave information and multi-component care strategies together specific to delirium, dementia and depression in older adults. This “Kaleidoscope of Care Strategies” is presented in Figure 1 on page 19. Not all care strategies are represented, however, it emphasizes the guiding principle that care is provided to the highest level of an individual’s ability and that delirium, dementia and/or depression may co-exist. Discussions under the sub-headings appear in specific chapters.

Nurses who care for older adults should become familiar with the care strategies outlined in this document, use the document from the RNAO (2003) guidelines on *Screening for Delirium, Dementia and Depression in Older Adults* and begin to apply as many of the recommendations as possible in their individual work settings. The nurses’ role is to assess for all three conditions within the context of the following tenets of care:

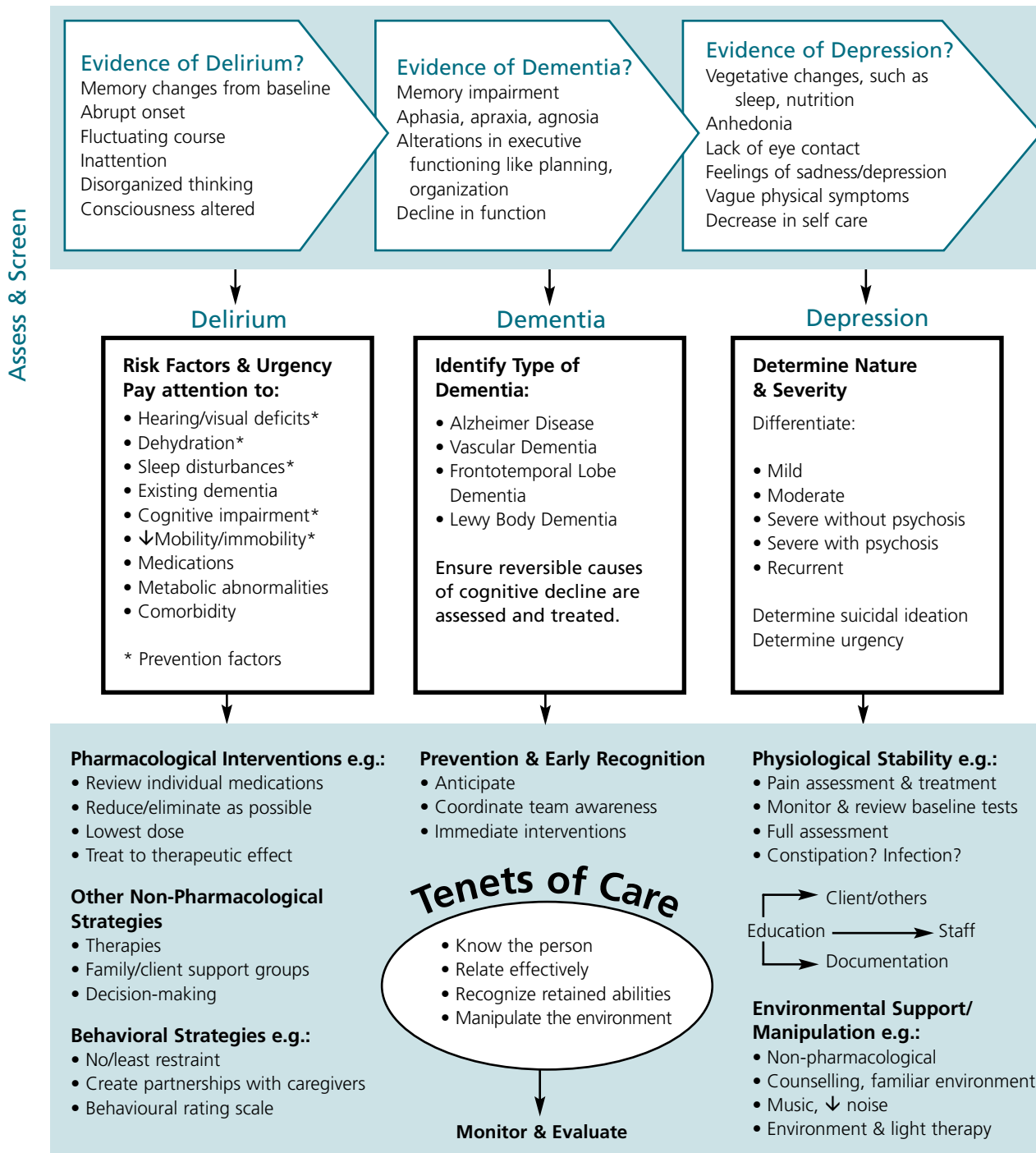
- Know the person
- Relate effectively
- Recognize retained abilities
- Manipulate the environment

Excellence in care requires using best practice assessment (including screening and ongoing assessments over time), using standardized instruments, and measuring the outcomes of care. The care of older adults with delirium, dementia and depression is often complex due to the number of chronic illnesses (numerous medications, coping with reduced function), and any acute illness that the client may have superimposed on these conditions. Practice settings would benefit from the participation and expertise of advanced practice nurses for full implementation.





Figure 1. Kaleidoscope of Care Strategies for Delirium, Dementia and Depression



Adapted with permission from Dianne Rossy, RN, MScN, GNC(C), Advanced Practice Nurse, Geriatrics, The Ottawa Hospital  
Note: The above Kaleidoscope does not contain all the caregiving strategies for delirium, dementia and depression. Details of caregiving strategies for delirium, dementia and depression can be found in chapters 1 to 4.

## *Responsibility for Guideline Development*

**The Registered Nurses Association of Ontario (RNAO)**, with funding from the Ministry of Health and Long-Term Care (MOHLTC), has embarked on a multi-year project of nursing best practice guideline development, pilot implementation, evaluation, and dissemination. In this fourth cycle of the project, one of the areas of emphasis is on the caregiving strategies for older adults with delirium, dementia and depression. This guideline was developed by a panel of nurses and researchers convened by the RNAO, conducting its work independent of any bias or influence from the Ministry of Health and Long-Term Care.

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## *Purpose and Scope*

**Best practice guidelines (BPG)** are systematically developed statements to assist practitioners' and clients' decisions about appropriate healthcare (Field & Lohr, 1990). This guideline has been developed to address the question of how best to care for older adults (65 years or older) with delirium, dementia and/or depression. It is the intent of this document to recommend care strategies to assist Registered Nurses (RNs) and Registered Practical Nurses (RPNs) who are working in diverse settings in acute, long-term, and community care.

The guideline focuses on: (1) Practice recommendations: directed at the nurse to guide practice regarding caregiving strategies for older adults with delirium, dementia and/or depression; (2) Educational recommendations: directed at the educational institutions and organizations in which nurses work to support its implementation; (3) Organization and Policy recommendations: directed at the practice settings and the environment to facilitate nurses' practice; (4) Evaluation and monitoring indicators.

It is acknowledged that the individual competencies of nurses varies between nurses and across categories of nursing professionals (RNs and RPNs) and are based on knowledge, skills, attitudes, critical analysis, and decision-making which are enhanced over time by experience and education. It is expected that individual nurses will perform only those aspects of care for which they have received appropriate education and experience. Since

care strategies for delirium, dementia and depression are based on accurate screening assessment of these conditions, the development panel for this guideline strongly recommends the implementation of this guideline in conjunction with the RNAO (2003) Best Practice Guideline entitled *Screening for Delirium, Dementia and Depression in Older Adults*.

It is expected that nurses, both RNs and RPNs, will seek appropriate consultation in instances where the client's care needs surpass the individual's ability to act independently. It is acknowledged that effective healthcare depends on a coordinated interdisciplinary approach incorporating ongoing communication between health professionals and clients, ever mindful of the personal preferences and unique needs of each individual client.

## *Guideline Development Process*

**In January of 2003**, a panel of nurses and researchers with expertise in practice, education and research related to gerontology and geriatric mental healthcare was convened under the auspices of the RNAO. At the onset, the panel discussed and came to a consensus on the scope of the best practice guideline.

A search of the literature for systematic reviews, clinical practice guidelines, relevant articles and websites was conducted. See Appendix A for a detailed outline of the search strategy employed.

The panel identified a total of 21 clinical practice guidelines related to geriatric mental health assessment and management. These guidelines were reviewed according to a set of initial inclusion criteria, which resulted in elimination of nine guidelines. The inclusion criteria were:

- Guideline was in English, international in scope.
- Guideline was dated no earlier than 1996.
- Guideline was strictly about the topic areas (delirium, dementia, and depression).
- Guideline was evidence-based (e.g., contained references, description of evidence, sources of evidence).
- Guideline was available and accessible for retrieval.

The resulting 12 guidelines were critically appraised with the intent of identifying existing guidelines that were current, developed with rigour, evidence-based and which addressed the scope identified by the panel for the best practice guideline. A quality appraisal was conducted on these 12 clinical practice guidelines using the *Appraisal of Guidelines for Research and Evaluation Instrument* (AGREE Collaboration, 2001). This process yielded a decision to work primarily with eight existing guidelines. These were:

- Alexopoulos, G., Silver, J., Kahn, D., Frances, A., & Carpenter, D. (1998). The expert consensus guideline series: Treatment of Agitation in Older Persons with Dementia. Expert Consensus Guideline Series [On-line]. Available: [http://www.psychguides.com/gl-treatment\\_of\\_agitation\\_in\\_dementia.html](http://www.psychguides.com/gl-treatment_of_agitation_in_dementia.html)
- American Psychiatric Association. (APA) (2000). Practice guideline for the treatment of patients with major depression. American Psychiatric Association [On-line]. Available: [www.psych.org/clin\\_res/Depression2ebook.cfm](http://www.psych.org/clin_res/Depression2ebook.cfm)
- American Psychiatric Association. (APA) (1999). Practice guideline for the treatment of patients with delirium. American Psychiatric Association [On-line]. Available: [www.psych.org/clin\\_re/pg\\_delirium.cfm](http://www.psych.org/clin_re/pg_delirium.cfm)
- American Psychiatric Association. (APA) (1997). Practice guideline for the treatment of patients with Alzheimer disease and other dementias of late-life. *American Journal of Psychiatry*, 144, 1-51.
- Centre for Health Services Research & Department of Primary Care, University of Newcastle upon Tyne (1997). The primary care management of dementia. National Electronic Library for Health [On-line]. Available: [www.nelh.nhs.uk/guidelinesdb/htm/Dementia-ft.htm](http://www.nelh.nhs.uk/guidelinesdb/htm/Dementia-ft.htm)
- Ellis, P. M. & Smith, D. A. R. (2002). Treating depression: The beyondblue guidelines for treating depression in primary care. *The Medical Journal of Australia*, 176 (10 Suppl), S77-S83.
- National Advisory Committee on Health and Disability (1996). *Guidelines for the treatment and management of depression by primary healthcare professionals*. New Zealand: New Zealand Guidelines Group.

- Scottish Intercollegiate Guidelines Network (SIGN)(1998). Intervention in the management of behavioural and psychological aspects of dementia. Scottish Intercollegiate Guidelines Network [On-line]. Available: [www.sign.ac.uk/pdf/sign/pdf/sign22.pdf](http://www.sign.ac.uk/pdf/sign/pdf/sign22.pdf)

The panel members divided into subgroups to undergo specific activities using the short-listed guidelines, other literature and additional resources for the purpose of drafting recommendations for nursing interventions. This process yielded a draft set of recommendations. The panel members as a whole reviewed the recommendations, discussed gaps, available evidence, and came to consensus on a draft guideline.

This draft was submitted to a set of external stakeholders for review and feedback – an acknowledgement of these reviewers is provided at the front of this document. Stakeholders represented various healthcare disciplines as well as professional associations. External stakeholders were provided with specific questions for comment, as well as the opportunity to give overall feedback and general impressions. The results were compiled and reviewed by the development panel. Discussion and consensus resulted in revisions to the draft document prior to publication and evaluation.





## Definition of Terms

An additional Glossary of Terms related to clinical aspects of this document is located in Appendix B.

**Clinical Practice Guidelines or Best Practice Guidelines:** Systematically developed statements (based on best available evidence) to assist practitioner and client decisions about appropriate healthcare for specific clinical (practice) circumstances (Field & Lohr, 1990).

**Consensus:** A process for making policy decisions, not a scientific method for creating new knowledge. At its best, consensus development merely makes the best use of available information, be that of 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.

**Evidence:** “An observation, fact or organized body of information offered to support or justify inferences or beliefs in the demonstration of some propositions or matter at issue” (Madjar & Walton, 2001, p. 28).

**Meta-Analysis:** The use of statistical methods to summarize the results of independent studies, thus providing more precise estimates of the effects of healthcare than those derived from the individual studies included in a review (Clarke & Oxman, 1999).

**Organization & Policy Recommendations:** Statements of conditions required for a practice setting that enable 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.

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

**Randomized Controlled Trial:** For the purposes of this guideline, a study in which subjects are assigned to conditions on the basis of chance, and where at least one of the conditions is a control or comparison condition.

**Stakeholder:** A stakeholder is an individual, group, or organization with a vested interest in the decisions and actions of organizations who 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. Stakeholders can be of various types, and can be divided into opponents, supporters, and neutrals (Ontario Public Health Association, 1996).

**Systematic Review:** Application of a rigorous scientific approach to the preparation of a review article (National Health and Medical Research Council, 1998). Systematic reviews establish where the effects of healthcare 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 (Clarke & Oxman, 1999).



## Background Context

**The best practice guideline**, *Screening for Delirium, Dementia and Depression in Older Adults* (RNAO, 2003), has been utilized as the foundation for this document.

Nurses have a responsibility to screen for delirium, dementia and depression in older adults and, further, to provide individualized care strategies to meet their needs in the healthcare continuum. Health Canada, Division of Aging and Seniors (2001) estimates that by 2021, there will be about 7 million seniors who will represent 19 % of the Canadian population over the age of 65 years. Of this population, an increasing number will experience some form of altered mental status. Canadian studies in the early 1990's on the prevalence of dementia and/or some form of cognitive impairment with no dementia (CIND) suggest that while 75.2 % had no impairment, the largest group with impairment was the CIND at 16.8 % followed by those diagnosed with dementia at 8 % (Graham, et al., 1997). The healthcare system must anticipate an increase in the number of older adults with cognitive impairment with or without dementia, and nurses must be educated to case find and initiate care strategies.

To date, under-recognition of delirium, dementia and depression remains an issue. The American College of Emergency Physicians (1999) suggests that 40 % of clients over the age of 70 years and presenting to emergencies have altered mental status; 25 % with altered level of consciousness; 25 % with delirium; and 50 % with cognitive impairment. Given that nurses are providing care to an increasingly complex and older client population, it is suggested that best practice guidelines to assist in anticipating and managing delirium, dementia and depression be explored. These care strategies offer nurses recommendations for practice that are evidence-based and reviewed by clinical experts.

Ageism and stigma affects the care of the elderly population (Conn, 2003). It is essential that nurses develop the knowledge and skills to properly assess, and initiate treatment. Following best practice guidelines will assist nurses to prevent illness, decrease morbidity and mortality, enhance health, and improve the quality of life of the older adults.

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# *Chapter 1*

## *Practice Recommendations for Delirium*

**Delirium** adversely affects function and outcomes and is associated with high morbidity and mortality. It is an acute, complex disorder that requires immediate interventions to prevent permanent brain damage and health risks, including death. It is “associated with mortality rates of 25-33 %, and results in increased length of hospital stay, increased intensity of nursing care, more institutional placements, and greater healthcare costs” (Inouye, 2000, p. 257). One Canadian study identified that non-detection of delirium was associated with increased mortality within six months of discharge from an emergency (Kakuma, et al., 2003). Another study concluded that incidence of delirium in hospitalized older adults was associated with an excess stay after diagnosis of 7.78 days (McCusker, Cole, Dendukuri & Belzile, 2003). It is crucial therefore to provide mechanisms for early recognition and correction of this potentially reversible condition.

There is more research related to screening than care strategies to manage the presenting symptoms of delirium. Fann (2000) notes in a methodological review of studies that delirium is misdiagnosed in 32 % to greater than 67 % of studies. A recent Canadian study identified a prevalence of 9.6 % of clients over the age of 65 years with identified delirium. The authors suggest using caution in the interpretation of the results as there appeared to be a tendency to identify hyperactive delirium and under-recognize hypoactive delirium, thereby missing cases (Elie, et al., 2000).

The treatment of delirium is based primarily on clinical experience, case reports and review articles (APA, 1999). There is limited quantitative research evidence to support the efficacy of specific care strategies. Research-based care strategies are organized in programs for delivery and include multiple interventions (Foreman, Wakefield, Culp, & Milisen, 2001; Inouye, 2000; Inouye, Bogardus, Baker, Summers, & Cooney, 2000; Milisen, et. al., 2001; Rapp & The Iowa Veterans Affairs Nursing Research Consortium, 1998).

If delirium is under-recognized, it is difficult to put the care strategies in place in a timely manner. It is a shared philosophy that delirium can represent a medical emergency, therefore, knowledge of prevention and management strategies are necessary and must address the underlying causes of delirium and the provision of general supportive measures (Alexopoulos, et al., 1998; APA, 1999; Inouye, 1993; Inouye, et al., 1990). “Effective, timely assessment and treatment can prevent unnecessary disability and premature mortality, reduce caregiver burden and greatly improve quality of life” (Conn, 2003, p.1).

Research findings in older adults related to the management of delirium have shown the following:

### ■ Prevention

Studies suggest that not all cases are preventable. Selected risk factors lend themselves to intervention to prevent delirium in clients who are at high risk. Prevention strategies often happen almost concurrently with screening and must address both the contributing factors as well as the presenting behaviour. (Alexopoulos, et. al., 1998; APA, 2000; Conn & Lieff, 2001; Inouye, 2000; Inouye, et al., 1999; Rapp & The Iowa Veterans Affairs Nursing Research Consortium, 1998; 2001).

### ■ Predisposing and Precipitating Factors

Studies suggest that there are a variety of factors that contribute to the potential for delirium. Care strategies are initiated that target the specific predisposing and precipitating factors for that individual (Inouye & Charpentier, 1996).

### ■ Recognition

There is a lack of consistent and shared definitions when describing and diagnosing delirium. Best practice guidelines and a systematic review of the literature suggest that delirium should be diagnosed by physicians according to the DSM IV – R criteria (Alexopoulos, et al., 1998; APA, 1999; Conn & Lieff, 2001; Inouye, et al., 1990; Milisen, et al., 2001). Recognition of delirium by nurses is dependent on identification of the cardinal symptoms of delirium.

### ■ Screening

Screening is clinically useful. Early recognition and early treatment is one of the most effective interventions in delirium prevention. The American Psychiatric Association (1999) guideline on delirium and the RNAO's (2003) *Screening for Delirium, Dementia and Depression in Older Adults* encourage the use of standardized assessment tools and clinical practice to recognize delirium. However, Fann (2000) in a literature review, cautions that the use of the tools must be examined for relevancy and can, in fact, produce a low positive predictive value. Screening can begin in emergency departments and is effective in populations of specific clients such as those with hip fractures or those admitted to medicine or surgery (Inouye, 2000; Kakuma, et al., 2003; Marcantonio, Flacker, Michaels, & Resnick, 2000; Rapp & The Iowa Veterans Affairs Nursing Research Consortium, 1998; 2001; RNAO, 2003).

### ■ Differentiation

There are two types of delirium and it is necessary to differentiate between the **hypoactive** versus the more common **hyperactive** delirium. The literature indicates the urgency of identification in order to allow for the implementation of the care strategies. Further, there can be a mixture of these two types of delirium presenting. The literature supports a delirium rating scale to further support differentiation of types and severity. Delirium severity has been shown to be associated with poor outcomes in the hip fracture population (Marcantonio, Ta, Duthie, & Resnick, 2002). See Appendix C for the Confusion Rating Scale.

### ■ Multi-component Programs

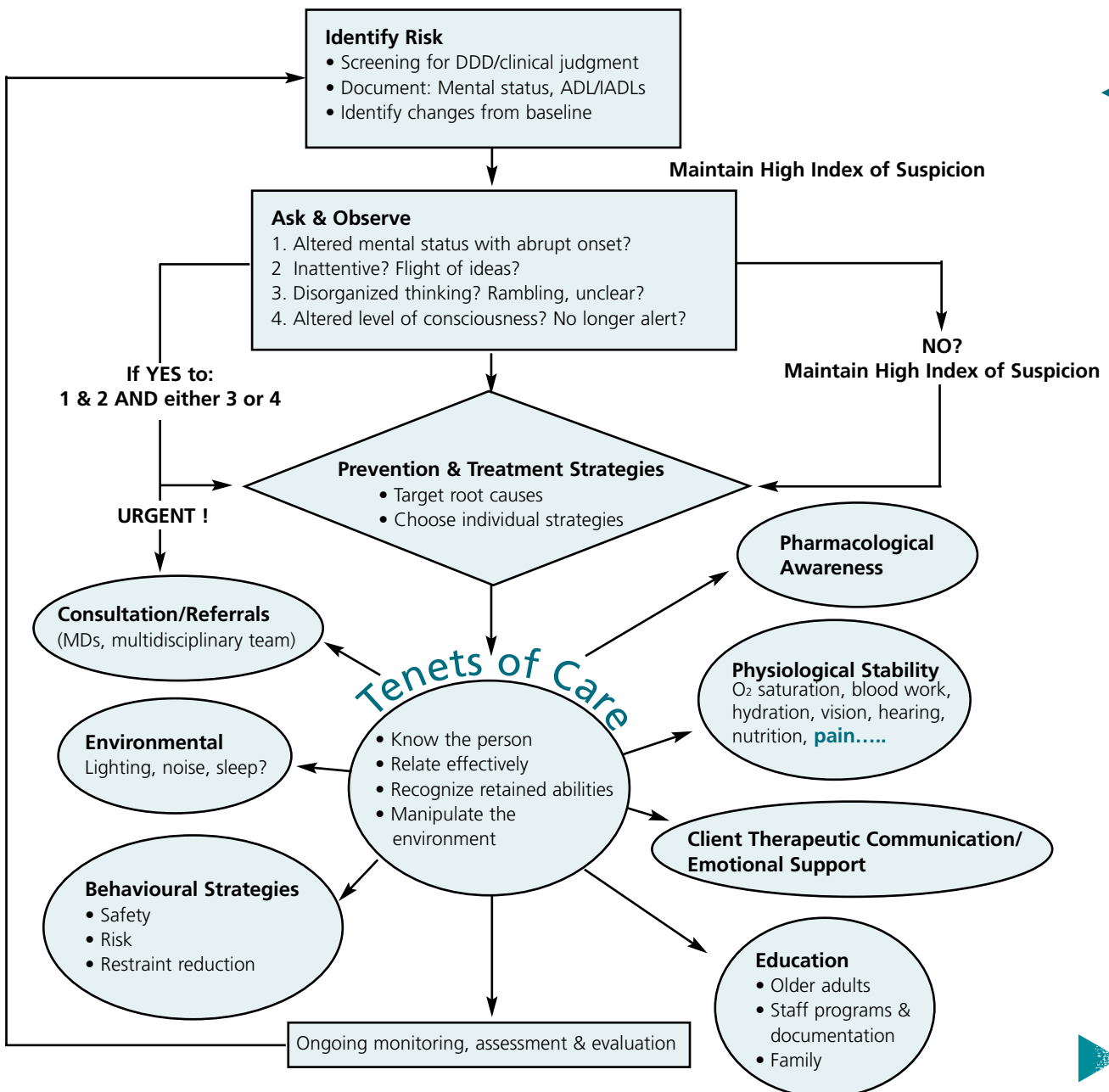
In the literature, a framework that was organized with multi-component interventions was found to be the most beneficial. The interventions are organized to provide care strategies that target the individual's presenting risk factors (Foreman, et al., 2001; Inouye, et al., 1999; Rapp & The Iowa Veterans Affairs Nursing Research Consortium, 1998).



# Practice Recommendations for Delirium

The following diagram outlines the flow of information and recommendations for the care strategies in delirium.

Figure 2: Flow Diagram on Caregiving Strategies for Delirium





### Recommendation • 1.1

Nurses should maintain a high index of suspicion for the prevention, early recognition and urgent treatment of delirium to support positive outcomes. *(Level of Evidence = IIa)*

### Discussion of Evidence

Nurses must anticipate the potential for delirium in older adults and continue to maintain a high index of suspicion for delirium on a continuous basis. Delirium can re-occur and is under-recognized. Symptoms may be transient, not necessarily universal, and may be present over a long period of time in the older adult (Gagnon, Allard, Masse, & DeSorres, 2000; RNAO, 2003). Further, there may be mixed presenting symptoms of delirium. Older adults may not have complete recovery from an episode of delirium. A recent prospective study suggests that severe delirium is associated with outcomes such as death, decline in activities of daily living (ADL) and ambulation, and nursing home placement (Marcantonio, et al., 2000).

Given that delirium is an acute condition with reversible components and is associated with high morbidity and mortality, it is suggested that nurses maintain a sense of urgency in prompt assessment and intervention. Some conditions that precipitate an episode of delirium are reversible when detected early.

Other conditions such as dementia or depression may also be considered and practitioners should use multiple methods to assist in screening (Fick & Foreman, 2000). Early recognition/treatment is associated with decreased morbidity, mortality, length of stay in acute care, and may assist in preventing irreversible cognitive impairment and institutionalization (Conn & Lieff, 2001; Fann, 2000; Gagnon, et al., 2000; Marcantonio, et al., 2000).



## Recommendation • 1.2

Nurses should use the diagnostic criteria from the *Diagnostic and Statistical Manual (DSM) IV-R* to assess for delirium, and document mental status observations of hypoactive and hyperactive delirium. (*Level of Evidence = IV*)

### Discussion of Evidence

The DSM IV-R criteria provide the most common diagnostic features of delirium. Nurses should identify the presenting features of delirium with an awareness of DSM IV-R criteria. Please refer to *Screening for Delirium, Dementia and Depression in Older Adults* (RNAO, 2003).

In general, the standards suggest an assessment of the client founded on baseline knowledge for evidence of:

- Disturbance of consciousness ( ↓ awareness, ↓ focus, inattentiveness).
- Change in cognition (memory deficit, disorganized thinking, disorientation, no previous dementia).
- Development of symptoms over a short period of time.
- Evidence from the history, physical, or lab results of contributing factors.
- Fluctuating course of delirium.
- Abrupt onset.

Identification of a potential delirium may assist in the early detection of a medical illness. Nurses need to be vigilant in observing and assessing not only the presence of delirium but anticipating a differentiation of the types of delirium. In order to complete the assessment, the nurse will need to know the functional and cognitive status of the client as a baseline including evidence of pre-existing dementia.

Nurses must continually be alert to the presentation of hypoactive delirium as it may have a higher likelihood of remaining unrecognized, and therefore may not have early prevention or intervention measures instituted (APA, 1999; Rapp & The Iowa Veterans Affairs Nursing Research Consortium, 1998; Trzepacz, et al., 1999; Tune, 2001).

### Recommendation • 1.3

**Nurses should initiate standardized screening methods to identify risk factors for delirium on initial and ongoing assessments.** *(Level of Evidence = IIa)*

### Discussion of Evidence

Delirium often is of multi-factorial origin affecting older adults in multiple settings. A review of multiple literature sources suggests some common risk factors for delirium which include chronological age, hearing or visual deficits, dehydration, sleep disturbances, pre-existing dementia, cognitive impairment, immobility, medication, metabolic abnormalities, and comorbidity (Alexopoulos, et al., 1998; APA, 1999; Fann, 2000; Foreman, et.al., 2001; Inouye, 2000; Rapp & The Iowa Veterans Affairs Nursing Research Consortium, 1998; Sullivan-Marx, 2000).

There are several screening tools for delirium that are available in the literature. One of the most popular validated tools, the Confusion Assessment Method (CAM), identifies older persons at greatest risk of delirium at the time of hospital admission (Inouye, 1993; 1998; Inouye & Charpentier, 1996; Inouye, et al., 1990). Refer to *Screening for Delirium, Dementia and Depression in Older Adults* (RNAO, 2003) for other tools.

These four questions taken from the CAM assist in identifying risk factors. It is recommended that nurses ask these questions at a minimum:

- Is there an acute change in mental status with a fluctuating course?
  - Is there inattention (difficulty focusing)?
  - Is there disorganized thinking? (rambling, disjointed)
  - Is there an altered level of consciousness (coma, somnolent, drowsiness, hypervigilance)?
- (Inouye, 1990)

If the answer is “yes” to any of the above questions, nurses should be highly suspicious of the potential for delirium and complete further assessment. Refer to the RNAO (2003) guideline *Screening for Delirium, Dementia and Depression in Older Adults* for symptoms of delirium.

Mnemonics may assist nurses in systematically remembering common causes associated with the potential for delirium in older adults. See Figure 3.

Figure 3 – Review for Causes of Delirium

Mnemonic: I Watch Death		Presenting Symptoms
<b>I</b>	<b>Infections</b>	Urinary Tract Infection (UTI), pneumonia, encephalitis
<b>W</b>	<b>Withdrawal</b>	Alcohol, benzodiazepines, sedatives-hypnotics
<b>A</b>	<b>Acute metabolic</b>	Electrolyte disturbance, dehydration, acidosis/alkalosis, hepatic/renal failure
<b>T</b>	<b>Toxins, drugs</b>	Opiates, salicylates, indomethacin, lidocaine, dilantin, steroids, other drugs like digoxin, cardiac medications, anticholinergics, psychotropics
<b>C</b>	<b>CNS pathology</b>	Stroke, tumor, seizures, hemorrhage, infection
<b>H</b>	<b>Hypoxia</b>	Anemia, pulmonary/cardiac failure, hypotension
<b>D</b>	<b>Deficiencies</b>	Thiamine (with ETOH abuse), B12
<b>E</b>	<b>Endocrine</b>	Thyroid, hypo/hyperglycemia, adrenal insufficiency, hyperparathyroid
<b>A</b>	<b>Acute vascular</b>	Shock, hypertensive encephalopathy
<b>T</b>	<b>Trauma</b>	Head injury, post-operative, falls
<b>H</b>	<b>Heavy Metals</b>	Lead, mercury, magnesium poisoning

Reprinted with permission of the American Psychiatric Publishing, Inc., [www.appi.org](http://www.appi.org). Adapted from: Wise, M. G. (1986). Delirium. In R. E. Hales & S. C. Yudofsky (Eds.), *American Psychiatric Press Textbook of Neuropsychiatry* (pp. 89-103). Washington, D. C.: American Psychiatric Press Inc.

Nurses should utilize selected screening tools and initiate care strategies to target the root causes of delirium when possible. In addition to supporting/managing the behavioural presentations, they must continue to monitor and update the plan of care as appropriate.



### Recommendation • 1.4

**Nurses have a role in prevention of delirium and should target prevention efforts to the client's individual risk factors.** *(Level of Evidence = 1b)*

### Discussion of Evidence

Experts, discussion papers and at least one randomized controlled trial suggest outcomes can be enhanced through preventative strategies. Once delirium has occurred, interventions are less effective and efficient (Cole, 1999; Cole, et al., 2002; Inouye, 2000). Inouye concludes that primary prevention of delirium should address risk factors. In all studies, nurses played a key role in assessing, managing and preventing delirium. In several non-randomized trials when nurses addressed environmental factors, sensory impairment, continence, immobility, pain and unstable medical conditions, the intervention group had a lower incidence of delirium and a shorter length of stay (Cole, et al., 2002).

Multi-component delirium prevention programs are a framework for the delivery of care strategies for delirium. Some studies suggest they are most effective when implemented with high risk populations or groups of clients with a high risk of delirium such as post-operative surgery (hip fracture) and medically complex conditions. The *Hospital Elder Life Program: A Model of Care to Prevent Cognitive and Functional Decline in Older Hospitalized Clients* is one example of a comprehensive program that details preventative interventions. See Appendix D for the *Hospital Elder Life Program – Risk Factors for Delirium and Intervention Protocols*. It targets six risk factors in the elderly: cognitive impairment, sleep deprivation, immobility, visual impairment, hearing impairment and dehydration. This program was effective in reducing delirium by approximately 25 % in the medically complex or surgical hospitalized older adults (Inouye, et al., 2000).





### **Recommendation • 1.5**

**In order to target the individual root causes of delirium, nurses working with other disciplines must select and record multi-component care strategies and implement them simultaneously to prevent delirium.** *(Level of Evidence = III)*

### **Discussion of Evidence**

Multi-component care strategies provide nurses with the opportunity to select multiple interventions that target the underlying etiology. Delirium is rarely the result of one alteration and more commonly, relates to a number of risk factors. Systematic screening, prevention and multi-component care strategies appear to be most beneficial when targeted to high risk populations such as older adults with hip fractures, complex medical problems, and in the post-operative period. The research further suggests targeting interventions to manage particular predisposing conditions such as:

- Presence of cognitive impairment
- Severe illness (comorbid status)
- Visual/hearing impairments
- Medications
- Electrolyte and physiological balance/hydration

These targeted interventions are associated with positive outcomes such as decreased length of stay and decreased loss of function (Inouye, et al., 1999; Rapp, et al., 1998). While there is more evidence documenting outcomes in the hospitalized populations, these particular predisposing conditions also apply in long-term care and community.

Interventions for delirium must reflect the complex and dynamic interaction of multiple root causes, and the individualized human response to illness. There are no randomized controlled trials (RCT) that support the efficacy of one individualized care strategy to prevent or treat delirium (APA, 2000; Cole, et al., 2002; Rapp, et al., 1998). Therefore, it is suggested that nurses select and implement multi-factorial approaches which have been developed by experts (Cole, Primeau, & Elie, 1998; Cole, Primeau, & McCusker, 2003).

The literature was reviewed and a compilation of care strategies was developed by the panel under the following domains. See Table 2 on p. 42 for further details.

1. Consultation/Referral
2. Physiological Stability
3. Pharmacological Awareness/Medication Review
4. Environmental
5. Education, Client/Family, Staff, Community
6. Communication/Emotional Support
7. Behavioural Strategies

The Iowa Veteran's Affairs Nursing Research Consortium, Acute Confusion Delirium (1998) and the Hospital Elder Life Program (Inouye, et. al., 2000) at [www.hospitalelderlifeprogram.org](http://www.hospitalelderlifeprogram.org), contained in Appendices D and E, offer additional evidence-based care strategies.

### Recommendation • 1.6

**Nurses must monitor, evaluate, and modify the multi-component intervention strategies on an ongoing basis to address the fluctuating course associated with delirium.**

*(Level of Evidence = IIb)*

### Discussion of the Evidence

Serial assessments of cognitive symptoms over time are recommended as they may indicate the efficacy of interventions, or changing medical conditions (APA, 1999; McCusker, et al., 2003; Rapp & The Iowa Veterans Affairs Nursing Research Consortium, 1998). Continuous monitoring and evaluation of interventions will enable nurses to respond appropriately to the changing needs of the client, adjusting interventions accordingly.

Symptom severity rating scales such as the Delirium Rating Scale (Marcantonio, et al., 2002), the Memorial Delirium Assessment Scale (MDAS) or the Confusion Rating Scale (Wise, 1986) may be useful to monitor the effect of an intervention, and course of delirium over time (APA, 1999). See sample case scenario in Appendix J.

The use of severity rating scales is supported by the prospective study of clients undergoing hip fracture surgery by Marcantonio et al. (2000). The MDAS was used to monitor delirium

severity. More severe delirium (hyperactive type) was found to be associated with worse outcomes than mild delirium (hypoactive type). The researchers recommend managing mild delirium to prevent severe delirium, and suggest monitoring those with severe symptoms over a longer period.

A prospective cohort study conducted by Gagnon et al. (2000) further supports the necessity of screening and monitoring severity of delirium. This study was conducted using the Confusion Rating Scale (CRS) for screening, monitoring of symptoms and symptom improvement to determine delirium frequency and outcome in clients with cancer who have been consecutively hospitalized for terminal care. Of 89 individuals, the prevalence of delirium symptoms on admission was 20.2 % and confirmed delirium was 13 %. The incidence of delirium symptoms detected by screening during follow up was 52.1 % while confirmed delirium was 32.8 %. Of the 32.8 % confirmed cases of delirium, half experienced symptom improvement considered clinically significant during follow up, although symptom improvement occurred less often in clients already delirious on admission, than those free of delirium on admission. The authors state that prevention, treatment and monitoring of delirium are priorities to reduce the burden associated with advanced cancer and to maintain quality of life near death.



Table 2: Multi-component Care Strategies for Delirium

Recommendation Care Strategies	Discussion of Evidence
<p><b>1.5.1 Consultation/Referral</b> Nurses should initiate prompt consultation to specialized services.</p>	<p>Studies and experts suggest that following discussion with the primary or attending physician, referrals should be made to:</p> <ul style="list-style-type: none"> <li>• specialized geriatric services,</li> <li>• psychiatric services,</li> <li>• neurologists,</li> <li>• and/or members of multidisciplinary team.</li> </ul> <p>They are helpful in detecting and initiating early treatment. Newly developing or increasing symptoms of delirium may be a sign of a deteriorating condition. (APA, 1999; Foreman, et al., 2001; Rapp &amp; The Iowa Veterans Affairs Nursing Research Consortium, 1998).</p>
<p><b>1.5.2 Physiological Stability/Reversible Causes</b> Nurses are responsible for assessing, interpreting, managing, documenting and communicating the physiological status of their client on an ongoing basis.</p>	<p>Improved client outcomes are associated with early identification and treatment of reversible causes. At a minimum:</p> <ul style="list-style-type: none"> <li>• Monitor intake and output, elimination patterns, oxygenation, blood glucose, hemoglobin, pain, vital signs, and electrolytes where possible. Nurses need to initiate appropriate laboratory and physical examinations in consultation with the physician (APA, 1999).</li> <li>• Utilize a systematic method of assessment of the physiologic status of their clients, and develop a process with which to communicate with the physicians. An example of a method to communicate is a standardized physician order sheet (see Appendix F).</li> <li>• Ensure adequate hydration and nutritional status, mobilization, attention to hearing and visual deficits and non-pharmacologic sleep protocol.</li> <li>• Provide hearing aids, eye glasses, specialty aids.</li> <li>• Assess and manage pain. The under treatment and the over treatment of pain may cause delirium. Nurses should review the RNAO(2002a) best practice guideline on the <i>Assessment and Management of Pain</i> available at <a href="http://www.rnao.org/bestpractices">www.rnao.org/bestpractices</a>.</li> <li>• Remove unnecessary catheters (see the RNAO(2002b) best practice guideline, <i>Promoting Continence Using Prompted Voiding</i>, available at <a href="http://www.rnao.org/bestpractices">www.rnao.org/bestpractices</a>).</li> </ul>
<p><b>1.5.3 Pharmacological</b> Nurses need to maintain awareness of the effect of pharmacological interventions, carefully review the older adults' medication profiles, and report medications that may contribute to potential delirium.</p>	<p>In collaboration with physicians and multidisciplinary team, nurses must maintain a pharmacological awareness in the use of selected medications that can contribute to delirium in the older adult (Alexopoulos, et. al., 1998; APA, 1999; Inouye, 1993; Inouye, et al., 1999; Milisen, Foreman, Godderis, Abraham, &amp; Broos, 1998). (See Appendix G for medications known to contribute to delirium in older adults.) Reduce or eliminate non-essential medication. Use the least number of medications in the lowest possible dose (Alexopoulos, et al., 1998; APA, 1999).</p>

Recommendation Care Strategies	Discussion of Evidence
<p><b>1.5.3 Pharmacological</b> Nurses need to maintain awareness of the effect of pharmacological interventions, carefully review the older adults' medication profiles, and report medications that may contribute to potential delirium.</p>	<p>Pay special attention to the following categories of medications as they are known to contribute to delirium:</p> <ul style="list-style-type: none"> <li>• Anticholinergic</li> <li>• Histamine 2 blocking agents</li> <li>• Analgesics</li> <li>• Sedative hypnotics</li> <li>• Anti-psychotics</li> <li>• Cardiovascular drugs</li> </ul> <p>} Appendix G</p> <p>Use psychotropic medications only for the treatment of specific symptoms or challenging behaviours and never as the first line of treatment intervention. Discontinue any non-essential medications during an episode of delirium. Discontinue medications after any episode of delirium or when not effective. Evaluate and monitor pharmacological measures including the rationalization of medication (APA, 1999; Foreman, et al., 2001; Inouye, 1993). Monitor for compliance with medication administration in the community if cognition is altered. Partner with pharmacists in the institutions and community.</p>
<p><b>1.5.4 Environmental</b> Nurses need to identify, reduce, or eliminate environmental factors that may contribute to delirium (See Appendix E).</p>	<p>APA (1999) and clinical experts suggest that identifying and altering environmental factors contribute to successful management of delirium. However, there is limited research on each intervention.</p> <ul style="list-style-type: none"> <li>• Create a familiar environment: familiar personal objects</li> <li>• Reorient clients and provide support: calendars, clocks (assess for appropriateness of use especially with clients with dementia)</li> <li>• Reduce noise. Clients with delirium may have misperceptions of visual and auditory stimuli, diminished hearing and visual acuity.</li> <li>• Use music according to client's personal preference.</li> <li>• Optimize levels of stimulation based on sensory overload or deprivation</li> <li>• Provide structure and predictable routine.</li> <li>• Use distraction.</li> <li>• Provide light in the day and reduce at night to stimulate sleep/wake cycles</li> <li>• Provide for frequent and closer observation (e.g., bring to nursing station) (APA, 1999; Conn &amp; Lieff, 2001, Foreman, et al., 2001; Milisen, et al., 2001; Rapp, et al., 2001).</li> </ul>
<p><b>1.5.5 Education</b> Nurses should maintain current knowledge of delirium and provide delirium education to the older adult and family.</p>	<ul style="list-style-type: none"> <li>• Assess the older adult's psychological, social and learning/educational characteristics.</li> <li>• Educate the older adult and family regarding the illness.</li> <li>• Provide post-delirium management and support to older adult and family. (See Appendix H, Patient Teaching Handout).</li> <li>• Educate the older adult and family regarding the known cause(s) of the delirium and risk factors for future episodes.</li> <li>• Share resources with other clinicians regarding delirium ( See Appendix I) (Alexopoulos, et. al., 1998; APA, 1999; Andersson, Norberg, &amp; Hallberg, 2002; Carr &amp; Fraser North-Burnaby Hospital, 2002; Inouye, 1993; Milisen, et al., 2001; Rapp &amp; The Iowa Veterans Nursing Research Consortium, 1998).</li> </ul>

Recommendation Care Strategies	Discussion of Evidence
<p><b>1.5.6 Communication/ Emotional Support</b> Nurses need to establish and maintain a therapeutic supportive relationship with older adults based on the individual's social and psychological aspects.</p>	<ul style="list-style-type: none"> <li>• Establish and maintain a supportive therapeutic relationship with the older adult and family. Interventions with the older adult should include orienting support as well as confirmation of their emotional state/reality. (see Appendix E).</li> <li>• Reassure with a calming voice and with the presence of family or recognized supports</li> <li>• Provide light in the day and reduce at night to stimulate sleep/wake cycles</li> <li>• Observe closely</li> </ul> <p>(See Appendix D: Hospital Elder Life Program) See the guideline on <i>Establishing Therapeutic Relationships</i> (RNAO, 2002c) and <i>Supporting and Strengthening Families through Expected and Unexpected Life Events</i> (RNAO, 2002d) (APA, 2000; Andersson, et al., 2002; Foreman, et al., 2001; Milisen, et al., 2001; Rapp, et al., 2001)</p>
<p><b>1.5.7 Behavioural Interventions</b> Nurses are responsible for the prevention, identification and implementation of delirium care approaches to minimize disturbing behaviour and provide a safe environment. Further, it is recommended that restraints not be used.</p>	<ul style="list-style-type: none"> <li>• Monitor regularly and adjust treatment strategies to ensure client's safety</li> <li>• Provide consistent staff/primary nursing.</li> <li>• Provide structure and predictable routine.</li> <li>• Provide fluids/food.</li> <li>• Use distraction.</li> <li>• Avoid the use of restraints.</li> <li>• Initiate pharmacotherapy (if necessary).</li> </ul> <p>See Appendix G for medications that contribute to delirium and disturbing behaviour. See chapter on dementia and Appendix E for behavioural strategies. (Alexopoulos, et al., 1998; APA, 1999; Inouye &amp; Charpentier, 1996; Rapp &amp; The Iowa Veterans Affairs Nursing Research Consortium, 1998).</p>

For a sample of applying the caregiving strategies for delirium, see the case scenario in Appendix J.





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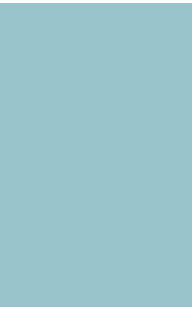
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# *Chapter 2*

## *Practice Recommendations for Dementia*



**Dementia:** The key features of dementia include multiple cognitive deficits which are severe enough to cause impairment in an individual's social or occupational functioning, and represent a decline from a previous level of functioning (APA, 1997). These cognitive deficits include memory impairment and at least one of the following: aphasia, apraxia, agnosia, or a decline in executive functioning. The degree to which these impairments are realized depends to a large extent on the type of dementia with which an individual is diagnosed (APA, 1997). The prevalence of dementia increases with age and ranges from a low of 8 % for individuals aged 65 years to 35 % for those aged 85 years and older (Canadian Study of Health and Aging Working Group, 1994). Current figures indicate that 364,000 Canadians over the age of 65 have either Alzheimer's Disease or a related dementia, and it is estimated that this number will rise to 592,000 by 2021 and to 750,000 by 2031 (Canadian Study of Health and Aging Working Group, 1994). The development of caregiving strategies for individuals with dementia is particularly relevant given the increasing prevalence and the associated burden that dementia places not only the individual affected, but also on their caregivers, family members, and the resources of the healthcare system (Patterson, et al., 2001).

One of the difficulties in ensuring persons with dementia receive appropriate and timely care rests with the problems inherent in making a diagnosis. Because many of the early cognitive deficits are attributed to normal aging, early-stage dementia often goes undiagnosed (Smith, 2002). Additionally, seniors often have several co-morbid conditions that complicate assessment and treatment. Conditions such as delirium, depression, vitamin B<sub>12</sub> deficiency, thyroid disease, and others are often confused with dementia or co-exist with it. Since many of these conditions are reversible, it is important that they are identified as part of the assessment (Winn, 1999). Delirium often occurs jointly with dementia since the underlying brain pathology frequently causes individuals with dementia to be more susceptible to the effects of medications or other concurrent medical conditions (APA, 1997). Individuals experiencing the new onset of late-life depression should be treated for their depression, but also followed over time as late-onset depression may be a prodromal illness to dementia (Schweitzer, et al., 2002). It is imperative for nurses to be aware of the early symptoms of dementia and to maintain a high index of suspicion for this condition in older adults as the current pharmacological treatments for dementia are most effective if the dementia is detected in its early stages. Timely interventions and treatment can assist in preventing excess disability, improving quality of life, and preserving the individual's level of function for a longer period while reducing caregiver burden (Conn, 2003; Leifer, 2003).

Since persons with dementia often experience a broad range of cognitive deficits, behavioural symptoms and mood changes, caregiving strategies need to be individualized and multimodal (APA, 1997). Familiarity with the various risk factors for dementia, as well as the different types of dementia, will assist nurses in planning caregiving strategies that are most relevant for the individual affected (Marin, Sewell, & Schlechter, 2000). An emphasis on individual's previous levels of function, their current retained abilities, and modification of the environment to compensate for the individual's competency, will also ensure that caregiving strategies are specific and individualized. While caregiving strategies frequently focus on assisting with an individual's cognitive deficits, it must be recognized that, at some point in the course of the disease, 90 % of individuals will experience behavioural symptoms as well (APA, 1997). Nurses should carefully document the behaviour and review its potential triggers (e.g., pain, acute illness, medications, etc.) and consequences (APA, 1997). Behavioural symptoms often lead to serious ramifications such as distress for individuals and their caregivers, premature institutionalization, and significant compromise of the quality of life for both individuals and their caregivers (Conn, 2003). Non-pharmacological interventions and specific behavioural techniques are often the first-line of defense when coping with behavioural symptoms and should be initiated prior to any medications (APA, 1997).

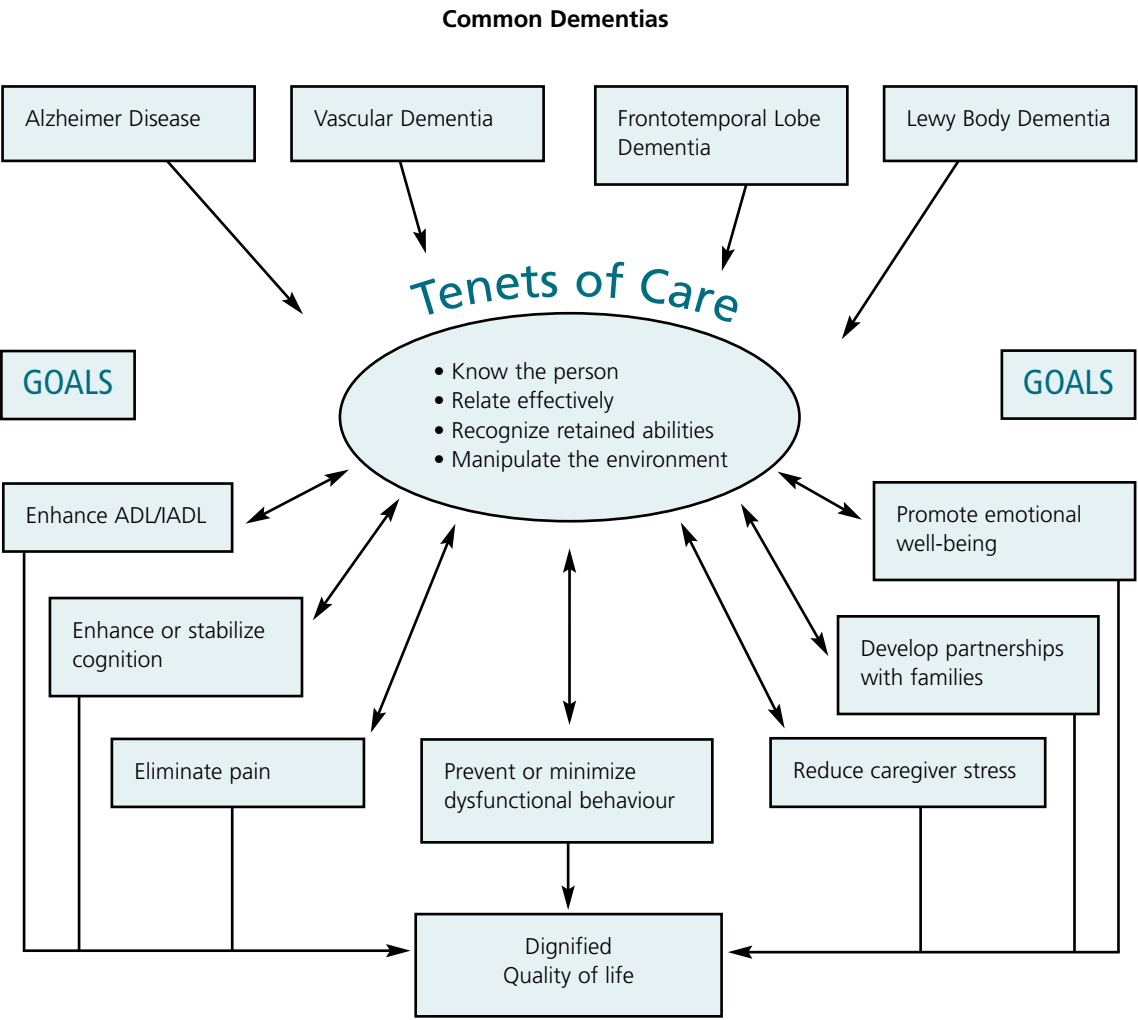
Although nothing will alter the ultimate outcome for individuals with a progressive dementia, nurses can still provide nursing care that will impact on the quality of their journey with dementia. Outcomes based on this philosophy may include: optimum cognitive functioning; improved social/interpersonal functioning and functioning with respect to activities of daily living; a reduction in behavioural symptoms; appropriate and timely utilization of resources; adequate support for persons with dementia and their caregivers; and enhanced understanding by individuals, family members and caregivers about dementia and effective care strategies (Kitwood & Bredin, 1992; Leifer, 2003).



# Practice Recommendations for Dementia

The following diagram outlines the flow of information and recommendations for the care strategies in dementia.

Figure 4: Model of Care for Dementia





**Recommendation • 2.1**

**Nurses should maintain a high index of suspicion for the early symptoms of dementia to initiate appropriate assessments and facilitate individualized care.** *(Level of Evidence = IIa)*

**Discussion of Evidence**

It was determined from the Canadian Study on Health and Aging (1994) that there are over 250,000 seniors with dementia living in Canada and this number is expected to increase to approximately 750,000 by the year 2031. Although some aspects of cognition do decline with advancing age, it should not be assumed that these changes are “normal” in every case (Agency for Healthcare Policy and Research (AHCPR), 1996; Conn, 2003). Dementia tends to be suspected in individuals who are experiencing decline in social, occupational, or day-to-day functioning, in addition to memory loss or changes in behaviour (Centre for Health Services Research & Department of Primary Care, University of Newcastle upon Tyne, 1997; Winn, 1999). Given the burden of dementia for older clients and their caregivers, it is important for nurses to follow-up concerns about observations of memory loss and functional decline (Patterson, et al., 2001). Since timely assessment and treatment are key to preventing excessive caregiver burden and improving the quality of life for persons with dementia, early recognition of the condition is essential (Conn, 2003; Leifer, 2003). *See Appendix K for Dementia Resources.*

It is important to respect the information taken from the client as well as all other sources of information. Clients and families may ignore or downplay changes they feel relate to aging.

**Recommendation • 2.2**

**Nurses should have knowledge of the most common presenting symptoms of: Alzheimer Disease, Vascular Dementia, Frontotemporal Lobe Dementia, Lewy Body Dementia, and be aware that there are mixed dementias.** *(Level of Evidence = IV)*

**Discussion of Evidence**

There are over 60 causes of dementia. The four most common types of dementia are Alzheimer Disease (60 %) (Patterson, et al., 2001), Vascular Dementia (15 %) (Small, et al., 1997), Frontotemporal Lobe Dementia (5 %) (Barker, et. al., 2002), and Lewy Body Dementia (20–25 %) (Lingler & Kaufer, 2002). *See Appendix L for the Types of Dementia.*

“Each of these dementias has a characteristic onset and disease progression. However, as each disease progresses into the later stages and disability increases, they all start to look the same and share a single common clinical pathway in the end” (O’Donnell, Molloy, & Rabheru, pp.38-39). Mixed pathology is common. From brain biopsies, Alzheimer’s Disease was found with 66 % of Lewy Body Dementias and 77 % of Vascular Dementias (Barker, et. al., 2002). It is very important to distinguish the type of dementia in order to maximize functional capacity and independence. Care strategies should be tailored to clients’ remaining abilities (which will vary depending on the type of dementia) rather than focusing only on their lost abilities. In so doing, nurses can minimize excess disability and promote well-being (Dawson, Wells, & Kline, 1993). Detailed knowledge of the person including their abilities, interests, previous occupation, and values enhances the effectiveness of this approach (Kitwood & Bredin, 1992).

### Recommendation • 2.3

**Nurses should contribute to comprehensive standardized assessments to rule out or support the identification and monitoring of dementia based on their ongoing observations and expressed concerns from the client, family, and interdisciplinary team.**

*(Level of Evidence = IIa)*

### Discussion of Evidence

Caregivers of clients who describe cognitive decline should have their observations taken very seriously (Wetmore, Feightner, Gass, & Worrall, 1999). Studies confirm that a collateral history should be obtained from a reliable informant, since clients with dementia may lack insight into their illnesses and their cognitive changes may limit the validity of self-report (APA, 1997; Centre for Health Services & Department of Primary Care, University of Newcastle upon Tyne, 1997).

Nurses should also be aware of the cultural impact on families’ recognition and acceptance of dementia in a family member and that standardized assessment tools may overestimate cognitive impairment in clients whose first language is not English (Patterson, et al., 2001).

Nurses and families working with dementia can use the FAST (Functional Assessment Staging Tool) in assessment and understanding client’s functional level and to develop the plan of care (Connolly, Pedlar, MacKnight, Lewis, & Fisher, 2000; Tanguay, 2003). See Appendix L for the course of Alzheimer’s Disease and Appendix M for the FAST stages.

A listing of standardized assessment tools such as the Clock Drawing Test, Mini-Mental State Examination (MMSE) and the Cornell Depression Scale can be found in the appendices of the guideline Screening for Delirium, Dementia and Depression in Older Adults (RNAO, 2003).

The diagnosis of dementia is a clinical diagnosis that requires a detailed history, physical examination, instrumental activities of daily living/activities of daily living (IADL/ADL) assessment and the performance of psychometric tests such as the MMSE, FAQ. Functional abilities are best assessed using standardized assessment instruments designed for this purpose such as the instrumental activities of daily living (IADL) and physical self-maintenance scale (Lawton & Brody, 1969) (*see Appendix N*). Several assessments over time may be required to establish and/or confirm a diagnosis (Patterson, et al., 1999). Nurses should be aware of the types of reversible conditions that may contribute to dementia. The most common cause of “reversible” dementia is probably medication (Patterson, et al., 2001). When clinical conditions that can impair cognition are discovered through clinical and lab assessments, nurses should ensure that corrective treatment is instituted, in collaboration with the physician. This may include such things as Vitamin B<sub>12</sub> replacement, correction of thyroid dysfunction, and correction of electrolyte imbalances. Effective treatment of these co-morbid conditions helps to prevent premature functional decline and may stabilize the client’s current functional level (Winn, 1999).

## **Recommendation • 2.4**

**Nurses should create partnerships with family members or significant others in the care of clients. This is true for clients who live in either the community or in healthcare facilities.**

*(Level of Evidence: III)*

## **Discussion of Evidence**

Families have been involved in the caregiving process throughout history but it is only recently that practitioners have begun to recognize and formalize the role of the family in the context of healthcare. Now more long-term care facilities and hospitals are adopting “client-centred/focused” care models (Byers, 1997) that recognize the client as the customer who is empowered with the ability to make his/her own decisions about treatment. Optimal client functioning is promoted by following client-centred medical and nursing routines (Cuttillo-Schmitter, Rovner, Shmuely, & Bawduniak, 1996). Healthcare providers and the client with dementia rely on family members/Power of Attorney for communication and decision-making when capacity is

diminished. The focus of nursing intervention has changed to searching for family strengths and resources and to understanding the family structure (Bisaillon, et al., 1997). In this way collaboration may be negotiated.

Forming partnerships can be very complex and variable considering the context of care, needs of the client, needs of the family, needs of the healthcare provider, and types of relationships developed (Ward-Griffin & McKeever, 2000). Further research is required to elicit definitive patterns of interaction, expand nurses' understanding of client-family/caregiver-nurse collaboration, and to facilitate optimal outcomes for clients (Dalton, 2003).

An evidence-based protocol for creating partnerships with family members has been created by Kelley, Specht, Maas, & Titler (1999). The family involvement in care for persons with dementia protocol includes a program for families and caregivers in partnership with healthcare providers (Kelley, et al., 1999). The ultimate goals of the protocol are to provide quality care for persons with dementia and to assist family members through support, education, and collaboration, to enact meaningful and satisfactory caregiving roles regardless of setting.

### Recommendation • 2.5

**Nurses should know their clients, recognize their retained abilities, understand the impact of the environment, and relate effectively when tailoring and implementing their caregiving strategies.**

*(Level of Evidence = III)*

## Discussion of Evidence

### Know the Person

Effective dementia care involves becoming familiar with the individual's life (Bailey, Kavanagh, & Sumby, 1998). Getting to know the person with dementia can help add meaning to the life of the person with dementia and benefit his/her care. Care providers must seek to round out their knowledge of each person's life and times. For example, care providers must know whether the aphasic, frail gentleman with dementia was a scholar or a bodybuilder or both (Bailey, et al., 1998). If they ever hope to understand why an elderly lady becomes distressed and wants to go downstairs before settling into bed each night, care providers must know the circumstances of her life (Zgola, 1990). Various tools have been developed to get to know the individual and one such example is found in Appendix O. Evidence suggests that learning about the individuality of the person can lead to staff understanding residents better and they are less

likely to impose their values on the residents (Best, 1998; Coker, et al., 1998). There is also anecdotal evidence that learning about the person enhanced the relationship between care providers and clients (Kihlgren et al., 1993; Pietrukowicz & Johnson, 1991).

### Recognize Retained Abilities

Health professionals have begun to emphasize the importance of focusing on abilities versus disabilities in the care of persons with dementia (Taft, Mathiesen, Farran, McCann & Knafl, 1997; Wells & Dawson, 2000). Abilities threatened in the presence of dementia are self care, social, interactional, and interpretative. Assessment tools to understand the person's remaining abilities have been developed by Dawson et al. (1993), and are found in Appendix P. Following the individualized assessment, abilities focused interventions can be developed to compensate for abilities that have been lost or to enhance those abilities that remain. For a thorough overview of these interventions see the work by Dawson et al. (1993). Careful attention to the abilities of cognitively impaired individuals may help to prevent or reverse excess disability (Salisbury, 1991). Excess disability may arise in individuals with cognitive impairment through the disuse of existing abilities.

Utilizing an abilities-focused approach leads to positive outcomes for clients and staff (Wells, Dawson, Sidani, Craig, & Pringle, 2000). Clients and staff in long-term care facilities benefited from morning care that was oriented toward the abilities of people with dementia. Clients were less agitated and caregivers were more relaxed.

### Manipulate the Environment

The focus on abilities and personhood also requires a consideration of the environment in which the individual lives and an understanding of how the environment influences the person. In the past decade, there has been increasing recognition of the role of the environment in reducing disruptive behaviour as well as increasing functional ability and improving the quality of life of persons with dementia (Hall & Buckwalter, 1987; Kitwood & Bredin, 1992; Lawton & Nahemov, 1973; Morgan & Stewart, 1997).

There is an important relationship between the competence of the individual and stimulation in the environment (Swanson, Maas, & Buckwalter, 1993). For example, when an individual's competence is low, then less environmental stimulation can be tolerated. An individual with cognitive impairment may be easily burdened by excessive or inappropriate stimulation and respond behaviourally by becoming agitated or withdrawing (Dawson, et al., 1993).

The behaviour of the individual should not be attributed to the disease or some personal characteristic but to the environment. A client's behaviour is often related to an unexpressed need or wish. It is the role of the nurse to attempt to understand this need, and manipulate the physical or social environment to correspond to the individual's remaining abilities.

Most of the intervention strategies reported in the literature involve manipulation of the social and physical environment to meet the unique needs of persons with dementia. Recognizing the importance of the environment, many long-term care facilities have created special care units (SCUs) designed to provide a supportive milieu for individuals with dementia. Interventions to manipulate the environment by creating units with increased space and smaller number of clients has led to positive outcomes such as increased space for wandering and a decrease in noise and general activity on the unit (Morgan & Stewart, 1997). Low socially dense areas also lead to a decrease in social interaction. These results highlight the need for the nurse to understand how changes in the environment may impact on clients differently depending on the competence of the individual. The impact of making modifications in person's homes who have dementia is a focus of research for Gitlin, et al. (2002). They have developed a home environmental skill building program to assist caregivers to modify their homes so that persons with dementia do not experience excessive or inappropriate stimuli. Outcomes from these studies suggest that caregivers have found the home modifications helpful, leading to reduced burden, and enhanced well-being (Gitlin, 2001; Gitlin, et al., 2002).

### Relate Effectively

It is becoming clear that how staff relate to persons with dementia is important when providing the individualized, abilities-focused care, in environments that match the competence of the individual. Evidence exists that there are specific ways that care providers relate to residents with dementia which can enable a person with dementia to feel supported, valued, and socially confident, regardless of cognitive impairments (Kitwood, 1993). This evidence stems from qualitative observational research that has been conducted focusing on observations of care provider-resident dyads in long-term care facilities (Brown, 1995; Hallberg, Holst, Nordmark, & Edber, 1995; Kitwood & Bredin, 1992).

Brown (1995) identified three particularly effective actions taken by the nurse within the engagement process which were later used by McGilton (2004) to develop a Relational Behavior (RB) Scale. There are three care provider actions within this engagement process:



(1) Staying with the resident during the care episode. Examples of care provider actions include, but are not limited to: close proximity, various forms of touch that are comfortable for the resident, and sitting beside the person. (2) Altering the pace of care by recognizing the person's rhythm and adapting to it. Care provider examples include: hesitating in care when necessary, being flexible, and pausing, stopping and trying another approach. (3) Focusing care beyond the task. Examples of care provider actions include: acknowledging the residents' subjective experiences and giving verbal reassurances. The emphasis of the nurses' behaviours were on relationship development versus mechanistic approaches, and on the natural capacity for connection (Hartrick, 1997; Morrison & Burnard, 1997).

More importantly, there is evidence that these effective care providers' relational behaviours are linked to positive outcomes for clients with dementia (McGilton, 2004). When care providers have related well to clients with dementia in practice, their clients have felt less anxious ( $r = -.59$ ,  $p < .005$ ), less sad ( $r = -.59$ ,  $p < .005$ ), and their level of agitation was reduced ( $r = -.39$ ,  $p < .05$ ) during episodes of morning or evening care.

## SCENARIO

The guideline development panel has developed a scenario to demonstrate how care might look if these four approaches were used to guide one's practice. All of the above recommendations can help guide practice and lead to positive outcomes for both client and nurses.

*Mrs. A. does not like to have a bath. She often becomes upset and insists she had taken one herself earlier. She feels the bath is a private activity that she should do for herself.*

*The nurse could initially guide Mrs. A. to the bathroom with a gentle touch, show her the bath and calmly explain the bathing routine. Keeping Mrs. A. warm and clothed until entering the bathroom may also prevent Mrs. A. from reacting to the coolness of the environment. With clear, one step directions, the nurse could show Mrs. A. how to undress, not forcibly undress her. If the nurse knows from Mrs. A.'s family members that she has enjoyed her baths in the past with fragrant bath salts, they can be added to the bath for additional comfort and familiarity. The nurse also calmly lets Mrs. A. know how well she is doing and how soothing the bath will feel. While assisting Mrs. A. to undress, the nurse is watchful for verbal and non-verbal cues, indicating the need to stop and try another approach, as well as those that suggest continuing.*

*The nurse in this situation used the four main principles of dementia care to guide her practice. The nurse took into account the following principles when providing care: 1) Mrs. A.'s personal history related to bathing, 2) an understanding of the potential influence of a cold environment on Mrs. A.'s behaviour, 3) a focus on Mrs. A.'s remaining abilities such as communicating with one step commands and demonstrating by cueing her how to undress, and 4) relating effectively, which involves altering one's pace of care and giving verbal reassurances during the bath. These nursing actions will minimize Mrs. A.'s potential agitation and anxiety that is often associated with the bathing experience.*

### Recommendation • 2.6

**Nurses caring for clients with dementia should be knowledgeable about pain assessment and management in this population to promote physical and emotional well-being.**

*(Level of Evidence = IV)*

### Discussion of Evidence

Pain is a common problem for elderly people with chronic diseases. The high prevalence of pain in advanced age is primarily related to chronic health disorders, particularly painful musculoskeletal conditions, such as arthritis and osteoporosis (Wallace, 1994). Other geriatric conditions that can be made worse by pain include gait disturbances, falls, deconditioning, malnutrition, and slow rehabilitation (Ferrell, Ferrell, & Rivera, 1995). Pain in elderly nursing home residents is a prevalent problem, estimated to occur in 26-83 % of residents (Warden, Hurley, & Volicer, 2003). Evidence suggests that pain is underdetected and poorly managed among older adults and presents as an even greater challenge for clients who have dementia. Cognitively impaired nursing home residents are often prescribed and administered significantly less analgesic medication than cognitively intact older adults (Horgas & Tsai, 1998).

Pain is whatever the person experiencing it says it is, existing whenever the person experiencing it says it does (McCaffery & Beebe, 1989). This definition works well for those who are able to articulate their pain experience. In cognitively impaired older adults, pain reporting is diminished in frequency and intensity but remains valid. Those with dementia remain at risk of living in a state of chronic pain because their presentation of pain and ability to articulate their subjective pain experience diminishes as cognitive losses increase. Unrecognized or under-treated pain can result in increased disability and decreased quality of life.

Pain assessment is complex in this population. Accurate assessment is critical for effective pain management. Scales for measuring the degree of pain often rely on clients to identify and communicate their pain. In the early stages of dementia, visual analog scales have been used to accurately report levels of pain. By the mid-stage of dementia, due to the loss in abstract reasoning, the concept of the scales is often not understood (Warden, et al., 2003). The Pain Assessment in Advanced Dementia (PAINAD) Scale was developed for use in clients with advanced dementia. It consists of five items: breathing, negative vocalizations, facial expression, body language, and consolability. Scores range from 0 (no pain) to 10 (maximum pain) (refer to Appendix Q). Healthcare professionals were able to successfully measure and treat pain in clients with advanced dementia using the PAINAD (Warden, et al., 2003). Comprehensive pain assessments for clients with dementia must incorporate the use of appropriate tools and in addition must include the client's expressions, appearance, activities and behaviours related to pain (Baker, Bowring, Brignell, & Kafford, 1996).

Clients with dementia may exhibit changes in behaviours such as resistiveness to care, verbal/physical aggression, agitation, pacing, exit seeking, grimacing, signs and symptoms of depression, and lower cognitive and physical performance as a result of unidentified and untreated pain (Cohen-Mansfield & Lipson, 2002; Herr & Mobily, 1991). Identifying pain in clients with moderate to severe dementia is further complicated as they often express discomfort from pain, constipation, emotional distress, cold, hunger, and fatigue with the same behaviours (Cohen-Mansfield & Lipson, 2002). Behavioural changes should be conceptualized as an attempt to communicate needs (Talerico & Evans, 2000). Often aggression or resistance may be a protective mechanism against pain associated with moving and being touched. These behaviours can represent feelings of pain and discomfort in clients with dementia that they are otherwise unable to express (Lane, et al., 2003). If the reason for a certain behaviour cannot be identified, suspect pain and treat with regular doses of non-opioid analgesia (e.g., acetaminophen) and non-pharmacological approaches (see the RNAO(2002) Nursing Best Practice Guideline, *Assessment & Management of Pain*, available at [www.rnao.org/bestpractices](http://www.rnao.org/bestpractices)). Pharmacological interventions for pain with older adults with dementia should be scheduled rather than as per needed (prn) basis.

If the caregiver suspects that the client may be in pain she or he should provide the appropriate intervention and observe whether the client responds. The criteria for effectiveness of an intervention must involve the examination of behavioural changes (Cohen-Mansfield & Lipson, 2002). Communicating pain assessment findings and developing comprehensive plans of care will facilitate team awareness of the behavioural signs of pain and improve pain management for the client. Also, having a thorough knowledge of the individual's life will assist in understanding behaviours and may enhance assessment and management of pain.

### Recommendation • 2.7

**Nurses caring for clients with dementia should be knowledgeable about non-pharmacological interventions for managing behaviour to promote physical and psychological well-being.**

*(Level of Evidence = III)*

### Discussion of Evidence

Results of studies are mixed or inconclusive in regards to non-pharmacological interventions in managing behavioural disturbances of clients with dementia, as responses to treatments are individualized (SIGN, 1998; Teri, Larson, & Reifler, 1988). There are limited studies that have addressed interventions that aim to change a person's behaviour by altering the triggers and/or the consequences of the behaviour. Descriptive studies have shown that disruptive behaviours by clients with cognitive impairment and perceptual deficits are defensive responses to perceived threats and reducing the aggression is best managed by a "person-focused" rather than a "task-focused" approach during personal care (Hoeffer, Rader, McKenzie, Lavelle, & Stewart, 1997). Behavioural and psychological problems are significant with dementia and at some point during the course of the illness, 90 % of clients can demonstrate disruptive symptoms that diminish quality of life for clients and caregivers (Patterson, et al., 2001). Behavioural manifestations tend to occur later in Alzheimer's Disease and Vascular Dementia, however they occur more frequently and earlier in the course of Frontotemporal and Lewy Body Dementias therefore careful screening and history taking are essential to determine effective therapies (Patterson, et al., 2001).

Healthcare professionals should rule out underlying causes of behavioural disorders that may be attributed to an acute physical illness, environmental distress or physical discomfort and should be treated appropriately (Centre for Health Services Research & Department of Primary Care, University of Newcastle upon Tyne, 1997; Swanson, et al., 1993). Behavioural disorders that are not

related to identifiable causes should be managed initially by non-pharmacological approaches taking precedence over routine use of sedating medication to control behaviours in clients with dementia (Centre for Health Services Research & Department of Primary Care, University of Newcastle upon Tyne, 1997; Cummings, et al., 2002; Patterson, et al., 2001; SIGN, 1998). Approaches and communicative interactions are critical when managing clients with dementia. Healthcare professionals should be aware that the environment and the attitudes of care providers can often precipitate the emergence of behavioural problems (Centre for Health Services Research & Department of Primary Care, The University of Newcastle upon Tyne, 1997; Sloane, et al., 1998).

Non-pharmacological interventions should focus on the stimulus initiating the behavioural symptoms when considering treatment. Techniques employed should be client-sensitive and this individualized approach should maintain the “person” as the centre of care (see Appendix R for Sample of Individualized Dysfunctional Behaviour Rating Instrument and Appendix S for the Cohen-Mansfield Agitation Inventory). Occupational activities, environmental modifications, validation therapy, reminiscence and sensory stimulation are interventions that can be considered, and again results are varied with each individual (Beck & Shue, 1994; Cummings, et al., 2002; Doody, et al., 2001; Kelley, et al., 1999; SIGN, 1998; Sloane, et al., 1998; Small, et al., 1997; Sparks, 2001). Management of dementia also involves strategies according to levels and progression of disease as identified by Sparks (2001) which may be integrated in the care of clients with dementia (see Appendix T). Appendix K also offers dementia resources that would be helpful for caregivers.



### Recommendation • 2.8

**Nurses caring for clients with dementia should be knowledgeable about pharmacological interventions and should advocate for medications that have fewer side effects.**

*(Level of Evidence = Ia)*

### Discussion of Evidence

Behavioural and psychological signs and symptoms of dementia are common and impair the quality of life for both clients and their caregivers. At some point in the illness, 90 % of clients have behavioural problems (Patterson, et al., 2001). Acetylcholinesterase inhibitors (donepezil, rivastigmine, galantamine) benefit clients with dementia (Doody, et al., 2001; Patterson, et al., 2001). Neuroleptics are effective for agitation or psychosis in clients where environmental manipulations fail (Doody, et al., 2001). Traditional neuroleptic agents (haldol, largactil, loxepine) appear moderately effective but have a high incidence of extrapyramidal side effects, including parkinsonism and tardive dyskinesia which can negatively impact function (Patterson, et al., 2001). Recent randomized controlled trials have established the value of the atypical neuroleptics in treating the behavioral and neurological symptoms of dementia. The atypical neuroleptics (e.g., risperidone, olanzepine and quetiapine) exhibit a much lower incidence of extrapyramidal side effects than traditional antipsychotic drugs (Patterson, et al., 2001). Antidepressants are effective in depressed clients with dementia (Doody, et al., 2001). Nurses should have knowledge and advocate for medications that are shown to have fewer side effects in order to promote function and coping.





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# *Chapter 3*

## *Practice Recommendations for Depression*



**Depression** is a multi-faceted syndrome, comprised of a constellation of affective, cognitive, somatic and physiological manifestations, in varying degrees from mild to severe (Kurlowicz & NICHE Faculty, 1997; National Advisory Committee on Health and Disability, 1996; National Institute of Health Consensus Development Panel, 1992). Older adults are at risk for several types of depression and treatment must be based on an accurate diagnosis (Piven, 2001). Caregiving strategies are inclusive of both non-pharmacological and pharmacological measures. Caregiving strategies should include a multidisciplinary approach encompassing a caregiver team consisting of the client, family members and community partners. Appropriate and timely caregiving strategies will facilitate more positive outcomes such as decreased rates of morbidity, mortality and suicide associated with depression (Holkup, 2002).

Depressive symptoms occur in 10 to 15 % of community-based elderly requiring clinical attention. Depression in late life is a major public health concern. It is estimated that by 2021, there will be 1 million Canadian seniors with depressive symptoms. The incidence of depression in seniors in long-term care settings is three to four times higher than the general population (Conn, 2003).

Mortality and morbidity rates increase in the elderly experiencing depression, and there is a high incidence of co-morbidity with medical conditions (Conwell, 1994). It is widely known that depression can lead to increased mortality from other diseases such as heart disease, myocardial infarction and cancer (U.S. Preventive Service Task Force, 2003). Untreated depression may also result in increased substance abuse, slowed recovery from medical illness or surgery, malnutrition and social isolation (Katz, 1996). The suicide rate for men aged 80 years and older is the highest of all age groups at about 31 per 100,000 (Health Canada, 2001). Studies reveal that single, white elderly males have the highest rate of suicide and are more likely to succeed than their female counterparts (Holkup, 2002).

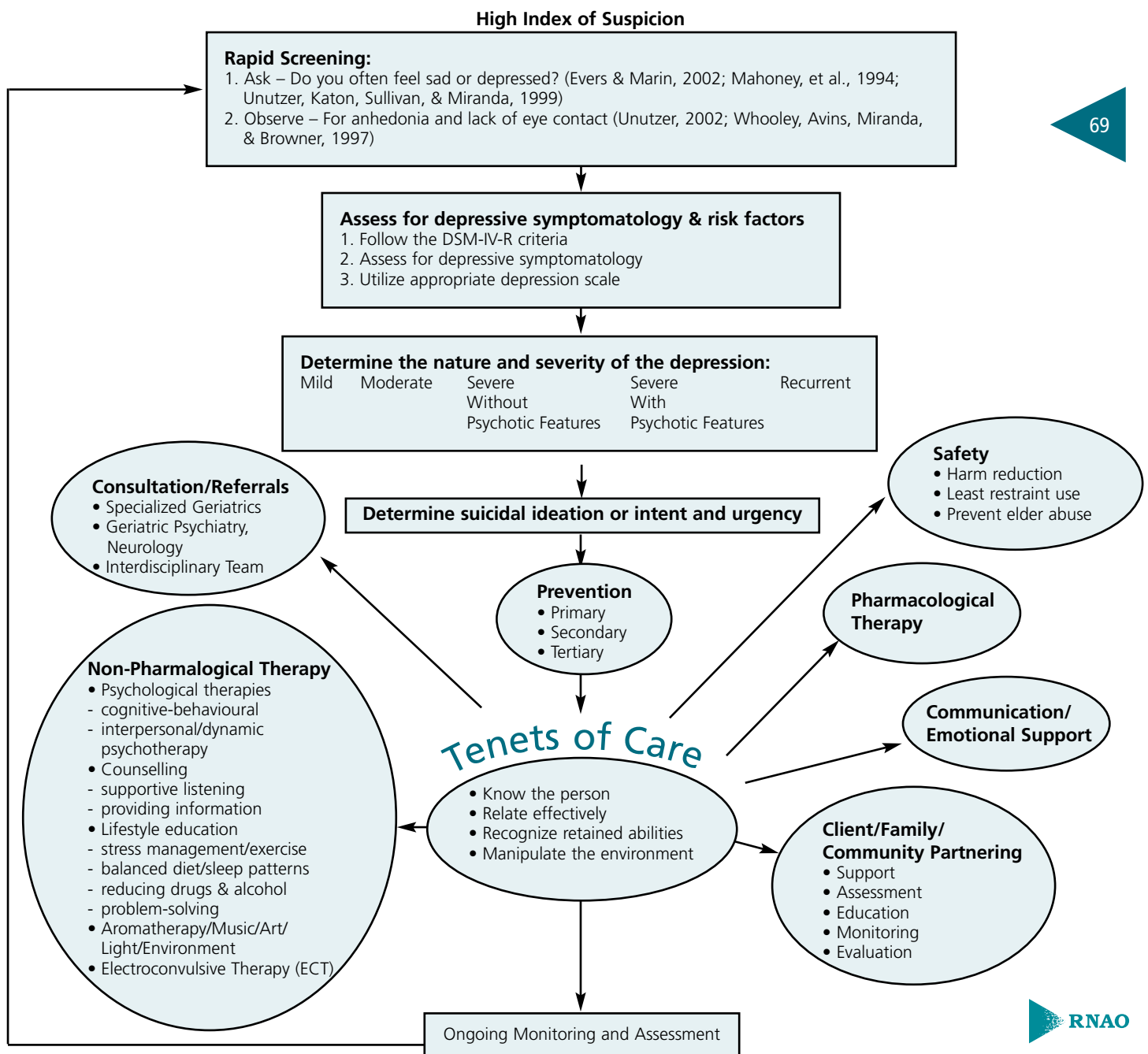
Any expression of suicidal ideation must be taken seriously and a referral to mental health services initiated. In addition, nurses should be able to educate the client, family and community about the warning signs of suicide and the immediate steps to be taken.

The type and severity of depression determines the choice of treatment(s) (APA, 2000a; Ellis & Smith, 2002). The most common treatment for depression is often pharmacological (Mulsant, et al., 2001). Nurses, however, need to be aware that the severity of depression dictates the choice of initial treatment modality. For example, with mild depression, non-pharmacological modalities may be the appropriate treatment of choice (National Advisory Committee on Health and Disability, 1996). The effectiveness of pharmacological treatment is determined by the type and severity of depressive disorder. Antidepressants are the psychotropic medications that typically alter mood and treat related symptoms. Antidepressant medications should be administered following a comprehensive health assessment.

# Practice Recommendations for Depression

The following diagram outlines the flow of information and recommendations for the care strategies in depression.

Figure 5: Flow Diagram on Caregiving Strategies for Depression





### Recommendation • 3.1

Nurses should maintain a high index of suspicion for early recognition/early treatment of depression in order to facilitate support and individualized care. *(Level of Evidence = IV)*

#### Discussion of Evidence

When assessing elderly clients the nurse must be aware that depression is often unrecognized or misdiagnosed in primary care settings and therefore treatment is often inadequate (Evers & Marin, 2002). Family caregivers may have a lack of understanding about depression. Older adults and their family may minimize and/or deny the indicators of depression due to assuming it is a normal part of aging. For rapid screening, nurses can ask two questions with the client and/or caregiver in order to ensure early intervention. The two questions are: (1) During the last month, have you often been bothered by feeling down, depressed, or hopeless? (2) During the last month, have you often been bothered by little interest or pleasure in doing things? (Evers & Marin, 2002; Foster, et al., 1999; Martin, Fleming, & Evans, 1995; Niederehe, 1996; Whooley, et al., 1997).

### Recommendation • 3.2

Nurses should use the diagnostic criteria from the *Diagnostic and Statistical Manual (DSM) IV-R* to assess for depression. *(Level of Evidence = IV)*

#### Discussion of Evidence

The DSM-IV-R is the standard for identifying the diagnostic criteria for major depression. However, it is also important to note that depressive symptomatology is unique and following the DSM-IV-R criteria alone may result in under diagnosis of depression in the older adult (Centre for Evidence Based Mental Health (CEBMH), 1998; Piven, 2001; Unutzer, et al., 1999). The next recommendation reviews other diagnostic tools that nurses can use in identifying depression.



**Recommendation • 3.3**

Nurses should use standardized assessment tools to identify the predisposing and precipitating risk factors associated with depression. *(Level of Evidence = IV)*

**Discussion of Evidence**

Nurses must be able to identify the current multi-component care strategies for depression. Prior to selecting or suggesting caregiving strategies, nurses need to review the results from the appropriate screening tool(s), as outlined in *Screening for Delirium, Dementia and Depression in Older Adults* (RNAO, 2003). These screening tools include Sig:E Caps (Jenike, 1989; Rivard, 1999), Cornell Scale for Depression (Alexopoulos, et al., 1988), and Geriatric Depression Scale (Brink, YeSavage, Lumo, & Rose, 1982). See Appendices I, J, and K of the RNAO (2003) guideline on *Screening for Delirium, Dementia and Depression in Older Adults* for these tools. Based on the results of the assessment, the nurse will be able to make decisions about individualized care by referring to the decision sheet outlined in Figure 5: Flow Diagram on Caregiving Strategies for Depression. In assessing depression, nurses should be aware of drugs that can cause symptoms of depression (see Appendix U).

**Recommendation • 3.4:**

Nurses must initiate prompt attention for clients exhibiting suicidal ideation or intent to harm others. *(Level of Evidence = IV)*

**Discussion of Evidence**

It is recommended that clients with depression should be carefully evaluated for suicidal ideation and intent (APA, 2000a; Holkup, 2002; Mulsant, et al., 2001). Immediate caregiving strategies should encompass harm reduction such as providing one to one supervision, and immediate referral to psychogeriatrician, psychiatrist, and/or emergency department. The strategies used for crisis intervention must be implemented immediately (see the RNAO(2002a) best practice guideline on *Crisis Intervention* available at [www.rnao.org/best-practices](http://www.rnao.org/best-practices)). Holkup (2002) in regard to crisis intervention states “rapport continues to be the most important component of the intervention” (p. 25). See Appendix M of the RNAO(2003) guideline on *Screening for Delirium, Dementia and Depression in Older Adults* for assessing suicide risk in the older adult.

## Recommendation • 3.5

**Nurses must be aware of current multi-component care strategies for depression.**

**3.5.1 Non-pharmacological interventions**

**3.5.2 Pharmacological caregiving strategies**

*(Level of Evidence = 1b)*

## Discussion of Evidence

Studies are inconclusive as to whether the combination of non-pharmacological care strategies positively enhance the outcomes for those with depression (APA, 2000b; Ellis & Smith, 2002; Freudenstein, Jagger, Arthur, & Donner-Banzhoff, 2001; Kurlowicz & NICHE Faculty, 1997; National Advisory Committee on Health & Disability, 1996; Niederehe, 1996; Rost, Nutting, Smith, Elliott, & Dickinson, 2002; Unutzer, et al., 1999; Zeiss & Breckenridge, 1997).

### 3.5.1 Non-pharmacological Interventions

There is a wide range of non-pharmacological interventions available for the treatment of depression in the older adult. There are varying levels of evidence regarding the use of non-pharmacological versus pharmacological caregiving strategies. Some of the non-pharmacological interventions that have been studied and recommended in treating mild to chronic depression include:

- Education for clients (Ellis & Smith, 2002; National Advisory Committee on Health & Disability, 1996)
- Environment and light therapy (APA, 2000b)
- Electroconvulsive therapy (ECT)
- Psychotherapy – cognitive-behavioural therapy (CBT), behaviour therapy (APA, 2000b); interpersonal psychotherapy (IPT), family therapy, marital therapy (National Advisory Committee on Health & Disability, 1996; Schwenk, Terrell, Shadigian, Valenstien, & Wise, 1998)
- Relationship-centered care – presencing (see the RNAO (2002b) best practice guideline on *Client Centred Care* available at [www.rnao.org/bestpractices](http://www.rnao.org/bestpractices))
- Coping skills such as life style counselling, support groups, problem solving, and exercise (APA, 2000b; CEBMH, 1998; National Advisory Committee on Health & Disability, 1996)
- Combined therapies (APA, 2000b; Kaldy & Tarnove, 2002; National Advisory Committee on Health & Disability, 1996)
- Aromatherapy, music, art therapy

### 3.5.2 Pharmacological caregiving strategies

Pharmacological caregiving strategies which include complementary and alternative products are used in varying degrees by older adults. Antidepressants are the psychotropic medications that alter mood and treat related symptoms. In consultation with a multidisciplinary team (or a psychiatrist), these medications should be administered following a comprehensive health assessment. Antidepressants must be tailored to the older adult. Dosages must “start low and go slow” when increasing medication amount and frequency (APA, 2000b). These medications need to be carefully monitored for adverse effects on the older adult (APA, 2000b). If confusion occurs in a cognitively intact older adult, nurses need to consider possible medication effects and immediately review the medication profile.

Selective serotonin reuptake inhibitors (SSRI), owing to their favourable safety profile, are the most commonly used antidepressant for treatment of depression in older adults (Mulsant, et al., 2001; Swartz, Barak, Mirecki, Naor, & Weizman, 2000). SSRI's do not have cardiac effects and lack significant anticholinergic effects. Tricyclic antidepressants are no longer recommended for the treatment of depression in older adults (APA, 2000b; Mulsant, et al., 2001). This group of medications has the potential for antiarrhythmic and anticholinergic effects which have contributed to deaths in persons with cardiac disorders. Monoamine oxidase inhibitors (MAOIs) are infrequently used because of dietary restrictions (APA, 2000b; Mulsant, et al., 2001); they are not recommended as first-line therapy.

Nurses need to be aware that if antidepressant medications are discontinued, dosages must be tapered slowly to avoid any untoward side effects. Nurses need to educate older adults and caregivers about the importance of medication adherence and the prevention of recurrence of depression.

Many older adults are reluctant to take psychotropic medications for fear of addiction, amongst other reasons. Client and family understanding about depression and its treatment, and rapport with nurses are important in overcoming barriers to medication adherence. The client and family need to be educated about the effectiveness of treatment with medications which is demonstrated by less distress, improved clarity of thought, mood, and behaviour. Caregivers need to constantly monitor the medication adherence and effectiveness to prevent relapse. The client and family need to immediately report any changes.

Nurses need to educate the client and caregiver(s) about the antidepressant medications

(National Advisory Committee on Health and Disability, 1996). Topics for education could include the name of medication, reason for use, dosage, frequency, possible side effects, dietary restrictions (if appropriate), possible medication-to-medication interactions, length of time required for medication therapy and rationales based on scientific evidence.

Nurses need to be aware that many clients take herbal remedies such as St. John's Wort, which may be contraindicated with their antidepressant medication(s). The effectiveness of St. John's Wort in the treatment of mild to moderate depression is inconclusive (Bilia, Galloris, & Vinciere, 2002; Gupta & Moller, 2003; Shelton, 2002). Nurses have a role to educate the client and caregiver about the importance of notifying care providers about their use of herbal remedies. Canadians are using herbal products to treat their medical conditions (Aung, Benjamin, & Berman, 1997; Blais, Aboubacrine, & Aboubacar, 1997; Buske, 2002; Millar, 1997). St. John's Wort can affect other prescribed medications and therefore clients taking this herbal product need close monitoring (Bilia, et al., 2002; Gupta & Moller, 2003).

See Appendix U for Drugs That Can Cause Symptoms of Depression.

### Recommendation • 3.6

**Nurses need to facilitate creative client/family/community partnerships to ensure quality care that is individualized for the older client with depression. (*Level of Evidence = IV*)**

### Discussion of Evidence

Effective caregiving strategies for the depressed older adult generally include the involvement of their partner, family or support networks. Support should be encouraged without overwhelming the individual, intruding upon their privacy or their wish not to involve their family.

Family involvement is particularly important if there is a risk of suicidal behaviour (APA 2000b; National Advisory Committee on Health & Disability, 1996). Family involvement encompasses non-pharmacologic and pharmacological strategies in support, assessment, education, and monitoring/evaluation to ensure individualized quality of care.

### Recommendation • 3.7

**Nurses should monitor the older adult for re-occurrence of depression for 6 months to 2 years in the early stages of recovery and ongoing for those with chronic depression.**

*(Level of Evidence = Ib)*

### Discussion of Evidence

It is important that treatment continue after initial relief from the acute symptoms. Numerous studies have clearly identified that older adults have poor adherence to treatment for depression and that the length of time that older adults need to be followed and monitored is based on the type and severity of the depression. The person is at risk of relapse during the early stages of recovery and after the discontinuation of pharmacological therapy. The clinical response to pharmacology therapy depends not only on adequate dose of medication but also on length of treatment (APA, 2000b; Ellis & Smith, 2002; Evers & Marin, 2002; Kaldy & Tarnove, 2002; Lebowitz, 1996; Mulsant, et al., 2001; National Advisory Committee on Health & Disability, 1996; Rost, et al., 2002; Schneider, 1996; Schwenk, et al., 1998; Unutzer, 2002). The frequency and method of monitoring should be decided in consultation with the client and family (National Advisory Committee on Health & Disability, 1996) and is dependent upon the client's cooperation, availability of social supports and presence of co-morbid conditions (APA, 2000b; National Advisory Committee on Health & Disability, 1996; Piven, 1998). See Appendix V (Indications for the Selection of an Appropriate Psychological Therapy), Appendix W (Outline of Key Factors for Continuing Treatment for Depression), Appendix X (Detection of Depression Monitor), and Appendix Y (Medical Illnesses Associated with Depression).



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# *Chapter 4*

## *Practice Recommendations for Delirium, Dementia and Depression*



## Practice Recommendations for Delirium, Dementia and Depression

### Recommendation • 4.1

In consultation/collaboration with the interdisciplinary team:

- Nurses should determine if a client is capable of personal care, treatment and financial decisions.
- If client is incapable, nurses should approach substitute decision-makers regarding care issues.
- Nurses should determine whom the client has appointed as Power of Attorney (POA) for personal care and finances, and whenever possible include the Power of Attorney along with the client in decision-making, consent, and care planning.
- If there is no Power of Attorney, nurses should encourage and facilitate the process for older adults to appoint Power of Attorney and to have discussions about end of life treatment and wishes while mentally capable.

*(Level of Evidence = IV)*

### Discussion of Evidence

Clients with delirium, dementia and depression are at high risk to be deemed incapable of making treatment and shelter decisions, especially during acute illnesses. Freedom to choose is a fundamental human right (Molloy, Darzins, & Strang, 1999). Capacity assessments can be complex and have potential for error. They are invasive and can result in loss of freedom. Decisions in every day life can range from very complex (e.g., the decision to have open heart surgery) to very simple (e.g., the decision to appoint a Power of Attorney). People with cognitive impairment are usually able to make some simple decisions but may need help with more complex decisions. A Power of Attorney can extend a person's freedom into a time of incapacity because the person can discuss and direct the Power of Attorney while still mentally capable to guide future healthcare, shelter, and financial decisions. Having a Power of Attorney may avoid the necessity of formal capacity assessments, thus preserving the person's dignity and choices (Legal and Financial Services Workgroup of the Eastern Ontario Dementia Network, 2001).

## Recommendation • 4.2

**In care settings where Resident Assessment Instrument (RAI) and Minimum Data Set (MDS) instruments are mandated assessment tools, nurses should utilize the MDS data to assist with assessment for delirium, dementia and depression.** *(Level of Evidence = III)*

### Discussion of Evidence

The Resident Assessment Instrument (RAI) was designed to provide a standardized assessment of nursing home residents (Hirdes, Zimmerman, Hallman, & Soucie, 1998). The Minimum Data Set (MDS) is a component of the RAI, and as of July 1996 the MDS was mandated by the Ministry of Health for use as the assessment instrument for all residents in chronic care institutions (Brunton & Rook, 1999). Related RAI–MDS tools have been mandated by the Ministry of Health and Long-Term Care for use in the beginning of January 2004 as core assessment tools for use by Community Care Access Centres (CCACs) in assessing all long-term home care clients, and patients in acute care beds eligible for alternative levels of care. The RAI assessment tools are also used throughout the United States in nursing homes, and in home care in some states, and are being increasingly introduced into continuing care settings across Canada and in over 20 countries around the world. Therefore, nurses should be familiar with how to interpret and use the data gathered using these assessment tools. Assessment elements within the RAI tools can assist nurses to screen for the potential presence of delirium (Marcantonio, et al, 2003), depression (Burrows, Morris, Simon, Hirdes, & Phillips, 2000) and to assess cognitive impairment status on admission, quarterly, annually and with any significant changes in status (Morris, et al., 1994).

Preliminary evidence suggests that the MDS can be pivotal to improving care and care outcomes in institutional care settings (Mor, et al., 1997; Rantz, Popejoy, Zwygart-Stauffachers, Wipke-Tevis, & Grando, 1999). Randomized trials have demonstrated positive impacts of the use of RAI assessments in home care (Bernabei, Murphy, Frijters, DuPaquier, & Gardent, 1997). Research specifically focused on the use of MDS data to enhance assessment and subsequent treatment of clients with delirium, dementia and depression is encouraged.

### Recommendation • 4.3

**Nurses should avoid physical and chemical restraints as first line care strategies for older adults with delirium, dementia and depression.** *(Level of Evidence = III)*

### Discussion of Evidence

Older adults presenting with delirium, dementia or depression may have increased risk of harm to themselves and/or others. It is the focus of this guideline to encourage all healthcare providers to screen, assess and provide multiple care strategies to reduce the risk rather than use physical or chemical restraints. Based on the Ontario Legislation, Patient Restraints Minimization Act (2001), systematic review by Evans, Wood, Lambert, & FitzGerald (2002), supporting guidelines such as the American Psychiatric Association (1999), Ontario Hospital Association (2001), and the College of Nurses of Ontario (1999), the guideline development panel recommends that restraints of any kind should only be used as a last resort and as a temporary measure.

There are no randomized controlled trials that have identified the sole intervention of restraint use with a particular domain such as delirium or dementia. It would be unethical to do a controlled study assigning clients to have restraints applied because the negative side effects are well documented. However, there are studies that are focused on prevalence, risk, reasons for restraint use, reduction strategies, restraints and falls, and effects of educational programs, among others.

Prevalence of restraint use varies widely between 3 to 21 % of clients in hospitals and 12 to 47 % in long-term residential settings (Evans, et al., 2002). It remains difficult in Canada to report national prevalence rates in acute care, as there are no standardized reporting guidelines. The main reasons for restraint use cited by caregivers include falls, disruptive behaviour and cognitive impairment (Evans, et al., 2002; Whitman, Davidson, Rudy, & Sereika, 2001). These risk factors may all be present with delirium, dementia and/or depression.

Qualitative studies identify the negative experience of individuals who have been restrained; it is important for caregivers of those with delirium, dementia and/or depression to prevent these negative experiences whenever possible (Evans, et al., 2002). Education of older adults is necessary to include them in the decision-making process; booklets and pamphlets should be available (Lever & Rossy, 2002; 2003).

Most restraint reduction trials have been conducted in Long-Term Care. Four moderately rated studies examined residents' physical status (Bradley, Siddique, & Dufton, 1995; Ejaz, Folmar, Kauffmann, Rose, & Goldman, 1994a; Evans & Strumpf, 1992; Stratmann, Vinson, Magee, & Hardin, 1997) and seven strongly rated studies (Capezuti, 1995; Ejaz, Jones, & Rose, 1994b; Evans, et al., 1997; Rovner, Steele, Shmueli, & Folstein, 1996; Sloane, et al., 1991; Werner, Cohen-Mansfield, Koroknay, & Braun, 1994a; Werner, Koroknay, Braun, & Cohen-Mansfield, 1994b). Measures included the incidence of injuries and falls, functional status, and chemical restraint use. Future restraint reduction initiatives should track similar data for comparison.

Restraint removal was associated with significantly lower fall rate (Capezuti, 1995). The findings in the study conducted by Evans et al. (1997) show that fall rates in a control group was 64.7 %, 41.5 % in the education group and 42.5 % fall rates in the education and consultation group. Bradley et al. (1995) also reported a decrease in the number of falls and injuries in participants. Two studies (Werner, et al., 1994b; Evans & Strumpf, 1992) reported no change in the number or percentage of falls after a restraint reduction program. The number of serious falls (injury related) did not change (Ejaz, et al., 1994a). Following implementation of a policy change, the number of individuals who were restrained at the time of a fall decreased from 28 % to 7 % (Stratmann, et al., 1997).

Chemical restraint use following implementation of a restraint reduction program decreased in three studies (Rovner, et al., 1996; Werner, et al., 1994a; 1994b). There was a slight decrease in scores on the Mini-Mental State Examination (MMSE) for residents in both control and intervention groups, however, the decrease was of a larger magnitude for those in the control group (Rovner, et al., 1996).





A trial on two medical wards reduced restraints from 40 % to 5-7 % over a six month period and fall incidents remained stable over the trial. However, a one year follow-up prevalence reported that restraint use had climbed to a higher rate (50 %) than before the restraint project due to lack of policy implementation and administrative support for least restraint practices (Lever, Molloy, Beddard, & Eagle, 1995).

Restraints can be safely removed (Capezuti, 1995; Ejaz et al., 1994b; Werner, et al., 1994a) using a restraint reduction program that includes education of all levels of staff. There is good clinical evidence and consensus that restraints should be a last resort measure when all other alternatives have failed, except in an emergency situation. Legislation in Ontario now mandates this approach to care and nurses must adapt their practice to abide by the law.



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# *Chapter 5*

## *Education Recommendation*



### Recommendation • 5.1

**All entry-level nursing programs should include specialized content about the older adult such as normal aging, involvement of client and family throughout the process of nursing care, diseases of old age, assessment and management of delirium, dementia and depression, communication techniques and appropriate nursing interventions.**

*(Level of Evidence = IV)*

### Discussion of Evidence

Research findings indicate some nurses learn very little about dementia while in school (Beck, 1996). Nursing students should be provided with opportunities to care for older adults. As the population ages, this becomes even more important. Nurses have a responsibility to stay up to date with the knowledge, skills and evidence-based findings related to the nursing care for older adults with delirium, dementia and depression. Evidence exists that curricula need to include strategies to help students cope with their experiences, including the positive and enriching experiences that can occur (Beck, 1996). Assessment, progression of dementia, terminology, communication with persons with dementia and interventions for persons with dementia should be elaborated on in nursing education (Barrett, Haley, Harrell, & Powers, 1997). Communication problems were reported by 37 undergraduate nursing students as a major barrier for students to overcome when caring for elders with dementia (Beck, 1996). Clinical practicums should focus on the care of the elderly in all settings.

Depression is the most treatable of mental disorders in older adults and nurses can reduce the negative effects of depression (Kurlowicz and NICHE Faculty, 1997). The findings and guidelines from the University of Iowa Gerontological Nursing Interventions Research Center regarding depression and suicide can be integrated into education programs (Holkup, 2002; Piven, 1998; 2001).

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# *Chapter 6*

## *Organization & Policy Recommendations*

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# Organization & Policy

## Recommendations

### Recommendation • 6.1

**Organizations should consider integration of a variety of professional development opportunities to support nurses in effectively developing knowledge and skills to provide care for older adults with delirium, dementia and depression.** *(Level of Evidence = IV)*

### Discussion of Evidence

The paramount need for staff training with regards to the care of the elderly was realized in the late 1980s as care of the elderly underwent significant change (Aylward, Stolee, Keat & Johncox, 2003). First, there was a shift in a custodial model of care to a more restorative or rehabilitative model of care and new learning and development of the staff is required to effect this change (Burgio & Scilley, 1994). Second, because of the increase in the capacity for assisted living in the community, the elderly who are in acute care or long-term care facilities are those with the most complex health care needs. Staff working with elders in all settings need to develop the capabilities to meet these challenges.

### Recommendation • 6.2:

**Healthcare agencies should implement a model of care that promotes consistency of the nurse/client relationship.** *(Level of Evidence = IIb)*

### Discussion of Evidence

Continuity of care is critical to understanding the person, to relating effectively and to developing relationships with the client over time (Patchner, 1987; Piercy, 2000; Teresi, et al., 1993). Following implementation of the continuity of care delivery models, staff were better able to interpret even subtle cues from residents and to respond appropriately by adjusting their behaviour to that of the resident (McGilton, et al., 2003). Best (1998) and Netten (1993) similarly concluded that care providers who provided continuity were more familiar with clients' personal histories, which helped them to relate more effectively with clients.

### Recommendation • 6.3

Agencies should ensure that nurses' workloads are maintained at levels conducive to care of persons with delirium, dementia and depression. *(Level of Evidence = IV)*

#### Discussion of Evidence

Presently, we have no evidence to determine appropriate nurse/client ratios. Currently there are 529 long-term care facilities in Ontario alone, with 61,000 beds (Conn, 2003). Given the building boom in long-term care (LTC), there is surprisingly little information about human resource needs in LTC facilities. It is recognized that future studies are required to determine appropriate staffing patterns to optimize behavioural interventions in long-term care settings (Doody, et al., 2001). Mental health services are not consistently provided to this population group (Conn, 2003). A better understanding is needed regarding the calculation of staffing patterns to provide appropriate care for persons with dementia in all care settings.



### **Recommendation • 6.4**

**Staffing decisions must consider client acuity, complexity level, and the availability of expert resources.** *(Level of Evidence = III)*

#### **Discussion of Evidence**

Level of client's complexity should match the skill mix of the personnel. More research is needed to define the roles of various types of practitioners (e.g., advanced practice nurses, registered nurse, registered practical nurses, healthcare aides, personal support workers) in the care of clients with dementia.

Evidence does exist that there is an improvement in care when advanced practice nurses (APN) are integrated in the care of elderly. Residents with APN input into their care, experienced significantly greater improvement or less decline in incontinence, pressure ulcers and aggressive behaviour (Ryden, et al., 2000). As well, significantly less deterioration in affect was noted. Clients in nursing homes affiliated with APNs had family members who expressed greater satisfaction with the medical care their relatives received (Kane, Flood, Keckchafer, Beshadsky, & Lum, 2002). The influence of APNs on clients with delirium, dementia and/or depression needs to be better understood.

### **Recommendation • 6.5**

**Organizations must consider the nurses' well-being as vital to provide care to persons with delirium, dementia and depression.** *(Level of Evidence = III)*

#### **Discussion of Evidence**

Recent evidence suggests that the best prediction of satisfaction for residents living in long-term care facilities is staff satisfaction (Chou, Boldy, & Lee, 2003). Turnover rates for long-term care staff have been found as high as 69 %, with the turnover rates for some positions, such as nursing assistants, rising as high as 200 % (Grant, 2001; Lindeman, 2001). Staffing problems in long-term care have important consequences for client welfare. The number of licensed nursing hours per client has been associated with client functional ability, risk of death, and probability of discharge from nursing homes (Bleisner, Smayling, Kane, & Shannon, 1998). Strategies to optimize professional caregivers' well-being included: enhancing attachment to clients and families, fostering professional identity and personal

growth, and monitoring and managing caregiver burden (Drebing, McCarty, & Lombardo, 2002). Parsons, Simmons, Penn, & Furlough (2003) found that involvement in work-related decisions, supportive supervisors, and managers keeping staff informed were significantly related to both turnover and overall satisfaction.

### Recommendation • 6.6

**Healthcare agencies should ensure the coordination of care through the appropriate processes to transfer information (e.g., appropriate referrals, communication, documentation, policies that support formal methods of information transfer, and networking between healthcare providers).**

*(Level of Evidence = IV)*

### Discussion of Evidence

The panel of experts suggests, on the basis of clinical expertise, that it is important to share information between providers in the healthcare continuum to ensure consistency of care. This can be achieved through appropriate referrals, communication, documentation, policies that support formal methods of information transfer, and networking between healthcare providers.

Lemieux-Charles and Chambers (2002) state that there is a lack of research on how to better connect the care in institutions and community. They studied four dementia networks in Ontario to evaluate perceptions of administrative and service delivery effectiveness, processes and outcomes of network management, and satisfaction with care processes. The researchers found that the three most significant factors in care recipients' and caregivers' satisfaction with processes of care were coordination of care, awareness of services and family physician care. They report that greater support from in-home services increases satisfaction with coordination and awareness of services. Recommendations from the study suggest that services should deal with the difficulty that clients and caregivers may have in accepting the problem. Care should be provided to address physical, social, emotional and financial states of clients and caregivers. Care providers, families and friends should be consulted to establish the most appropriate assistance and enable easy entry and exit from services as needs change. The authors suggest that networks are seen as a way to surmount the fragmentation of services when there are many different providers, types of care and varieties of specialization. In communities where specialized services are developed and agencies work together, networks have been perceived to have changed the delivery services through information sharing (Lemieux-Charles & Chambers, 2002).

Ontario's strategy for Alzheimer disease and related dementias includes an initiative to establish dementia networks, and an implementation framework that was developed by the Ministry of Health and Long-term Care Work Group. The resource handbook, *A Guide to Developing a Dementia Network*, was released to assist local communities enhance the provision of services in their community.

The innovative Integrated System Delivery (ISD) model used by the Program of Research to Integrate Services for the Maintenance of Autonomy (PRISMA) has shown positive health outcomes for frail elderly (Herbert, Durand, Dubuc, & Torigny, 2003). PRISMA includes coordination between diverse decision makers and managers of organizations and services, a single entry point for service, a case-management process, individualized service plans, a single assessment instrument, a case-mix classification system, and a computerized clinical chart for communicating between institutions and professionals for client monitoring. Preliminary results on the efficacy of this Integrated Service Delivery (ISD) model for community-dwelling frail older people have shown a decreased incidence of functional decline, decreased burden for caregivers, and a lesser proportion of older people wishing to be admitted to institutions. Nurses are in a key position to advocate for the coordination of care, and integrated service delivery models.

### **Recommendation • 6.7 (Delirium)**

**Brief screening questions for delirium should be incorporated into nursing histories and/or client contact documents with opportunity to implement care strategies.**

*(Level of Evidence= IV)*

### **Discussion of Evidence**

There are a variety of screening instruments for delirium (RNAO, 2003) and often these are tailored to the older adult, clinician preferences and the presenting situation. Incorporating key questions into the nursing assessment format assists the nurse to identify the potential for delirium as early as possible, as well as not adding an additional assessment form. The Confusion Assessment Method is one method that is highly sensitive and specific (> 90 %) and offers easy questions to incorporate (Inouye, 1998). Experiential knowledge suggests that the more readily available and the less perceived “additional” paper or assessments, the more likely that it will be incorporated into practice.

### Recommendation • 6.8 (Delirium)

**Organizations should consider delirium programs that contain screening for early recognition and multi-component interventions for treatment of clients with, but not limited to, hip fractures, post-operation surgery, and those with complex medical conditions (see resources available in Appendix I).** *(Level of Evidence = IV)*

### Discussion of the Evidence

Given that early recognition of delirium can enhance clinical outcomes and decrease length of stay and, that the literature has defined this in specific hospitalized populations, it is suggested that organizations may wish to consider intervention programs within these categories. Medically ill clients have a significantly increased risk of developing comorbidities, thereby increasing their length of stay while exposing them to further risk of delirium (APA, 1999; RNAO, 2003). In one controlled clinical trial on a medical unit that targeted specific risk factors for delirium, the program intervention was effective in reducing incidence of delirium as well as the duration of the episodes. The actual risk of delirium was reduced by 40 % through the intervention and the assistance of trained volunteers (Inouye, 2000).

Older adults undergoing surgery, including cardiac surgery, have long been identified as having a risk of developing delirium. In particular, orthopedic hip surgery appears to include a higher proportion of clients experiencing delirium of between 21 % and 60 % (Andersson, Gustafson & Hallberg, 2001; Marcantonio, Flacker, Michaels, & Resnick, 2000; Marcantonio, Ta, Duthie, & Resnick, 2002).

### Recommendation • 6.9 (Depression)

**Caregiving activities for the older adult presenting with depression and/or suicidal ideation should encompass primary, secondary and tertiary prevention practices.** *(Level of Evidence = IV)*

### Discussion of Evidence

In primary prevention, strategies are directed at public education, the dissemination of information about depression, and the risks associated with depression such as suicide. This also raises awareness of myths associated with depression and suicide in the older adult. Secondary prevention activities include screening and early identification of depressed older

adults and suicide risk as well as crisis intervention and psychotherapy. Tertiary prevention activities are linked with rehabilitation and the continuing care for those older adults living with depression and are to assist family, friends and community partners (Holkup, 2002).

### Recommendation • 6.10

Nursing best practice guidelines can be successfully implemented only where there are adequate planning, resources, organizational and administrative support, as well as appropriate facilitation. Organizations may wish to develop a plan for implementation that includes:

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

In this regard, RNAO (2002a) through a panel of nurses, researchers and administrators has developed the *Toolkit: Implementation of Clinical Practice Guidelines*, based on available evidence, theoretical perspectives and consensus. The RNAO strongly recommends the use of this *Toolkit* for guiding the implementation of the best practice guideline on *Caregiving Strategies for Older Adults with Delirium, Dementia and Depression*.

(Level of Evidence = IV)

### Discussion of Evidence

Organizations will assist in advancing knowledge about delirium, dementia and depression care by disseminating nursing research, supporting the nurse to use these findings and supporting participation in the research process (see RNAO (2002b) guideline on *Establishing Therapeutic Relationships* at [www.rnao.org/bestpractices](http://www.rnao.org/bestpractices)). Given the continuous advancement of knowledge, there is a need for continuing education and validation of what is learned so nurses can provide care that is appropriate, facilitative and grounded in current evidence (Gitlin, et al., 2002).



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## Evaluation & Monitoring of Guideline

Organizations implementing the recommendations in this nursing best practice guidelines are advised to consider how the implementation and its impact will be monitored and evaluated. The following table, based on framework outlined in the RNAO *Toolkit: Implementation of Clinical Practice Guidelines* (2002), illustrates some indicators for monitoring and evaluation:

Indicator	Structure	Process	Outcome
Objectives	To evaluate the supports available in the organization that allow for nurses to implement the caregiving strategies for delirium, dementia and depression in older adults.	To evaluate the changes in practice that lead towards implementation of the caregiving strategies for delirium, dementia and depression in the older adult.	To evaluate the impact of implementation of the recommendations.
Organization/ Unit	<p>Review of best practice recommendations by organizational committee(s) responsible for policies and procedures.</p> <p>Availability of client education resources that is consistent with best practice recommendations.</p> <p>Continued investment in staff training to provide enhanced high quality care for older adults with delirium, dementia and depression.</p> <p>Provision of accessible resource people for nurses to consult for ongoing support after the initial implementation period.</p> <p>Organization mission statement supporting a model of care that promotes consistency of the nurse/client relationship.</p>	<p>Modification to policies and/or procedures consistent with best practice recommendations.</p> <p>Development of forms or documentation systems that encourage documentation of clinical assessment of delirium, dementia and depression and concrete procedures for making referrals when nurses are doing the assessments.</p> <p>Organizational practices that promote staff satisfaction and emotional well-being.</p>	<p>Policies and procedures related to use of caregiving strategies consistent with the guidelines.</p> <p>Orientation program inclusion of delirium, dementia and depression.</p> <p>Referrals internally and externally.</p>
Provider	Percentage of full-time, part-time and casual nurses attending the best practice guideline education sessions on caregiving strategies for delirium, dementia and depression in older adults	<p>Nurses self-assessed knowledge of:</p> <ul style="list-style-type: none"> <li>a) Normal aging</li> <li>b) Differential features of delirium, dementia and depression</li> <li>c) How to do a mental status exam</li> </ul>	<p>Evidence of documentation in the client's record consistent with the guideline recommendations:</p> <ul style="list-style-type: none"> <li>a) Episodes of delirium charted</li> <li>b) Changes in behaviour</li> </ul>

Indicator	Structure	Process	Outcome
Provider		<p>d) Their role to properly assess, differentiate between delirium, dementia and depression and initiate appropriate care in a timely manner.</p> <p>Percent of nurses self-reporting adequate knowledge of community referral sources for clients with geriatric mental health problems (physicians nurse practitioner, geriatric psychiatric consultants, Alzheimer Society of Canada).</p> <p>Percent of nurses reporting job satisfaction and adequate emotional well-being.</p>	<p>c) Referrals to geriatric specialty services</p> <p>d) Emotional well-being (satisfaction with care as reported by clients and/or families)</p> <p>e) Percentage of reduction in relapse for depression and improved treatment outcomes</p> <p>f) Improvement or decline in functional abilities</p> <p>g) Percentage of reduction in restraint use (chemical &amp; physical restraints)</p>
Geriatric Client/Family	Percentage of geriatric clients admitted to unit/facility with mental health problems.	<p>Percentage of clients and/or families who received education sessions and support for delirium, dementia and depression care.</p> <p>Percentage of clients referred to specialty programs for geriatric mental health (physicians, nurse practitioner, geriatric psychiatric consultants, Alzheimer's Society of Canada)</p>	<p>Reduction of readmission rate in hospital or placement in long-term care facilities due to caregiver stress.</p> <p>Improvement in emotional well-being (satisfaction with care as reported by clients and/or families).</p> <p>Increased knowledge and understanding of disease process and care approaches.</p> <p>Reduction in mortality rate and suicidal ideation with improved care and support.</p> <p>Improvement in functional abilities and behaviours as a result of implementing the caregiving strategies for delirium, dementia and depression.</p>

Indicator	Structure	Process	Outcome
Financial Costs	Provision of adequate financial resources for the level of staffing necessary to implement the caregiving strategies for delirium, dementia and depression (staffing acuity must consider client acuity, complexity level and the availability of expert resources).	Cost related to implementing the guideline: <ul style="list-style-type: none"><li>• Education and access to on-the-job supports.</li><li>• New documentation systems</li><li>• Support systems</li></ul>	Overall resource utilization.  Length of stay  Readmission rates  Costs for treatments  Re-integration back in the community or long-term care facility

An evaluation focusing on reviewing existing evaluation measures, identifying gaps and developing new tools has been designed to support the monitoring of the implementation of guideline recommendations. These tools will be published on the RNAO website at [www.rnao.org/bestpractices](http://www.rnao.org/bestpractices) as they become available.

## Implementation Tips

**The Registered Nurses Association of Ontario**, the guideline development panel and evaluation team have compiled a list of implementation tips to assist healthcare organizations or healthcare disciplines who are interested in implementing this guideline. A summary of these strategies follows:

- Have a 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.
- Establish a steering committee comprised of key stakeholders and members who are committed to leading the initiative. Keep a work plan to track activities, responsibilities and timelines.
- Provide educational sessions and ongoing support for implementation. The education sessions may consist of Power Point presentations, facilitator's guides, handouts, and case studies. Binders, posters and pocket cards may be used as ongoing reminders of the training. This guideline contains many resources, especially in the appendices, which nurses may use when developing the educational materials.

- Provide organizational support, such as having the structures in place to facilitate the implementation. For examples, hiring replacement staff so participants will not be distracted by concerns about work, and having an organizational policy that reflects the value of best practices through policies and procedures and documentation tools.
- Teamwork, collaborative assessment and treatment planning with the client and family through interdisciplinary work are beneficial. It is essential to be cognizant of and to tap the resources that are available in the community. Appendices I and K highlight some of the resources that are available in the community. Another example would be linking and developing partnerships with regional geriatric programs for referral process. The RNAO's Advanced Clinical/Practice Fellowship (ACPF) Project is another way that registered nurses in Ontario may apply for a fellowship and have an opportunity to work with a mentor who has clinical expertise in delirium, dementia and depression. With the ACPF, the nurse fellow will also have the opportunity to learn more about new resources.

In addition to the tips 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 of this Toolkit can be found in Appendix Z. A full version of the document in pdf format is also available at the RNAO website, [www.rnao.org/bestpractices](http://www.rnao.org/bestpractices).



## Process for Update/Review of Guideline

**The Registered Nurses Association of Ontario** proposes to update the Best Practice Guidelines as follows:

1. Each nursing best practice guideline will be reviewed by a team of specialists (Review Team) in the topic area every three years following the last set of revisions.
2. During the three-year period between development and revision, the RNAO Nursing Best Practice Guidelines project staff will regularly monitor for new systematic reviews and randomized controlled trials (RCTs) in the field.
3. Based on the results of the monitor, project staff will recommend an earlier revision period. Appropriate consultation with a team of members comprised of original panel members and other specialists in the field will help inform the decision to review and revise the BPG earlier than the three-year milestone.
4. Three months prior to the three-year review milestone, the project staff will commence the planning of the review process by:
  - a) Inviting specialists in the field to participate in the Review Team. The Review Team will be comprised of members from the original panel as well as other recommended specialists.
  - b) Compiling feedback received, questions encountered during the dissemination phase, as well as other comments and experiences of implementation sites.
  - c) Compiling new clinical practice guidelines in the field, systematic reviews, meta-analysis papers, technical reviews and randomized controlled trial research, and other relevant literature.
  - d) Developing a detailed work plan with target dates and deliverables.

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



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## Appendix A: Search Strategy for Existing Evidence

### STEP 1 – Database Search

A database search for existing guidelines was conducted by a university health sciences library. An initial search of the MEDLINE, Embase and CINAHL databases for guidelines and articles published from January 1, 1995 to December 2002 was conducted using the following search terms: “delirium management”, “dementia management”, “depression management”, “geriatrics”, “practice guideline(s)”, “clinical practice guideline(s)”, “standards”, “consensus statement(s)”, “consensus”, “evidence-based guidelines”, and “best practice guidelines”.

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### STEP 2 – Structured Website Search

One individual searched an established list of websites for content related to the topic area. This list of sites, reviewed and updated in October 2002, was compiled based on existing knowledge of evidence-based practice websites, known guideline developers, and recommendations from the literature. Presence or absence of guidelines was noted for each site searched, as well as date searched. The websites at times did not house a guideline but directed to another website or source for guideline retrieval. Guidelines were either downloaded, if full versions were available or were ordered by phone/e-mail.

- Agency for Healthcare Research and Quality: <http://www.ahcpr.gov>
- Alberta Heritage Foundation for Medical Research – Health Technology Assessment: <http://www.ahfmr.ab.ca/hta>
- Alberta Medical Association – Clinical Practice Guidelines: <http://www.albertadoctors.org>
- American College of Chest Physicians: <http://www.chestnet.org/guidelines>
- American Medical Association: <http://www.ama-assn.org>
- British Medical Journal – Clinical Evidence: <http://www.clinicalevidence.com>
- Canadian Coordinating Office for Health Technology Assessment: <http://www.ccohta.ca>
- Canadian Task Force on Preventive Healthcare: <http://www.ctfphc.org>
- Centers for Disease Control and Prevention: <http://www.cdc.gov>
- Centre for Evidence-Based Mental Health: <http://www.cebmh.com>
- Centre for Evidence-Based Pharmacotherapy: <http://www.aston.ac.uk/lhs/teaching/pharmacy/cebp>
- Centre for Health Evidence: <http://www.cche.net/che/home.asp>
- Centre for Health Services and Policy Research: <http://www.chspr.ubc.ca>

- Clinical Resource Efficiency Support Team (CREST): <http://www.crestni.org.uk>
- CMA Infobase: Clinical Practice Guidelines: <http://mdm.ca/cpgsnew/cpgs/index.asp>
- Cochrane Database of Systematic Reviews: <http://www.update-software.com/cochrane>
- Database of Abstracts of Reviews of Effectiveness:  
<http://nhscrd.york.ac.uk/darehp.htm>
- Evidence-Based On-Call: <http://www.eboncall.org>
- Government of British Columbia – Ministry of Health Services:  
<http://www.hlth.gov.bc.ca/msp/protoguides/index.html>
- Institute for Clinical Systems Improvement: <http://www.icsi.org/index.asp>
- Institute of Child Health: <http://www.ich.ucl.ac.uk/ich>
- Joanna Briggs Institute: <http://www.joannabriggs.edu.au/about/home.php>
- Medic8.com: <http://www.medic8.com/ClinicalGuidelines.htm>
- Medscape Women's Health: <http://www.medscape.com/womenshealthhome>
- Monash University Centre for Clinical Effectiveness:  
<http://www.med.monash.edu.au/healthservices/cce/evidence>
- National Guideline Clearinghouse: <http://www.guidelines.gov>
- National Institute for Clinical Excellence: <http://www.nice.org.uk>
- National Library of Medicine Health Services/Technology Assessment:  
<http://hstat.nlm.nih.gov/hq/Hquest/screen/HquestHome/s/64139>
- Netting the Evidence: A SchARR Introduction to Evidence-Based Practice on the Internet: <http://www.shef.ac.uk/scharr/ir/netting>
- New Zealand Guidelines Group (NZGG): <http://www.nzgg.org.nz>
- NHS Centre for Reviews and Dissemination: <http://www.york.ac.uk/inst/crd>
- NHS Nursing & Midwifery Practice Development Unit: <http://www.nmpdu.org>
- NHS R & D Health Technology Assessment Programme:  
<http://www.hta.nhsweb.nhs.uk/htapubs.htm>
- PEDro: The Physiotherapy Evidence Database:  
<http://www.pedro.fhs.usyd.edu.au/index.html>
- Queen's University at Kingston: <http://post.queensu.ca/~bhc/gim/cpgs.html>
- Royal College of General Practitioners: <http://www.rcgp.org.uk>
- Royal College of Nursing: <http://www.rcn.org.uk/index.php>
- Royal College of Physicians: <http://www.rcplondon.ac.uk>
- Sarah Cole Hirsch Institute: <http://fpb.cwru.edu/HirshInstitute>
- Scottish Intercollegiate Guidelines Network (SIGN): <http://www.sign.ac.uk>

- Society of Obstetricians and Gynecologists of Canada Clinical Practice Guidelines:  
[http://www.sogc.medical.org/sogcnet/index\\_e.shtml](http://www.sogc.medical.org/sogcnet/index_e.shtml)
- The Canadian Cochrane Network and Centre: <http://cochrane.mcmaster.ca>
- The Qualitative Report: <http://www.nova.edu/ssss/QR>
- Trent Research Information Access Gateway:  
<http://www.shef.ac.uk/scharr/triage/TRIAGEindex.htm>
- TRIP Database: <http://www.tripdatabase.com>
- U.S. Preventive Service Task Force: <http://www.ahrq.gov/clinic/uspstfix.htm>
- University of California, San Francisco:  
<http://medicine.ucsf.edu/resources/guidelines/index.html>
- University of Laval – Directory of Clinical Information Websites:  
<http://132.203.128.28/medecine>
- University of York – Centre for Evidence-Based Nursing:  
<http://www.york.ac.uk/health-sciences/centres/evidence/cebn.htm>

### STEP 3 – Search Engine Web Search

A website search for existing guidelines on delirium, dementia and depression was conducted via the search engine “Google,” using the search terms identified above. One individual conducted this search, noting the search term results, the websites reviewed, date and a summary of the findings. The search results were further critiqued by a second individual who identified guidelines and literature not previously retrieved.

### STEP 4 – Hand Search/Panel Contributions

Additionally, panel members were already in possession of a few of the identified guidelines. In some instances, a guideline was identified by panel members and not found through the previous search strategies. These were guidelines that were developed by local groups or specific professional associations.

## STEP 5 – Core Screening Criteria

This above search method revealed 21 guidelines and numerous articles related to delirium, dementia and depression.

The final step in determining whether clinical practice guidelines would be critically appraised was to have two individuals screen the guidelines based on the specific inclusion criteria. These criteria were determined by panel consensus:

- Guideline was in English, international in scope.
- Guideline was dated no earlier than 1996.
- Guideline was strictly about the topic areas (delirium, dementia, depression).
- Guideline was evidence-based, e.g. contained references, description of evidence, sources of evidence.
- Guideline was available and accessible for retrieval.

## Results of the Search Strategy

The results of the search strategy and the decision to critically appraise identified guidelines are detailed below. Twelve guidelines met the screening criteria and were critically appraised using the *Appraisal of Guidelines for Research and Evaluation* (AGREE, 2001) instrument.

### TITLE OF THE PRACTICE GUIDELINES CRITICALLY APPRAISED

Alexopoulos, G., Silver, J., Kahn, D., Frances, A., & Carpenter, D. (1998). The expert consensus guideline series: Treatment of Agitation in Older Persons with Dementia. Expert Consensus Guideline Series [On-line]. Available: [http://www.psychguides.com/gl-treatment\\_of\\_agitation\\_in\\_dementia.html](http://www.psychguides.com/gl-treatment_of_agitation_in_dementia.html)

American College of Emergency Physicians (1999). Clinical policy for the initial approach to patients presenting with altered mental status. *Annals of Emergency Medicine*, 33(2), 1-39.

American Psychiatric Association (APA) (2000). Practice guideline for the treatment of patients with major depression. American Psychiatric Association [On-line]. Available: [www.psych.org/clin\\_res/Depression2ebook.cfm](http://www.psych.org/clin_res/Depression2ebook.cfm)

American Psychiatric Association (APA) (1999). Practice guideline for the treatment of patients with delirium. American Psychiatric Association (On-line). Available: [www.psych.org/clin\\_re/pg\\_delirium.cfm](http://www.psych.org/clin_re/pg_delirium.cfm)

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Centre for Health Services Research & Department of Primary Care, University of Newcastle upon Tyne (1997). The primary care management of dementia. National Electronic Library for Health [On-line]. Available: [www.nelh.nhs.uk/guidelinesdb/htm/Dementia-ft.htm](http://www.nelh.nhs.uk/guidelinesdb/htm/Dementia-ft.htm)

Ellis, P. M. & Smith, D. A. R. (2002). Treating depression: The beyondblue guidelines for treating depression in primary care. *The Medical Journal of Australia*, 176(10 Suppl), S77-S83.

National Advisory Committee on Health and Disability (1996). *Guidelines for the treatment and management of depression by primary healthcare professionals*. New Zealand: New Zealand Guidelines Group.

New Zealand Guideline Group (NZGG) (1998). Guidelines for the support and management of people with dementia. New Zealand Guideline Group [On-line]. Available: [http://www.nzgg.org.nz/library/gl\\_complete/dementia/index.cfm#contents](http://www.nzgg.org.nz/library/gl_complete/dementia/index.cfm#contents)

Scottish Intercollegiate Guidelines Network (SIGN) (1998). Intervention in the management of behavioural and psychological aspects of dementia. Scottish Intercollegiate Guidelines Network [On-line]. Available: [www.sign.ac.uk/pdf/sign22.pdf](http://www.sign.ac.uk/pdf/sign22.pdf)

## Appendix B: Glossary of Terms

**Agnosia:** Loss or impairment of the ability to recognize, understand, or interpret sensory stimuli or features of the outside world, such as shapes or symbols.

**Anhedonia:** Loss of interest in pleasurable things.

**Aphasia:** Prominent language dysfunction, affecting the ability to articulate ideas or comprehend spoken or written language.

**Apraxia:** Loss or impairment of the ability to perform a learned motor act in the absence of sensory or motor impairment (e.g., paralysis or paresis).

**Caregiving Strategies:** Strategies within the domain of nursing that may encompass detection of a medical condition, interventions to support prevention and recovery, or the optimization of life while living with the condition.

**Comprehensive Geriatric Assessment:** Includes the assessment domains of function, physical health, mental and cognitive health and socioenvironmental factors.

**DSM IV – R:** Diagnostic and statistical manual of mental disorders (4th ed.)

**Hyperactive Delirium:** Characterized by an agitated state, constant motion, usually displaying non-purposeful, repetitive movement, and most often involving verbal behaviours (Rapp, 1998).

**Hypoactive Delirium:** Characterized by an inactive, withdrawn and sluggish state, with limited, slow and wavering verbalizations (Rapp, 1998).

**Mild Depression:** Presence of 5 – 6 depressive symptoms causing either a mild decrease in functioning or normal functioning that requires a greater effort (National Advisory Committee on Health and Disability, 1996).

**Moderate Depression:** Severity that is intermediate between mild and severe depression (National Advisory Committee on Health and Disability, 1996).



**Multidisciplinary Team:** Can include but is not limited to: registered nurse, advanced practice nurse/nurse specialist, registered practical nurse, physician, specialized physician such as a Geriatrician, occupational therapist, physiotherapist, speech/language therapist, social worker, dietitian, pharmacist, unregulated health worker, home care provider.

**Primary Prevention (also called prevention):** Preventive measures that are aimed at public education and the dissemination of information about elders' increased risk of suicide, the risk factors associated with elderly suicide, resources available to suicidal elders, and dispelling suicide myths. Primary prevention helps to raise awareness of and to break down taboos surrounding elderly suicide (Holkup, 2002).

**Recurrent Depression:** There is increasing evidence that depression is a recurrent disorder which once diagnosed, requires monitoring, treatment(s) and interventions which will minimize relapse (NZGG, 1996). Lifetime recurrence is quite high: 50 % who have had one episode will relapse; 70 % who have had two episodes will relapse; and 90 % who have had three episodes will relapse. Therefore, continuation with treatment to avoid relapse is important (Centre for Evidence-Based Mental Health, 1998; National Advisory Committee on Health and Disability, 1996).

**Secondary Prevention (also called intervention):** Preventive measures that are implemented after suicidal tendencies or high risk conditions have become apparent. Secondary prevention strategies include identification and assessment of suicidal clients and crisis intervention. Psychotherapy is also included in the realm of secondary prevention (Holkup, 2002).

**Severe Depression:** Presence of most of the criteria symptoms and clear cut observable disability (e.g., inability to work) (National Advisory Committee on Health and Disability, 1996). Psychotic features may or may not be present. These features include delusions and hallucinations (Centre for Evidence-Based Mental Health, 1998).

**Suicidal Ideation:** The act of thinking and/or talking about the possibility of suicide as an option to a perceived intolerable circumstance.

**Tertiary Prevention (also called postvention):** Measures taken to assist the family, friends or community who have been affected by an elder's suicide. Tertiary prevention is also concerned with interventions focusing on caring for elders who have survived a non-fatal suicide attempt and who are no longer suicidal, and their family members (Holkup, 2002).

## Appendix C: Confusion Rating Scale

Date (month, day, year)			
	Day	Evening	Night
Disorientation			
Inappropriate behaviour			
Inappropriate communication			
Illusions/hallucination			

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Diagnostic Interview and Screening using the Confusion Assessment Method (CAM) made on: \_\_\_\_\_ Interviewer: \_\_\_\_\_  
Results of CAM: \_\_\_\_\_ Positive for Delirium \_\_\_\_\_ Negative for Delirium \_\_\_\_\_

### Directions

1. Record absence or presence of the four behavioural dimensions of confusion at the end of each 8-hour shift.
2. Consider the night shift to begin at midnight.
3. Use the following definitions:
  - a. Disorientation: Verbal or behavioural manifestation of not being oriented to time or place or misperceiving persons in the environment.
  - b. Inappropriate behaviour: Behaviour inappropriate to place and/or for the person; e.g., pulling at tubes or dressings, attempting to get out of bed when that is contraindicated, and the like.
  - c. Inappropriate communication: Communication inappropriate to place and/or for the person; e.g., incoherence, non communicativeness, or unintelligible speech.
  - d. Illusion/hallucination: Seeing or hearing things that are not there; distortions of visual objects.
4. Code each of the four behaviours as follows:
  - 0 - behaviour not present during the shift
  - 1 - behaviour present at some time during the shift, but mild
  - 2 - behaviour present at some time during the shift, and pronounced

5. If assessment was impossible during the entire workshift, specify the reason as follows:

- A - Natural sleep
- B - Pharmacological sedation
- C - Stupor or coma
- D - Other reason

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## Appendix D: Hospital Elder Life Program

The Mini-Mental State Examination (MMSE) may be used a validated baseline assessment tool but is not a screening tool for delirium.

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Factor and Eligible Clients	Standardized Intervention Protocols	Targeted Outcome for Reassessment
<b>Cognitive impairment*</b> All clients, protocol once daily; clients with baseline MMSE score of <20 or orientation score of < 8, protocol three times daily.	Orientation protocol: board with names of care-team members and day's schedule; communication to reorient to surroundings; calendar. Therapeutic-activities protocol: cognitively stimulating activities three times daily (e.g., discussion of current events, structured reminiscence, or word games).	Change in orientation score.
<b>Sleep deprivation</b> All clients; need for protocol assessed once daily.	Nonpharmacological sleep protocol: at bedtime, warm drink (milk or herbal tea), relaxation tapes or music, and back massage. Sleep-enhancement protocol: unit-wide noise-reduction strategies (e.g., silent pill crushers, vibrating beepers, and quiet hallways) and schedule adjustments to allow sleep (e.g., rescheduling of medications and procedures).	Change in rate of use of sedative drug for sleep. <sup>+</sup>
<b>Immobility</b> All clients; ambulation when-ever possible, and range-of-motion exercises when clients chronically non-ambulatory, bed or wheelchair bound, immobilized (e.g., because of an extremity fracture or deep venous thrombosis), or when prescribed bed rest.	Early-mobilization protocol: ambulation or active range-of-motion exercises three times daily; minimal use of immobilizing equipment (e.g., bladder catheters or physical restraints).	Change in Activities of Daily Living score.
<b>Visual impairment</b> Clients with < 20/70 visual acuity on binocular near-vision testing.	Vision protocol: visual aids (e.g., glasses or magnifying lenses) and adaptive equipment (e.g., large illuminated telephone keypads, large-print books, and fluorescent tape on call bell), with daily reinforcement of their use.	Early correction of vision, ≤ 48 hr after admission.

## – Risk Factors for Delirium and Intervention Protocols

Factor and Eligible Clients	Standardized Intervention Protocols	Targeted Outcome for Reassessment
<b>Hearing impairment</b> Clients hearing $\leq 6$ of 12 whispers on Whisper Test.	Hearing protocol: portable amplifying devices, earwax disimpaction, and special communication techniques, with daily reinforcement of these adaptations.	Change in Whisper Test score.
<b>Dehydration</b> Clients with ratio of blood urea nitrogen to creatinine $\geq 18$ , screened for protocol by geriatric nurse specialist.	Dehydration protocol: early recognition of dehydration and volume repletion (e.g., encouragement of oral intake of fluids).	Change in ratio of blood urea nitrogen to creatinine.

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\*The orientation score consisted of results on the first 10 items on the Mini-Mental State Examination (MMSE).  
 +Sedative drugs included standard hypnotic agents, benzodiazepines, and antihistamines, used as needed for sleep.

Reprinted with permission of Dr. Sharon Inouye.

Inouye, S. K., Bogardus, S. T., Charpentier, P. A., Summers, L. L., Acampora, D., Holford, T. R., et al. (1999). A multi-component intervention to prevent delirium in hospitalized older patients. *The New England Journal of Medicine*, 340(9), 669-676.



## Appendix E: Description of Interventions

Category of Support	Interventions
<b>Physiological Support</b>	<p>Establish/maintain normal fluid and electrolyte balance.</p> <p>Establish/maintain normal nutrition.</p> <p>Establish/maintain normal body temperature.</p> <p>Establish/maintain normal sleep/wake patterns (treat with bright light for two hours in the early evening).</p> <p>Establish/maintain normal elimination patterns.</p> <p>Establish/maintain normal oxygenation (if clients experience low oxygen saturation treat with supplemental oxygen).</p> <p>Establish/maintain normal blood glucose levels.</p> <p>Establish/maintain normal blood pressure.</p> <p>Minimize fatigue by planning care that allows for separate rest and activity periods.</p> <p>Increase activity and limit immobility.</p> <p>Provide exercise to combat the effects of immobility and to “burn off” excess energy.</p> <p>Decrease caffeine intake to help reduce agitation and restlessness.</p> <p>Manage client’s discomfort/pain.</p> <p>Promptly identify and treat infections.</p>
<b>Communication</b>	<p>Use short, simple sentences.</p> <p>Speak slowly and clearly, pitching voice low to increase likelihood of being heard; do not act rushed, do not shout.</p> <p>Identify self by name at each contact; call client by his/her preferred name.</p> <p>Repeat questions if needed, allowing adequate time for response.</p> <p>Point to objects or demonstrate desired actions.</p> <p>Tell clients what you want done – not what not to do.</p> <p>Listen to what the client says, observe behaviours and try to identify the message, emotion, or need that is being communicated.</p> <p>Validation Therapy: technique tries to find the reason behind the expressed feeling.</p> <p>Resolution Therapy: attempts to understand and acknowledge the confused client’s feelings.</p> <p>Use nonverbal communication alone or in combination with verbal messages.</p> <p>Educate the client (when not confused) and family.</p>
<b>Environment</b>	<p>Reality Orientation: offer orienting information as a normal part of daily care and activities.</p> <p>Repeat information as necessary for the confused person.</p> <p>Provide orienting information and explain the situation, unfamiliar equipment (e.g., monitors, intravenous lines, oxygen delivery devices), the rules/regulations, plan for care, and the need for safety measures.</p>

# for Delirium

Category of Support	Interventions
	<p>Remove unfamiliar equipment/devices as soon as possible.</p> <p>Provide call bell and be sure it is within reach. The client should understand its purpose and be able to use it.</p> <p>Use calendars and clocks to help orient client.</p> <p>Limit possible misinterpretations or altered perceptions which may occur due to pictures, alarms, decorations, costumed figures, television, radio and call system.</p> <p>Work with client to correctly interpret his/her environment.</p> <p>Establish a consistent routine, use primary nursing and consistency in caregivers.</p> <p>Bring in items from the client's home, allow the client to wear his/her own clothes.</p> <p>Avoid room changes, especially at night. Put delirious, disruptive clients in a private room if at all possible.</p> <p>Create an environment that is as "hazard free" as possible.</p> <p>Provide adequate supervision of acutely confused/delirious clients.</p> <p>Avoid physical restraint whenever possible; use a sitter or have a family member stay with the client if safety is a concern. If restraints must be used, use the least restrictive of these.</p> <p>Consider moving the client closer to the nurses' station .</p> <p>Environmental manipulations may be appropriate if many clients wander: wandering alarms, exit door alarms, or painting lines on floor in front of exits or rooms you do not want the client to enter. Wandering can also be managed through "collusion", walking with resident, then you or other staff, "invite" him/her to return to ward/facility.</p> <p>Have a plan to deal with disruptive behaviour; keep your hands in sight; avoid "threatening" gestures or movement; remove potentially harmful objects from client, room, and the caregiver's person. Bear in mind that these episodes may not be remembered by clients. If they are remembered, often they are the cause of embarrassment.</p>
<b>Sound and Light</b>	<p>Keep the environment calm and quiet with adequate, but soft, indirect light and limit noise levels.</p> <p>Provide glasses and hearing aides to maximize sensory perception.</p> <p>Consider the use of night lights to combat nighttime confusion.</p> <p>Use music which has an individual significance to the confused and agitated client to prevent the increase in or decrease agitated behaviours.</p>



Category of Support	Interventions
<b>Psychosocial</b>	Encourage clients to be involved in, and to control, as much of their care as possible. Be sure to allow them to set their own limits, and do not force clients to do things they do not want to, as this is likely to cause disruptive behaviours. Reminiscing can also help increase self-esteem.
<b>Social Interaction</b>	Encourage family and friends to visit, but visits work best when scheduled, and numbers of visitors and lengths of visits should be limited so as not to overwhelm the client. Consider involving the client in programming so as to decrease his/her social isolation (physiotherapy and occupational therapy may be potential options).
<b>Other Interventions</b>	Consult with a Nurse Specialist/Geriatrics or Psychiatry for severe disruptive behaviours, psychosis, or if symptoms do not resolve in 48 hours. Provide reassurance to clients both during and after acute confusion/delirious episodes. Acknowledge client's feelings/fears. Allow clients to engage in activities that limit anxiety. Avoid demanding abstract thinking for delirious clients, keep tasks concrete. Limit choices, and offer decision-making only when clients are capable of making these judgments.
<b>Behavioural Management Interventions (for disruptive behaviours seen as part of Acute Confusion)</b>	Changing staffing patterns or altering care routine (including amount/type of touching). One to one supervision. Pay attention to clients. Talk with/counsel clients; give verbal reprimands. Ignore. Removal of client from the situation; time out; seclusion/isolation. Reposition. Positive reinforcement of desired behaviours; removal of reinforcer of undesired behaviour. Restrict activities. Physical or chemical restraint as a last resort.
<b>Cognitive and Attentional Limitation Interventions (for disruptive behaviours seen as part of Acute Confusion)</b>	Diversion can be used to distract the client from the disruptive behaviours that she/he is currently engaging in. Divide activities into small steps in order to simplify them and decrease likelihood of causing disruptive behaviours. Determine what triggered or caused the disruptive behaviour, and try to prevent its occurrence.

Category of Support	Interventions
<b>Pharmaceutical Interventions</b>	<p>In general, limit use of medications (to the extent possible) in clients with acute confusion and disruptive behaviours.</p> <p>Regularly evaluate each medication used and consider discontinuing. If this is not possible, use the minimal number of medications in the lowest effective doses.</p> <p>Monitor for intended and adverse effects of medications.</p> <p>Treat pain in the delirious client; however, be alert for narcotic induced confusion and disruptive behaviours.</p> <p>Avoid medicating clients to control wandering, as medications are likely to make them drowsy and light-headed, increasing the risk for falls.</p> <p>Be sure to monitor for side, untoward or paradoxical effects.</p>

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Rapp, C. G., & The Iowa Veterans Affairs Nursing Research Consortium (1998). Research-Based Protocol: Acute confusion/delirium. In M. G. Titler (Series Ed.). *Series on Evidence-Based Practice for Older Adults* (pp. 10-13). Iowa City, IA: The University of Iowa College of Nursing Gerontology Nursing Interventions Research Center, Research Dissemination Core.



## Appendix F: Example of Physician Order form for Suspicion of Delirium

### Cornwall General Hospital

#### Routine Orders for Undiagnosed Delirium Work-up

Indicate those that apply:

- ☐ Drug chemistry/toxicity studies
- ☐ CBC
- ☐ Electrolytes, BUN, creatinine, calcium, magnesium, glucose and albumin
- ☐ TSH, B12, RBC folate
- ☐ Blood cultures (if temperature above 38°C or below 35°C);
- ☐ Lumbar puncture
- ☐ Urinalysis
- ☐ Chest x-ray
- ☐ Sputum for C & S
- ☐ ECG
- ☐ Oxygen saturation
- ☐ EEG
- ☐ Post void residual
- ☐ Abdominal flat plate
- ☐ CAT scan
- ☐ V/Q Scan
- ☐ MRI
- ☐ Other

#### Consultations

- ☐ Internist
- ☐ Neurologist
- ☐ Psychiatrist
- ☐ Other

Physician Signature

Date and time

Reference: Adapted from American Psychiatric Association Practice Guidelines.(1999)  
Practice Guideline for the Treatment of Patients with Delirium  
*The American Journal of Psychiatry*, (supplement). Vol 156, No.5.

#### Diagnostic Criteria Modified from DSM-IV (APA 1994)

- Disturbances of consciousness with a change in cognition that is not better accounted for by dementia.
- Develops over hours to days.
- Fluctuates during the course of the day.
- Impaired ability to focus, sustain or shift attention.
- Impaired cognition or perceptual disturbance.
- Associated with sleep-wake cycle, psychomotor, emotional, or EEG disturbance.
- Evidence that the disturbance is caused by a general medical condition, substance intoxication or withdrawal, or multiple etiologies.

SUSPECT DRUG TOXICITY INTERACTION IF PATIENT IS:		
1. On more than five medications, especially: <b>Anticonvulsants; Barbiturates; Histamine H<sub>2</sub> Antagonist; Thiazide diuretics; Insulin/hypoglycemic agent; Anticholinergics; Antipsychotics; Antidepressants; Benzodiazepines; Cardio glycosides; Narcotics</b> 2. Receiving a medication for more than 5 years. 3. Age 85 or older. 4. Running drug levels beyond or at the high end of therapeutic range.	YES →	Request drug chemistry and/or trial discontinuation of medicine.
	NO ↓	
SUSPECT INFECTIOUS PROCESS IF PATIENT HAS:		
1. Elevation in baseline temperature, even less than 37°C rectally. 2. History of lower respiratory infection or UTI more than twice per year. 3. History of any chronic infection. 4. Recent episode of falling.	YES →	Request appropriate diagnostic tests: most common: urinalysis; chest x-ray; sputums as indicated.
	NO ↓	
SUSPECT ELIMINATION PROBLEMS IF PATIENT EXHIBITS		
A. Urinary Problems 1. History of incontinence, retention, or indwelling catheter. 2. Signs or symptoms of dehydration, tenting, increased BUN. 3. Decreased urinary output. 4. Taking anticholinergic medication. 5. Abdominal distention.	YES →	Request catheterization for post void residual and/or incontinence assessment.
	NO ↓	
B. Gastrointestinal problems 1. Immobility for more than 2 days in persons previously mobile. 2. Abdominal distention. 3. Decreased number of bowel movements or constipated stool. 4. Decreased fluid intake. 5. Decreased food intake, especially bulk.	YES →	Accomplish digital rectal exam, request enema, initiate appropriate bowel regimen.
	NO ↓	
SUSPECT CHANGES IN CHRONIC ILLNESS IF:		
Physical and psychosocial assessment reveals exacerbation of previously diagnosed condition, such as: Diabetes Mellitus      Hypo/Hyperthyroidism      COPD ASHD      Cerebrovascular insufficiency      Cancer Alzheimer's disease      Depression	YES →	Request appropriate diagnostic tests.
	NO ↓	
SUSPECT NEW DISEASE PROCESS SUCH AS: (Presenting symptom is delirium and signs and symptoms of underlying disease will be subtle.)		
A. Cardio and cerebrovascular conditions: Silent MI; TIA/CVA; CHF <b>or</b> B. GI conditions, GI bleed, if evidence of daily use NSAIDS/Steroids	YES →	Request: PE; Pulse Oximetry; EKG; Hemoglobin/Hematocrit; Chemistry Screen; Electrolytes; TSH; Specific Test; Cancer Detection; CAT
	NO ↓	
C. Other medical conditions: Hypo/hyperglycemia; Hypo/hyperthyroidism; Electrolyte imbalance; Cancer; Neurological conditions (e.g., normal pressure hydrocephalus) <b>or</b> D. Psychiatric conditions, especially if evidence of family history.	YES →	Request: psychiatric evaluation dementia work-up
	NO ↓	
SUSPECT PSYCHOSOCIAL ENVIRONMENTAL PROBLEMS IF PATIENT HAS:		
Evident losses (family members, significant life items) 1. Alterations in personal space. 2. Been recently admitted. 3. Increase or decrease in sensory stimulation. 4. Interpersonal difficulties. 5. Dementia.	YES →	Initiate nursing management by environmental manipulation: 1. Make environment user friendly <ul style="list-style-type: none"><li>• Labeling environment</li><li>• Putting orienting items in room</li><li>• Pictures</li></ul> 2. Consider mental health referral 3. Facilitating family involvement.

## Appendix G: Medications Known to Contribute to Delirium in Older Adults

### Categories of Drugs that Can Cause “Acute Change in Mental Status”

Mnemonic: Drug Category	Examples of Drugs
<b>A</b> ntiparkinsonian drugs	Trihexyphenidyl, Benztropine, Bromocriptine, Levodopa, Selegiline (deprenyl)
<b>C</b> orticosteroids	Prednisolone
<b>U</b> rinary incontinence drugs	Oxybutinin (Ditropan), Flavoxate (Urispas)
<b>T</b> heophylline	Theophylline
<b>E</b> mpyting drugs (motility drugs)	Metoclopramide (Reglan), Prepulsid (Cisapride)
<b>C</b> ardiovascular drugs (including anti-hypertensives)	Digoxin, Quinidine, Methadopa, Reserpine, Beta Blockers (Propanolol – to a less amount), Diuretics, Ace inhibitors (Captopril & Enalapril), Calcium Channel antagonists (Nifedipine, Verapamil & Diltiazem)
<b>H</b> 2 blockers	Cimetidine (uncommon on its own but ↑risk with renal impairment), Ranitidine
<b>A</b> ntimicrobials	Cephalosporins, Penicillin, Quinolones & others
<b>N</b> SAIDS	Indomethacin, Ibuprofen, Naproxen, as well as * salicylate compounds
<b>G</b> eropsychiatry drugs	1. Tricyclic antidepressants (e.g., Amitriptyline, Desipramine - to a ↓, Imipramine, Nortriptyline) 2. SSRIs- safer but watch if hyponatremia present. 3. Benzodiazepines (e.g., diazepam) 4. Antipsychotics (e.g., Haldol, Chlorpromazine, Risperidone)
<b>E</b> NT drugs	Antihistamines/decongestants/cough syrups in over-the-counter preparations
<b>I</b> nsomnia	Nitrazepam, Flurazepam, Diazepam, Temazepam
<b>N</b> arcotics	Meperidine, Pentazocine (risky)
<b>M</b> uscle relaxants	Cyclobenzaprine (Flexeril), Methocarbamol (Robaxin)
<b>S</b> eizure drugs	Phenytoin, Primidone

\* This is a table noting some examples of possible medications that can contribute to delirium. It is the physiological status of the older adult and the combination of medications, among other factors that increase risk. Therefore: “Watch and Beware”.

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## *Appendix H: Teaching Handout for Families and Friends of Patients*

### **Delirium: What It Is and How You Can Help**

#### **What is Delirium?**

Delirium is a medical word used to describe the condition that causes a sick person to become confused in his or her thinking. This is a physical problem, not a psychological one. Delirium usually comes on over a few days and, with treatment, it will often improve.

#### **What Causes Delirium?**

A physical illness can cause delirium, particularly if there are changes in the chemistry of the blood, or if dehydration or infection exist. Medications, although necessary to treat illness or provide pain control and symptom relief, also may contribute to the development of delirium. Anyone can become delirious under certain circumstances of illness.

#### **What Are the Signs and Symptoms of Delirium?**

A sick person may show some or all of the following symptoms of delirium:

- Saying things that are all mixed up;
- Not knowing where they are;
- Seeing or hearing things which are not real;
- Being restless and unable to stay still;
- Climbing out of bed; and
- Having restless spells that alternate with being drowsy and sleepier than usual.

The sick person may seem irritable and angry. They may not be able to understand when people try to reassure them that everything is all right. They also may be irritable with nurses and other staff. They may be somewhat paranoid and suspicious, thinking that everyone is against them or that there is a plot going on. Some delirious people may want to call the police to get help.

One of the best ways to understand delirium, and what a delirious sick person is going through, is to imagine what it is like to be in the middle of a very mixed up and strange dream or nightmare. The difference with a delirious person is that they are having these experiences while they are awake.

### How is Delirium Treated?

First, doctors will try to find the most likely cause of the delirium. Sometimes this is a puzzle, and, often, no single cause can be pinpointed. The doctor may make changes to the medications the delirious person is taking. Treatment may also include measures like an intravenous (IV) to administer fluid that can correct chemical problems in the blood and treat infection. The doctor also will order some medications to treat the delirium itself, and may order sedatives to help the delirious person stay calm.

### What Can Family and Friends Do to Help?

There are some things that you can do to help if someone you care about is going through a period of delirium when ill.

- Talk with the healthcare team about any signs of delirium you see developing in your loved one.
- Be reassured that, with treatment, the delirium should go away, or will be greatly reduced.
- Try to use a calm, soft voice when speaking to your loved one or with others nearby.
- Try placing a soft light in the room at night so your loved one can see where he or she is. Delirious people often are more restless and agitated at night because they feel disoriented.
- Remind them where they are. If they are in the hospital, try placing a poster-type sign at the foot of the bed with large letters saying, for example, “**You are in the \_\_\_\_ Hospital on \_\_\_\_ Street in \_\_\_\_ (city).**”
- Remind the person of the date, time and season. This will help them stay connected.





- Gently reassure them that they are safe and that everything is all right.
- Consider developing a schedule of family and close friends to stay with the person around the clock so they will not be alone. This will help them feel secure and less frightened, and also will help maintain their own safety if they are restless or agitated. Sometimes hospitals have volunteers who can help with this. Some families will hire a healthcare aid for the night-time hours. This gives peace of mind to the family, and will allow you to get some needed sleep at home while knowing that your loved one is not alone.
- Bring familiar photos into the room and play favourite music softly in the background.
- Consider limiting the number of visitors who come to see your loved one until the delirium goes away.
- Remember to look after yourself. Try to get some rest and relaxation. Go out for short walks, have a massage, or do other relaxing and restoring things. Remember to eat, drink lots of fluids to keep up your energy, and try not to drink too much coffee and other caffeinated beverages. It is not easy to be with a delirious person, even though you may understand the nature of the problem. It may help to share your thoughts and feelings with someone. Ask to see a palliative-care team, hospital chaplain or social worker for supportive counselling.
- Try not to take some of the things that your loved one says to heart. Remember that delirious people are not themselves. In fact, they are not likely to remember very much about the period of time that they suffer from delirium, and they will not remember what they said, what they did, or what happened.

Prepared by Dr. Elizabeth Latimer, Professor, Department of Family Medicine, McMaster University and Palliative Care Physician, Hamilton Health Sciences. Reprinted with permission, from the author and the Canadian Journal of CME first printed in Managing Delirium in Seriously Ill and Dying Patients, *Journal of CME*, September 1999 (133), 91-109.

## Appendix I: Delirium Resources

### A. Programs/Educational Supports

Available Programs/Educational	Resources Available	Contact
<p><b>1. Elders at Risk: A Sustainable Best Practice Approach to Delirium. A Delirium Action Research Retrospective Qualitative Study Project 2000-2004.</b></p> <p>Deborah Burne, RN, BA, CPMHN(C) Community Mental Health Nurse- Geriatric Psychiatry Professor Dementia Studies St. Lawrence College, Cornwall</p> <p>Kim Peterson, RN, BScN, MCE Vice President Nursing Services Cornwall Community Hospital</p>	<ul style="list-style-type: none"> <li>• Delirium Policy</li> <li>• Documentation                             <ul style="list-style-type: none"> <li>-Delirium Risk Assessment</li> <li>-Mental Status Assessment</li> <li>-Physician's Order sheet (Routine Orders for Undiagnosed Delirium)</li> </ul> </li> <li>• Delirium with Nursing Assessment/intervention decision tree</li> <li>• Delirium Curriculum for Nursing-annual, on line                             <ul style="list-style-type: none"> <li>-delirium, dementia, depression education</li> <li>-case studies video</li> <li>-post-test</li> </ul> </li> <li>• Pharmacological support – biannual delirium update</li> <li>• Education – delirium day workshop – resource manual</li> <li>• Client/family education pamphlet</li> </ul>	<p>D. Burne  <a href="mailto:ddb@sympatico.ca">ddb@sympatico.ca</a>                      K. Peterson  <a href="mailto:Kim.peterson@cornwallhospital.ca">Kim.peterson@cornwallhospital.ca</a>  <a href="http://www.cornwallhospital.ca">www.cornwallhospital.ca</a></p>
<p><b>2. Delirium Prevention &amp; Education Project</b></p> <p>Best Practice Resources, Delirium Prevention and Education, Committee for the Enhancement of Elder Friendly Environments</p> <p>Regional Geriatric Program (RGP) Central</p>	<ul style="list-style-type: none"> <li>• Literature</li> <li>• Best Practice Resources</li> <li>• Prevalence study &amp; tools</li> <li>• Education:                             <ul style="list-style-type: none"> <li>- Delirium Workshops</li> <li>- Power Point classes</li> </ul> </li> <li>• Delirium poster</li> </ul>	<p><a href="http://www.rgpc.ca">www.rgpc.ca</a></p>
<p><b>3. Delirium: Look, Screen and Intervene (2004).</b></p> <p>Dianne Rossy, RN, MScN, GNC(C). APN, Geriatrics.</p> <p>Dr. B. Power, MD, FRCP Geriatrician.</p> <p>The Ottawa Hospital &amp; The Regional Geriatric Assessment Unit of Ottawa</p>	<ul style="list-style-type: none"> <li>• Policy/procedure</li> <li>• Physician's Order Form:                             <ul style="list-style-type: none"> <li>- Delirium Work-Up</li> <li>- Physician Alert</li> </ul> </li> <li>• Nursing Information Handcards:                             <ul style="list-style-type: none"> <li>- Trigger Questions</li> <li>- Screening Tools</li> <li>- Table of Differentiation for DDD &amp; Kaleidoscope of Care Strategies</li> <li>- Screening Assessment Flow Diagram for Delirium &amp; What You Can Do</li> <li>- Screening Assessment Flow Diagram for Dementia &amp; What You Can Do</li> <li>- Screening Assessment Flow Diagram for Depression &amp; What You Can Do</li> </ul> </li> </ul>	<p>D. Rossy  <a href="mailto:drossy@ottawahospital.on.ca">drossy@ottawahospital.on.ca</a>  <a href="http://www.rgapottawa.com">www.rgapottawa.com</a></p>

Available Programs/Educational	Resources Available	Contact
	<ul style="list-style-type: none"> <li>• Prevalence Study &amp; Tools</li> <li>• Education:               <ul style="list-style-type: none"> <li>- Self-Directed Study of Delirium, Dementia and Depression (used with permission from Deer Lake Lodge)</li> <li>- Handcards</li> <li>- Patient Brochure</li> </ul> </li> <li>• “The 3 As to Alternatives” A Self-Directed Learning Resource Guide on Least Restraint (on website or for purchase)               <ul style="list-style-type: none"> <li>- Hospital Prevalence Data Collection Tool</li> </ul> </li> </ul>	
<b>4. Putting the P.I.E.C.E.S. Together</b>  A Psychogeriatric Guide and Training Program for Professionals in Long-Term Care in Ontario	<ul style="list-style-type: none"> <li>• Education:               <ul style="list-style-type: none"> <li>- Video: “Recognizing Delirium in the Elderly” Ann Tassonyi</li> <li>- Power Point classes</li> </ul> </li> <li>• Resources &amp; Tips</li> <li>• Screening Tools</li> </ul>	<a href="http://www.pieces.cabhru.com/PRC/videos.htm">www.pieces.cabhru.com/PRC/videos.htm</a>
<b>5. Clinical Practice Guideline: Delirium in the Elderly (2002).</b>  Marcia Carr, RN, MScN Coordinator of Acute Geriatric Services Fraser Valley Health Authority, Burnaby Site, B.C.	<ul style="list-style-type: none"> <li>• Policy/procedure</li> <li>• Guidelines for care</li> <li>• Education</li> <li>• Care of patients with agitation</li> <li>• Screening tool</li> </ul>	M. Carr <a href="mailto:www.marcia.carr@fraserhealth.ca">www.marcia.carr@fraserhealth.ca</a>



## B. Posters

- Delirium Prevention: Regional Geriatric Program Central  
[www.rgpc.ca](http://www.rgpc.ca)  
Phone number: 905-549-6525 ext. 124440
- Screening & Selecting Care Strategies for Delirium, Dementia and Depression in Older Adults.  
[www.rnao.org/bestpractices](http://www.rnao.org/bestpractices)

## C. Pharmacological Reference Supports (also see Appendix G)

- Alexopoulos, G., Silver, J., Kahn, D., Frances, A. & Carpenter, D. (1998). The expert consensus guideline series: Treatment of Agitation in Older Persons with Dementia. [Online]. Available: [http://www.psychguides.com/gltreatment\\_of\\_agitation\\_in\\_dementia.html](http://www.psychguides.com/gltreatment_of_agitation_in_dementia.html)
- American College of Emergency Physicians. (1999). Quick Reference Form: Altered Mental Status Clinical Policy. *Annals of Emergency Medicine*, 33(2).
- Dalziel, W., Byszewski, A. & Ross, A. (1996). The top ten problem drugs for the elderly. *CPJ/RPC*, June, 32-34.
- McIntosh, D., Chisholm, T., Gardner, D. & Dursun, S. (1999). *Dalhousie Psychotropic Drug Reference Card*. Dalhousie Department of Psychiatry. 5909 Julee Road. Room 4083A. Halifax, N.S. B3H 2E2.

## D. Videos

- Tassonyi, A. *Recognizing Delirium in the Elderly*.  
<http://www.pieces.cabhru.com/PRC/videos.htm>

## E. Websites

- Hospital Elder Life Program (HELP), Yale-New Haven Hospital.  
[www.hospitalelderlifeprogram.org](http://www.hospitalelderlifeprogram.org)

## F. Patient Teaching Brochures

- Dr. Elizabeth Latimer. *Delirium: What it is and How You Can Help*.  
(See Appendix H)
- The Ottawa Hospital. *Delirium or Acute Confusion and How You Can Help*.

## Appendix J: Delirium Case Scenario

### Case Scenario: Long-Term Care (LTC)/Acute Care

Mr. Con Fused, a 66 year old gentleman residing in Long-Term Care complained of abdominal pains over the last few weeks. The staff noted that he was “increasingly confused”, and that he had suffered two falls within the last two weeks. He was seen by the Nurse Practitioner and sent to Acute Care.

#### Medical History:

Right CVA 1992, History of Epilepsy, Mild Dementia, Old Head Injury.

#### Lab Investigations:

He had x-rays of hip and pelvis, investigations for hematuria and LFTs. He was also placed on Tylenol #3 prn for complaints of pain, and sent back to LTC.

#### Medications:

Androcur 50 mg bid	Dilantin 200 mg bid
Folic acid od	Nozinan 10 mg hs
Phenobarbital 15 mg tid	Primidone 250 mg bid
Ranitidine 150 mg bid	Tylenol 500 mg 1-2 prn
Bisacodyl	Diazepam 5 mg I/M prn for seizures
Dulcolax supp prn	Fleet enema prn
Maalox prn	Septra 400/80 mg hs
Tylenol #3 prn q4h	

#### Presentation:

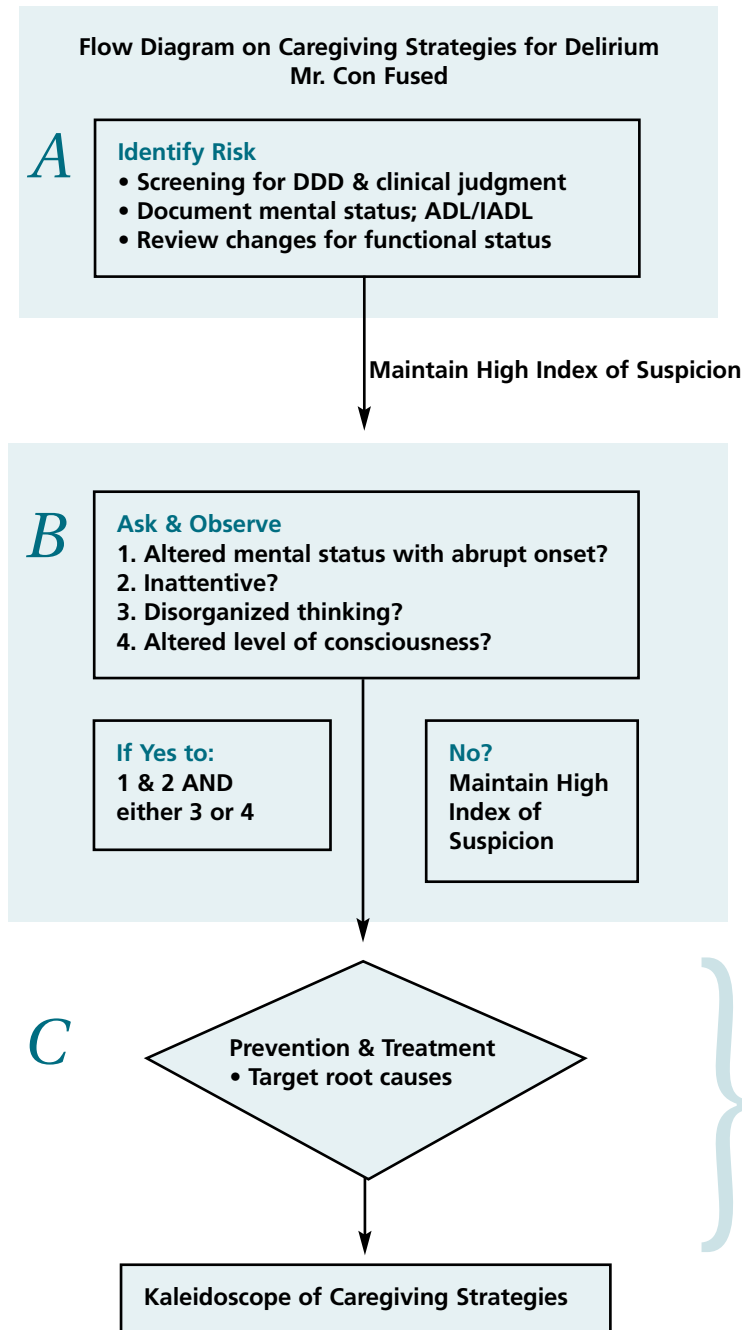
The staff continued to be concerned with the change in this individual in the last couple of weeks. He previously was fully oriented to time, place and person, but lately he had been thinking that he was getting ready to go to work when getting dressed in the morning, not realizing he was living in a Long-Term Care facility. He had difficulty focusing his attention in conversation, and at times did not make sense. One evening he created a disturbance when he was seeing bugs on his bed sheets. He was causing concern to the night staff as he seemed to have developed a sleep/wake cycle disturbance and would spend half the night awake, contrary to his usual pattern.

He is now incontinent of urine. He also has difficulty with ambulation and transfers, needing to be managed in a wheelchair with restraints. He stopped eating, stopped joining activities and was always requesting to go to the hospital. He had not been following the steps of his obsessive routines which had been well established since his admission to the facility six years ago. At times he became irritable and assaulted staff during care.

Use the Delirium Decision Tree to answer the following questions:

- What alterations in the client's cognitive, physical, and functional status would cause you concern?
- What assessments would you complete? What tools can assist you?
- What factors are contributing to the presentation? What is the level of risk?
- What members of the healthcare team could assist you in your care?
- What interventions would be helpful to improve the client's condition?
- How would you monitor his condition?
- What can you do to prevent delirium?
- How can you support the family?
- What are the educational issues?





**A. Mr. Con Fused E.g.:**

**1. Screening: "something is wrong"**

- Review possible screening tools
- BPG, Screening for DDD
- Review Table of Differentiation

**2. Alteration from baseline:**

- not oriented
- not focusing
- sleep disturbance
- loss of obsessive routines
- 2 falls
- not joining activities
- irritability

**3. Changes in function:**

- ambulation deficits
- not eating
- newly incontinent
- wheelchair & restraints

**B. Ask & Observe**

1. Abrupt onset? **Yes** (within last 2 weeks)
2. ↑Inattentive? **Yes** Behaviour fluctuating, ↑ @ night.
3. Disorganized thinking? **Yes** (not oriented, unpredictable).
4. No longer alert? (unclear)

**Therefore: High Index of Suspicion for Delirium**

CAM + for delirium  
Likely superimposed on early dementia (in history)

**C. Investigate Root Causes E.g.:**

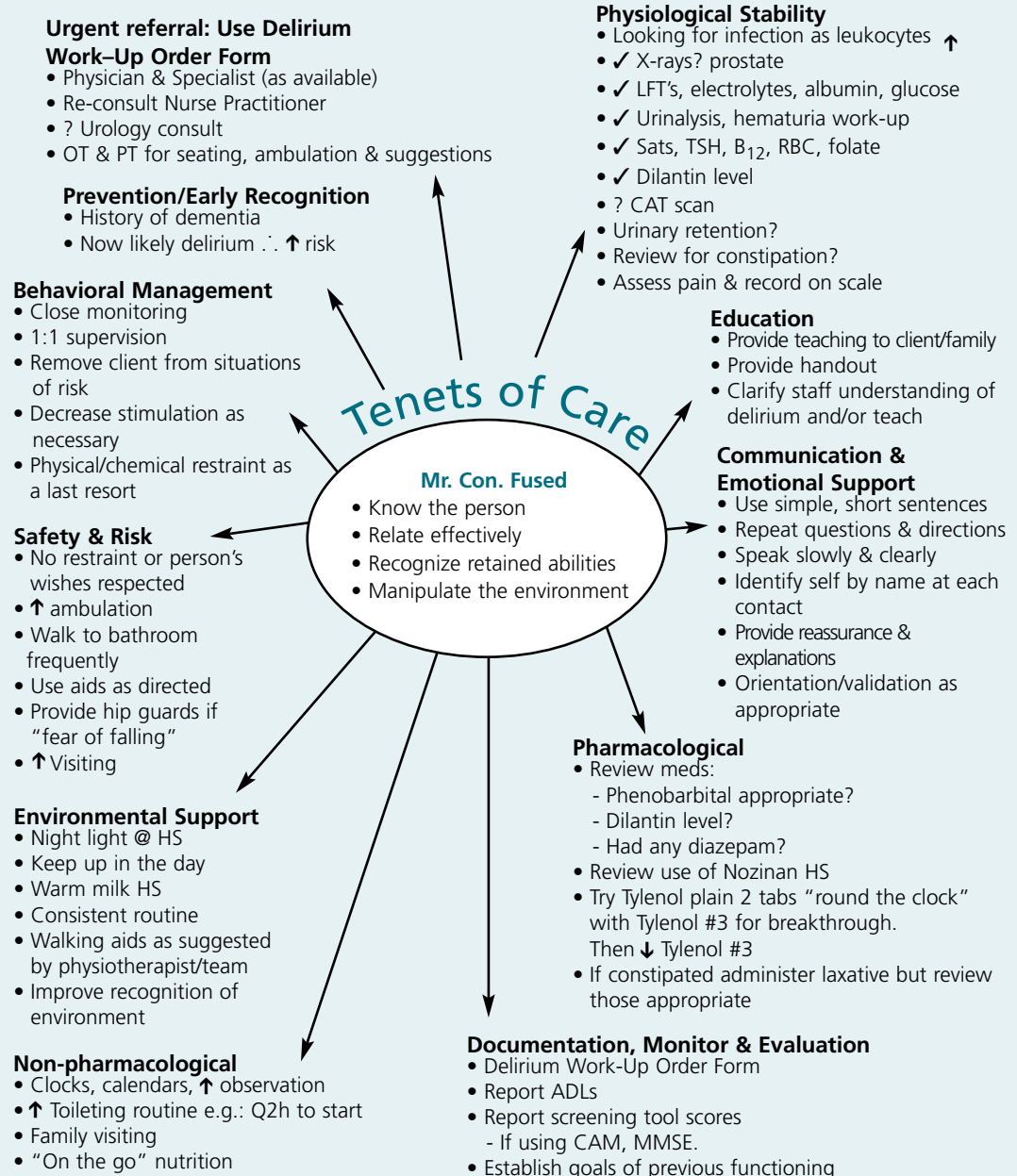
Abdominal pain-etiology?  
Falls - new CVA?  
Ambulation - new CVA?  
Constipation? - review  
New Medications - Tylenol # 3's?  
Results of x-rays? Blood work?  
Use of restraints?

**What Can You Do?**

✓ Risk Factors for Delirium present  
+ CAM Screening Tool (Suspect Delirium)  
Initiate prompt communication with Physician  
Kaleidoscope of Care Strategies (see next page)  
IT IS NOT NORMAL AGING



## Kaleidoscope of Caregiving Strategies for Mr. Con Fused



## Appendix K: Dementia Resources

### A. Outcomes and Scales for Measurement

Outcomes and Scales for Measurement	Tools	Refer to...
ADL/IADL	Instrumental Activities of Daily Living Scale and Physical Self-Maintenance Scale	Lawton, M. P., & Brody, E. M. (1969). Assessment of older people. Self-maintaining and instrumental activities of daily living. <i>The Gerontologist</i> , 9(3), 179-186.
	Katz	Katz, S., Ford, A. B., Moskowitz, R. W. et al. (1984). Index of activities of daily living. In L. Israel, D. Kozarevic, & Sartorius, N. (Eds.), <i>Source book of geriatric assessment</i> . (2 vols). (pp. 237-238). New York: Karger.  Katz, S. (1996). Index of independence in activities of daily living. In I. McDowell & C. Newell. (Eds.). <i>Measuring health: A guide to rating scales and questionnaires</i> . (pp. 54-60). New York: Oxford University Press.
	Barthel Index	Mahoney, F. I., and Barthel, D. W. (1965). Functional evaluation: The Barthel Index. <i>Maryland State Medical Journal</i> , 14, 61-65.
	Functional Independence Measure (FIM)	<a href="http://www.tbims.org/combi/FIM/">http://www.tbims.org/combi/FIM/</a>
Cognition	Mini-Mental State Examination (MMSE)	Folstein, M. F., Folstein, S. E., & McHugh, P. R. (1975). Mini-mental state : A practical method for grading the cognitive state of patients for the clinician. <i>Journal of Psychiatric Research</i> , 12, 189-198.
	Clock Drawing Test	Shulman, K., Shedletsky, R., & Silver, I. (1986). The challenge of time: Clock drawing and cognitive function in the elderly. <i>International Journal of Geriatric Psychiatry</i> , 1, 135-140.

Outcomes and Scales for Measurement	Tools	Refer to...
Pain Scale	Pain Assessment in Advanced Dementia	See Appendix Q  Warden, V., Hurley, A. C., & Volicer, L. (2003). Development and psychometric evaluation of the pain assessment in advanced dementia (PAINAD) scale. <i>Journal of the American Medical Directors Association, January/February</i> , 9-15.
Partnerships with Families	Family Involvement in Care Model	Kelley, L. S., Specht, P., Maas, M. L., & Titler, M. G. (1999). Family involvement in care for persons with dementia. The University of Iowa Gerontological Nursing Intervention Research Center, National Institute of Nursing Research [On-line]. Available: <a href="http://www.nursing.uiowa.edu/quirc">http://www.nursing.uiowa.edu/quirc</a>
Caregiver Stress	Burden Interview	Zarit, S. H., Reever, K. E., & Bach-Peterson, J. (1980). Relatives of the impaired elderly: Correlates of feeling of burden. <i>The Gerontologist</i> , 20, 649-655.
	Behavioural and Mood Disturbance Scale (BMDS) and Relatives' Stress Scale (RSS)	Greene, J. G., Smith, R., Gardiner, M., & Timbury, G. C. (1982). Measuring behavioural disturbance of elderly demented patients in the community and its effect on relatives: A factor analytic study. <i>Age &amp; Ageing</i> , 11, 121-126.
Behavioural Changes	Individualized Dysfunctional Behaviour Rating Instrument (IDBRI)	See Appendix R  Geriatric Consultation Team (1995). Hamilton Health Sciences Henderson Site, Hamilton, Ontario.
	Cohen-Mansfield Agitation Inventory (CMAI)	See Appendix S  Cohen-Mansfield, J., Marx, M. S., & Rosenthal, A. S. (1989). A description of agitation in a nursing home. <i>Journal of Gerontology</i> , 44, M77-M84.
	Pittsburgh Agitation Scale (PAS)	Rosen, J., Burgio, L., Kollar, M., Cain, M., Allison, M., Fogleman, M., Michael, M., & Zubenko, G. S. (1994). The Pittsburgh Agitation Scale: A user-friendly instrument for rating agitation in dementia patients. <i>American Journal of Geriatric Psychiatry</i> , 2, 52-59.

Outcomes and Scales for Measurement	Tools	Refer to...
Emotional Well-Being	Philadelphia Geriatric Center Morale Scale	Lawton, M. P. (1975). Philadelphia Geriatric Center Morale Scale: A Revision. <i>Journal of Gerontology</i> , 30, 85-89.
	Dementia Mood Profile Test	Tappen, R. M., & Barry, C. (1995). Assessment of affect in advanced Alzheimer's disease: The Dementia Mood Picture Test. <i>Journal of Gerontological Nursing</i> , 21(3), 44-46.
Getting to Know the Patient	Getting to Know Me	See Appendix O
Abilities Assessment	Abilities Assessment for the Nursing Care of Persons with Alzheimer's Disease and Related Disorders	See Appendix P  Dawson, P., Wells, D. L., & Kline, K. (1993). <i>Enhancing the Abilities of Persons with Alzheimer's and Related Dementias: A Nursing Perspective</i> . New York: Springer Publishing Co.
Relating Well	Relational Behaviour (RB) Scale	McGilton, K. (2004). Relating well to persons with dementia: A variable influencing staffing and quality care outcomes. <i>Alzheimer Care Quarterly</i> , 5(1), 63-72.

## B. Videos

- "Alzheimer's Disease Inside Looking Out" by Terra Nova Films (20 mins)
- "The Alzheimer Journey Module 4 - Understanding Alzheimer Disease The Link Between Brain and Behaviour" By Alzheimer Society of Canada
  - Module 1: The Alzheimer Journey: The Road Ahead
  - Module 2: The Alzheimer Journey: On the Road
  - Module 3: The Alzheimer Journey: At the Cross Roads
  - Module 4: The Alzheimer Journey: Understanding the Disease
- Hello in There: Understanding the Success of Person-Centered Care. CGEC \$100.00 Alzheimer Society or Canadian Learning Company, 95 Vansittart Ave. Woodstock, Ontario, N4S 6E3. Tel. (800) 267-2977 or Fax (519) 537-1035.
- Choice & Challenge: Caring for Aggressive Older Adults – Alzheimer Society or Canadian Learning Company, 95 Vansittart Ave. Woodstock, Ontario, N4S 6E3. Tel. (800) 267-2977 or Fax (519)537-1035.
- Everyone Wins: Quality Care Without Restraints – Alzheimer Society or Canadian Learning Company, 95 Vansittart Ave. Woodstock, Ontario, N4S 6E3. Tel. (800) 267-2977 or Fax (519)537-1035.

### C. Websites

- Alzheimer's Research Exchange  
[www.alzheimersresearchexchange.ca](http://www.alzheimersresearchexchange.ca)
- Alzheimer Society Toronto  
[www.asmt.org](http://www.asmt.org)
- Drum Circles: The Ruth Sherman Centre for Research and Education, Shalom Village  
[www.shalomvillage.on.ca](http://www.shalomvillage.on.ca)
- Hospital Elder Life Program (HELP), Yale-New Haven Hospital  
[www.hospitalelderlifeprogram.org](http://www.hospitalelderlifeprogram.org)
- Intimacy, Sexuality and Sexual Behaviour in Dementia. How to Develop Practice Guidelines and Policy for Long-Term Care Facilities. Continuing Gerontological Education Cooperative.  
[www.fhs.mcmaster.ca/mcah/cgec](http://www.fhs.mcmaster.ca/mcah/cgec)
- Murray Alzheimer Research and Education Program, University of Waterloo  
[www.marep.uwaterloo.ca](http://www.marep.uwaterloo.ca)
- Putting the P.I.E.C.E.S Together: A Psychogeriatric Guide and Training Program for Professionals in Long-Term Care in Ontario  
[www.pieces.cabhu.com](http://www.pieces.cabhu.com)
- The Office of the Public Guardian and Trustee, Ministry of the Attorney General  
[www.attorneygeneral.jus.gov.on.ca/english/family/pgt](http://www.attorneygeneral.jus.gov.on.ca/english/family/pgt)



## Appendix L: Types of Dementia

Disease	Onset	Progression	Course	Characteristics
Dementia of Alzheimer Type (DAT)	Insidious (1-2 years before diagnosis and treatment sought)	Gradual and continuous over years	Usually 8-10 years but variable (3-20 years)	<ol style="list-style-type: none"> <li>1. Short term memory affected first, loss of executive functions (IADL first)</li> <li>2. Orientation to time lost second</li> <li>3. Orientation to place lost third</li> <li>4. In later stages, loss of motor and sensory functions (hallucinations, delusions, apraxias, falls)</li> </ol>
Vascular Dementia (VD)	Sudden	Step-like	Variable	<ol style="list-style-type: none"> <li>1. Presence of vascular risk factors (hypertension, hypercholesterolemia, diabetes, smoking, TIAs, atrial fibrillation or evidence of previous stroke)</li> <li>2. Presentation varies according to area(s) of brain affected. May get focal deficits, gait problems, early incontinence, physical deficits</li> <li>3. More likely to display agitation</li> <li>4. Delusions &amp; hallucinations less common</li> </ol>
Frontotemporal Dementia (FTD)	Slow	More rapid than DAT	2-7 years	<ol style="list-style-type: none"> <li>1. Bizarre behaviours, incongruous with previous personality</li> <li>2. More common in males</li> <li>3. Age of onset earlier, before cognitive decline evident</li> <li>4. Subsets with aphasia, apraxia &amp; agnosia have frontal Pick's Bodies</li> <li>5. Apathy</li> <li>6. Behaviours usually socially inappropriate (explosive anger/agitation with loss of self awareness &amp; growing disinhibition, grooming &amp; hygiene problems)</li> </ol>
Dementia of Lewy Body Type (LBD)	Slow	Rapid, fluctuating but progressive	± 5 years	<ol style="list-style-type: none"> <li>1. First fluctuating confusion Onset of hallucinations but cognition intact (except for SMMSE diagram or Clock)</li> <li>2. Parkinsonism leading to increasing falls, gait disorder</li> <li>3. Increased rigidity, decreased mobility Hypersensitive to neuroleptics (Hallucinations rarely eliminated while rigidity and tardive dyskinesia occurs)</li> </ol>

## Appendix M: The Functional Assessment

### The FAST Stages

Stage 1: No cognitive decline    Stage 2: Very mild decline    Stage 3: Mild decline  
 Stage 4: Moderate decline    Stage 5: Moderate severe decline    Stage 6: Severe decline  
 Stage 7: Very severe decline

### FAST<sup>+</sup> and FAST-ACT (Guidelines and Checklist)

Client Name: \_\_\_\_\_ ID# \_\_\_\_\_

Information and Recommended Action to Assist Clients and Families Living with Alzheimer's Disease

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Stage of Cognitive Decline (FAST © 1988 by Barry Reisberg, MD)	Information or Action for Client (FAST-ACT © 1997 by D. Macdonald Connolly, BN)	Information or Action for Family (FAST-ACT © 1997 by D. Macdonald Connolly, BN)
<b>1. No Cognitive Decline</b> <i>(Normal)</i> No difficulties, either subjectively or objectively AMMMSE++: 29-30 Date: _____	<b>Information regarding:</b> <input type="checkbox"/> General age-specific health promotion tips <input type="checkbox"/> Normal aging <input type="checkbox"/> Advance directives (living will) <input type="checkbox"/> Durable power of attorney and alternate	<b>Information regarding:</b> <input type="checkbox"/> General age-specific health promotion tips <input type="checkbox"/> Normal aging <input type="checkbox"/> Advance directives (living will) <input type="checkbox"/> Durable power of attorney and alternate
<b>2. Very Mild Cognitive Decline</b> <i>(Normal)</i> Complains of forgetting location of objects; subjective work difficulties AMMMSE: 29 Date: _____	<b>Information regarding:</b> <input type="checkbox"/> General age-specific health promotion tips <input type="checkbox"/> Normal aging <input type="checkbox"/> Advance directives (living will) <input type="checkbox"/> Durable power of attorney and alternate	<b>Information regarding:</b> <input type="checkbox"/> General age-specific health promotion tips <input type="checkbox"/> Normal aging <input type="checkbox"/> Advance directives (living will) <input type="checkbox"/> Durable power of attorney and alternate
<b>3. Mild Cognitive Decline:</b> <i>AAMI (Age Associated Memory Impairment-incipient dementia)</i> Decreased job functioning evident to coworkers Difficulty travelling to new locations Decreased organizational capacity AMMMSE: 25 Estimated duration: *if dementia, 7 years Date: _____	<b>Information regarding:</b> <input type="checkbox"/> As in earlier stages <input type="checkbox"/> Normal aging versus dementia <input type="checkbox"/> Support regarding normal aging <input type="checkbox"/> Tips to support memory (e.g., cues, lists, memory aids, value in humour)	<b>Information regarding:</b> <input type="checkbox"/> As in earlier stages <input type="checkbox"/> Normal aging versus dementia <input type="checkbox"/> Support regarding normal aging <input type="checkbox"/> Tips to support memory (e.g., cues, lists, memory aids, value in humour)
<b>4. Moderate Cognitive Decline</b> <i>(Mild Dementia)</i> Decreased ability to perform complex tasks (e.g., planning dinner for guests, handling finances, shopping) AMMMSE: 20 (range 20-23) Estimated duration: 2 years Date: _____	<b>Information regarding:</b> <input type="checkbox"/> Dementia and FAST <input type="checkbox"/> Treatment options and research trials <input type="checkbox"/> Stages and progression of Alzheimer's disease  <b>Supporting Abilities</b> <input type="checkbox"/> Structure routines <input type="checkbox"/> Tips to support choosing proper clothing <input type="checkbox"/> Dosette for medications	<b>Watch for:</b> <input type="checkbox"/> Signs of further decline (e.g., difficulty with complex tasks)  <b>Information regarding:</b> <input type="checkbox"/> Dementia and FAST <input type="checkbox"/> Treatment options and research trials <input type="checkbox"/> Stages and progression of Alzheimer's disease  <b>Preventing Excess Disability</b> <input type="checkbox"/> Structure routines <input type="checkbox"/> Tips to support choosing proper clothing <input type="checkbox"/> Dosette for medications



# Staging Tool-Action Checklist (FAST-ACT)

Stage of Cognitive Decline (FAST © 1988 by Barry Reisberg, MD)	Information or Action for Client (FAST-ACT © 1997 by D. Macdonald Connolly, BN)	Information or Action for Family (FAST-ACT © 1997 by D. Macdonald Connolly, BN)
	<p><i>Financial Issues</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Cease credit cards</li> <li><input type="checkbox"/> Open joint bank accounts</li> <li><input type="checkbox"/> Change insurance, estate if beneficiary</li> <li><input type="checkbox"/> Pension cheque paid in trust or automatic deposit</li> </ul> <p><i>Legal Issues</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Prepare will</li> <li><input type="checkbox"/> Prepare durable power of attorney and alternate</li> <li><input type="checkbox"/> Prepare advance directives (living will)</li> </ul> <p><i>Ensuring Safety</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Contact CMHC for information regarding environment</li> <li><input type="checkbox"/> Driving, care ownership</li> <li><input type="checkbox"/> Wanderers Registry and Medic Alert bracelet (keep up-to date photo)</li> </ul> <p><i>Counselling regarding:</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Reactions and role of family members</li> <li><input type="checkbox"/> Impact of lifelong relationships</li> <li><input type="checkbox"/> Reactions of "out-of-town" visitors</li> <li><input type="checkbox"/> Care for caregiver (keeping family strong, value of respite and options)</li> <li><input type="checkbox"/> Referral to local Alzheimer office</li> <li><input type="checkbox"/> Early stage support groups</li> </ul> <p><i>Informing Others</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Family, friends, neighbours, and social groups</li> <li><input type="checkbox"/> Journal</li> </ul>	<p><i>Financial Issues</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Prepare to take over finances</li> <li><input type="checkbox"/> Change credit cards</li> <li><input type="checkbox"/> Open joint bank accounts</li> <li><input type="checkbox"/> Change insurance, estate beneficiary</li> <li><input type="checkbox"/> Pension cheque paid in trust or automatic deposit</li> </ul> <p><i>Legal Issues</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Prepare will</li> <li><input type="checkbox"/> Prepare durable power of attorney and alternate</li> <li><input type="checkbox"/> Prepare advance directives (living will)</li> </ul> <p><i>Ensuring Safety</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Contact CMHC for information regarding environment</li> <li><input type="checkbox"/> Contact home care OT, home safety assessment</li> <li><input type="checkbox"/> Driving, care ownership</li> <li><input type="checkbox"/> Wanderers Registry and Medic Alert bracelet (keep up-to-date photo)</li> <li><input type="checkbox"/> Tips for managing medications</li> </ul> <p><i>Counselling regarding:</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Reactions and role of family members</li> <li><input type="checkbox"/> Reactions of "out-of-town" visitors</li> <li><input type="checkbox"/> Care for caregiver (keeping family strong, value of respite and options)</li> <li><input type="checkbox"/> Referral to local Alzheimer office</li> <li><input type="checkbox"/> Early stage support groups</li> <li><input type="checkbox"/> Impact of lifelong relationships</li> <li><input type="checkbox"/> Watch for disease progression to next stage</li> </ul> <p><i>Informing Others</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Family, friends, neighbours, and social groups</li> <li><input type="checkbox"/> Journal of autobiographical introduction</li> </ul>

Stage of Cognitive Decline (FAST © 1988 by Barry Reisberg, MD)	Information or Action for Client (FAST-ACT © 1997 by D. Macdonald Connolly, BN)	Information or Action for Family (FAST-ACT © 1997 by D. Macdonald Connolly, BN)
<p><b>5. Moderately Severe Cognitive Decline:</b> (Moderately Severe Dementia) Requires assistance in choosing proper clothing to wear for the day, season, or occasion (e.g., may wear same clothing repeatedly unless supervised) AMMMSE: 14 (Range: 10-19) Estimated duration: 18 months Date: _____</p>	<p><b>Stage 4 and 5 information and support:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Normalize experience, behaviour</li> <li><input type="checkbox"/> Acknowledge feelings of frustration and loss</li> <li><input type="checkbox"/> Supportive comments regarding disease (e.g., "plans are in place so someone will give help needed")</li> </ul> <p><b>Tips for coping</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Simplify environment</li> <li><input type="checkbox"/> Take things one step at a time</li> <li><input type="checkbox"/> Simplify clothes in closet</li> </ul>	<p><b>Stage 4 and 5 support and information regarding:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Behavioural responses – impact of stress</li> <li><input type="checkbox"/> Impact of environment</li> <li><input type="checkbox"/> Repertoire of coping skills</li> <li><input type="checkbox"/> Wandering</li> <li><input type="checkbox"/> Long-term care options</li> <li><input type="checkbox"/> Value in touring facilities</li> <li><input type="checkbox"/> Value of "bridging"*** to new services and support</li> <li><input type="checkbox"/> Acknowledge feelings of frustration and loss</li> </ul> <p><i>Driving</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Must stop by Stage 5</li> </ul> <p><i>Perceptual Problems</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Visual – mirrors, floor surfaces, contrasts</li> </ul> <p><i>Supportive Environment</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Respecting dignity of person with Alzheimer's disease</li> <li><input type="checkbox"/> Consistency, calmness, giving cues</li> <li><input type="checkbox"/> Soothing atmosphere, touch, facial expressions, tone of voice</li> <li><input type="checkbox"/> Favourite songs, music, stories, possessions</li> <li><input type="checkbox"/> Inclusion in life review – reminiscing by family in presence of person with Alzheimer's disease</li> </ul> <p><b>Tips for caregiving regarding:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Communication</li> <li><input type="checkbox"/> Nutrition</li> <li><input type="checkbox"/> Scheduling supports</li> <li><input type="checkbox"/> Back-up plans</li> <li><input type="checkbox"/> Family updates</li> <li><input type="checkbox"/> Household adjustments to promote safety</li> </ul> <p><b>Service to caregiver</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Family and community supports</li> <li><input type="checkbox"/> Respite options</li> <li><input type="checkbox"/> Homemaker, sitter</li> <li><input type="checkbox"/> Meals on wheels</li> </ul> <p><b>Watch for:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Difficulty putting on clothes</li> <li><input type="checkbox"/> Inability to follow written directions</li> </ul> <p><b>Tips for Caregiver</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Prevent excess disability, structure routines</li> <li><input type="checkbox"/> Review medication regimen periodically</li> <li><input type="checkbox"/> Gradually simplify all tasks</li> </ul> <p><i>Activity planning</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Quiet activities, repetitive action (e.g., sanding, chopping, sorting)</li> <li><input type="checkbox"/> Life review, reminiscence by family in presence of person with Alzheimer's disease</li> <li><input type="checkbox"/> Favourite songs, music, stories, possessions</li> <li><input type="checkbox"/> Inclusion in activities and conversation</li> </ul>
<p><b>6. Severe Cognitive Decline:</b> (Moderately Severe Dementia) AMMMSE: 5 (Range 0-9) (Estimated duration in brackets)</p> <p>6a. Improperly putting on clothes without assistance or cueing*** (5 months) Date: _____</p> <p>6b. Unable to bathe properly (difficulty adjusting bath water temperature)*** (5 months) Date: _____</p>	<p><b>Stage 5 and 6</b> <b>At this stage tips now for caregiver</b></p> <p><b>Information regarding:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Care for caregiver – reassess respite and support needs</li> <li><input type="checkbox"/> Assessing pain, illness</li> <li><input type="checkbox"/> Fluid, caloric needs (increase if restless)</li> <li><input type="checkbox"/> Autopsy or donation to medical science</li> <li><input type="checkbox"/> Developing plan regarding long-term care, including touring facilities</li> </ul>	

Stage of Cognitive Decline (FAST © 1988 by Barry Reisberg, MD)	Information or Action for Client (FAST-ACT © 1997 by D. Macdonald Connolly, BN)	Information or Action for Family (FAST-ACT © 1997 by D. Macdonald Connolly, BN)
<p>6c. Unable to handle mechanics of toileting (e.g., forgets to flush, doesn't wipe properly or properly dispose of toilet tissue)*** (5 months) Date: _____</p> <p>6d. Urinary incontinence*** (4 months) Date: _____</p> <p>6e. Fecal incontinence*** (10 months) Date: _____</p> <p><b>7. Very Severe Cognitive Decline:</b> (Severe Dementia) AMMMSE: 0 (Estimated duration in brackets)</p> <p>7a. Ability to speak limited to approximately half-dozen intelligible different words or fewer in the course of the average day or an intensive interview (12 months) Date: _____</p> <p>7b. Speech ability limited to a single intelligible word in average day or an intensive interview (may repeat the word over and over) (18 months) Date: _____</p> <p>7c. Ambulatory ability lost (cannot walk without personal assistance) (12 months) Date: _____</p> <p>7d. Cannot sit up without assistance (will fall over if no lateral rests [arms] on chair) (12 months) Date: _____</p> <p>7e. Loss of ability to smile (18 months) Date: _____</p> <p>7f. Loss of ability to hold up head independently (12 months or longer) Date: _____</p>	<p><input type="checkbox"/> Options for "bridging" to long-term care (in home or facility)</p> <p><b>Watch for:</b> <i>Perceptual problems</i> <input type="checkbox"/> Clumsiness, fears</p> <p><i>Signs of incontinence</i> <input type="checkbox"/> Occasional urinary or fecal incontinence</p> <p><i>Tips for continence management</i> <input type="checkbox"/> Assess for urinary tract problems (infection, enlarged prostate) <input type="checkbox"/> Assess for constipation and impaction <input type="checkbox"/> Choose simpler clothes <input type="checkbox"/> Keep bathroom free of clutter <input type="checkbox"/> Prompt and scheduled voiding</p> <p><i>Progression of disease to next stage</i> Decline in speech, motor skills</p>	<p><i>Importance of:</i> <input type="checkbox"/> Soothing atmosphere, touch, facial expressions, tone of voice <input type="checkbox"/> Consistency in environment (keep furniture placement and routines the same)</p> <p><i>Service to Caregiver</i> <input type="checkbox"/> Reassess respite and support needs <input type="checkbox"/> Develop plan regarding long-term care <input type="checkbox"/> Reassess need for OT assessment (function and environment) <input type="checkbox"/> Contact physician if behaviour unmanageable <input type="checkbox"/> Review catastrophic reactions, record causes and what helps <input type="checkbox"/> Discuss options regarding bathing (e.g., "bath-in-a-bag")</p> <p><b>Information regarding:</b> <input type="checkbox"/> Fluid, caloric needs <input type="checkbox"/> Eating and swallowing issues <input type="checkbox"/> Palliative care measures <input type="checkbox"/> Pain assessment, management</p> <p><b>Tips for caregiver</b> <input type="checkbox"/> Give snacks frequently – high calorie cookies, high protein drinks <input type="checkbox"/> Giving medications if swallowing problems <input type="checkbox"/> Life review, reminiscence by family in presence of person with Alzheimer's disease <input type="checkbox"/> Have special music, photos, prayer books at hand <input type="checkbox"/> Review decisions regarding care before crisis <input type="checkbox"/> Review funeral arrangements <input type="checkbox"/> Make sure all family aware of decisions</p> <p><b>Service to caregiver</b> <input type="checkbox"/> Develop plan for family support as condition declines <input type="checkbox"/> Assessment of plan regarding swallowing issues <input type="checkbox"/> Bereavement support after death, local support groups, helping others</p>

- + FAST = “Functional Assessment Staging.” Adapted from Reisberg, B. (1988) Functional Assessment Staging (FAST). *Psychopharmacology Bulletin*, 24, 653-659.
- ++AMMMSE = Approximate mean MMSE (Mini-Mental State Examination). Included for information only – not-intended as diagnostic measure. Source: *The Encyclopedia of Aging: A Comprehensive Resource in Gerontology and Geriatrics*, (2nd ed.). (1995). New York: Springer.
- \* Estimated duration of Alzheimer disease in participants without other complicating illnesses who survive and progress to the subsequent deterioration stage. Source: Reisberg, B., et al. (1996). Longitudinal Course Mortality and Temporal Course of Probable Alzheimer’s Disease: A 5-year Prospective Study. *International Psychogeriatrics*, 8(2), 291-311.
- \*\*Bridging = An overlap in caregivers or service until the person with dementia adjusts to a new caregiver or location.
- \*\*\* Occasionally or more often during the past weeks.

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Connolly, D. M., MacKnight, C., Lewis, C. & Fisher, J. (2000). Guidelines for stage-based supports in Alzheimer’s care: The FAST-ACT. *Journal of Gerontological Nursing*, Nov, 34-45. Copyright © 2000, SLACK Incorporated.



## Appendix M: FAST Action Checklist (FAST-ACT)

Client name: _____ ID # _____ Notes from visit: _____
Date: _____ Stage: _____ Significant symptoms/changes _____ Emphasis for this visit: _____ Emphasis of next visit: _____ Signature _____
Date: _____ Stage: _____ Significant symptoms/changes _____ Emphasis for this visit: _____ Emphasis of next visit: _____ Signature _____
Date: _____ Stage: _____ Significant symptoms/changes _____ Emphasis for this visit: _____ Emphasis of next visit: _____ Signature _____
Date: _____ Stage: _____ Significant symptoms/changes _____ Emphasis for this visit: _____ Emphasis of next visit: _____ Signature _____
Date: _____ Stage: _____ Significant symptoms/changes _____ Emphasis for this visit: _____ Emphasis of next visit: _____ Signature _____

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## Appendix N: Instrumental Activities of Daily Living (IADL) and Physical Self-Maintenance Scale

**Instruction:** We would like you to answer some questions about how your relative functions every day. With regard to the following functions, indicate which of the given statements best describes how your relative has functioned in the last week.

*Please circle the appropriate number:*

### USING THE PHONE

He/she:

1. Does not use the phone at all.
2. Answers the telephone, but does not dial.
3. Dials a few well-known numbers.
4. Operates the telephone on own initiative, looks up and dials numbers, etc.

### SHOPPING

He/she:

1. Is completely unable to shop.
2. Needs to be accompanied on any shopping trip.
3. Shops independently for small purchases.
4. Takes care of all shopping needs independently.
5. Does not apply – has never done this.

### FOOD PREPARATION

He/she:

1. Needs to have meals prepared and served.
2. Heats and serves prepared meals, or prepares meals but does not maintain adequate diet.
3. Prepares adequate meals if supplied with ingredients.
4. Plans, prepares, and serves adequate meals independently.
5. Does not apply – has never done this.

## HOUSEKEEPING

He/she:

1. Does not participate in any housekeeping tasks.
2. Needs help with all home maintenance tasks.
3. Performs light daily tasks, but cannot maintain an acceptable level of cleanliness.
4. Performs light daily tasks, such as dishwashing and bedmaking.
5. Maintains the house alone, or with occasional assistance, e.g., “heavy work - domestic help.”
6. Does not apply – has never done this.

## LAUNDRY

He/she:

1. Needs all laundry to be done by others.
2. Launders small items – rinses socks, stockings, etc.
3. Does personal laundry completely.
4. Does not apply – has never done this.

## TRANSPORTATION

He/she:

1. Does not travel at all.
2. Has travel limited to taxi or automobile with assistance of another.
3. Arranges own travel via taxi, but does not otherwise use public transportation.
4. Travels independently on public transportation or drives own car.

## RESPONSIBILITY FOR MEDICATION

He/she:

1. Is not capable of dispensing own medications.
2. Takes responsibility if medication is prepared in advance in separate dosages.
3. Is responsible for taking medication in correct dosages at correct time.

## ABILITY TO HANDLE FINANCES

He/she:

1. Is not capable of handling money.
2. Manages day-to-day purchases, but needs help with banking, major purchases.
3. Manages financial matters independently, (budgets, writes cheques, pays rent and bills, goes to bank), collects and keeps track of income.



### TOILETING

He/she:

1. Soils or wets while awake more than once a week.
2. Soils or wets while asleep more than once a week.
3. Needs to be reminded or given help in cleaning self or has rare accidents (weekly at most).
4. Cares for self at toilet completely with no incontinence.

### FEEDING

He/she:

1. Does not feed self at all and resists efforts of others to feed them.
2. Requires extensive assistance at all meals.
3. Feeds self with moderate assistance and is untidy.
4. Eats with minor assistance at meal times and/or with special preparation of food, or helps with cleaning up after meals.
5. Eats without assistance.

### DRESSING

He/she:

1. Is completely unable to dress self and resists efforts of others to help.
2. Needs major assistance in dressing, but cooperates with efforts of others to help.
3. Needs moderate assistance in dressing or selection of clothes.
4. Dresses and undresses self with minor assistance.
5. Dresses, undresses, and selects clothing from own wardrobe.

### GROOMING

He/she:

1. Actively resists or negates all efforts of others to maintain grooming.
2. Needs total grooming care, but can remain well groomed after help from others.
3. Needs moderate and regular assistance or supervision in grooming.
4. Grooms self adequately with occasional minor assistance, e.g., shaving.
5. Is always neatly dressed, and well-groomed, without assistance.

## WALKING

He/she:

1. Is bedridden more than half the time.
2. Sits unsupported in a chair or wheelchair, but cannot propel self without help.
3. Walks with assistance of another person, or railing, cane, walker; or wheelchair.  
Needs help in getting in and out of the house.
4. Walks within residence or about one block distance.
5. Goes about grounds or city.

## BATHING

He/she:

1. Cannot or will not try to wash self, and resists efforts to keep him/her clean.
2. Cannot or will not wash self, but is cooperative with those who bathe him/her.
3. Washes face and hands only, needs help with rest of body.
4. Bathes self with help getting in and out of tub.
5. Bathes self (tub, shower, sponge bath) without help.

Lawton, M. P., and Brody, E. M. (1969). Assessment of older people. Self-maintaining and instrumental activities of daily living. *The Gerontologist*, 9, 179-186.

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## Appendix O: Getting to Know Me

*"Let me share my life with you so you can bring my life to me"*

*(R. Dunne)*

*Name:*

*Birthdate:*

*My first home and family life...*

*My family and friends...*

*My typical day...*

*My special talents and interests...*

*Things that give me the most pleasure...*

*Things that make me unhappy...*

*How you can comfort me...*

*My life's work...*

*My life's play...*

*If I could live my life over again, I would...*

*Three words that describe me are...*

*One last thing you need to know...*

Reprinted with permission of Nadine Janes, RN, MSc, ACNP, GNC(C), PhD (candidate), Faculty of Nursing, University of Toronto, Toronto, Ontario.

## Appendix P: Abilities Assessment for the Nursing Care of Persons with Alzheimer's Disease and Related Disorders

Name: \_\_\_\_\_

Age: \_\_\_\_\_

Visual Impairment YES \_\_\_\_\_ NO \_\_\_\_\_

Hearing Impairment: YES \_\_\_\_\_ NO \_\_\_\_\_

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### MEDICAL DIAGNOSIS:

Score:	Self-Care Abilities	_____ (39)	Percent	_____ (100)
	Social Abilities	_____ (25)		_____ (100)
	Interactional Abilities	_____ (53)		_____ (100)
	Interpretive Abilities	_____ (34)		_____ (100)
	<b>TOTAL</b>	_____ (151)		_____ (100)

### SELF CARE ABILITIES

#### 1. Voluntary Movements

Yes	No
(1)	(0)

(a) Lips: maintains relaxation of the lips when light pressure is applied in the form of a tongue blade or flexed finger moved along the lips

Score \_\_\_\_\_

(b) Fingers: maintains finger extension when the examiner stimulated the palm of the open hand with a finger

Score \_\_\_\_\_

(c) Arms: passively extends the arm to some extent after each of four times that the examiner bends and extends the person's arms

Score \_\_\_\_\_

**Subtotal** \_\_\_\_\_ (3)  
(1. a-c)

## 2. Spatial Orientation

### (a) Right/Left Orientation

Ask person to demonstrate awareness of left and right orientation in simple (single), complex (in combination), or other (another person) levels:

		Yes (1)	No (0)
Single:	(i) touch your right hand	_____	_____
	(ii) touch your left foot	_____	_____
Complex:	(i) touch your right ear with your left hand	_____	_____
	(ii) point to your left eye with your right hand	_____	_____
Other Person:	(i) touch my left hand	_____	_____
	(ii) touch my right hand	_____	_____
	Score	_____	(6)
 (b) Point of Origin			
	Is able to return to room/home without assistance (e.g., finding own room)	_____	_____
	Score	_____	
	<b>Subtotal</b> <b>(2. a-b)</b>	_____	(7)

## 3. Purposeful Movements

### (a) Initiation and Follow-Through

(i) Show 3 objects (e.g., pen, spoon, soap) to individual and ask him/her to show you how to use them - if done correctly score 3 for each correct answer. \_\_\_\_\_ (3)  
 \_\_\_\_\_ (3)  
 \_\_\_\_\_ (3)

If done *incorrectly*, proceed to:

(ii) Demonstrate the use of the objects and ask the person to copy your actions. Score 2 for each correct answer. \_\_\_\_\_ (2)  
 \_\_\_\_\_ (2)  
 \_\_\_\_\_ (2)

If done *incorrectly*, proceed to:

(iii) Place the objects (one at a time) in person's hand and ask patient to pretend to use them. Score 1 for each correct answer. \_\_\_\_\_ (1)  
 \_\_\_\_\_ (1)  
 \_\_\_\_\_ (1)

Score \_\_\_\_\_ (9)

(b) Simple Activity

Individual performs 2 simple tasks using “one” object.

Yes No  
(1) (0)

(i) Instruct individual to comb hair:

initiates activity

\_\_\_\_\_

follows through activity by self

\_\_\_\_\_

completes activity by self

\_\_\_\_\_

stops activity by self

\_\_\_\_\_

sequences activity properly (e.g., in right order)

\_\_\_\_\_

(ii) Instruct individual to drink from a cup:

initiates activity

\_\_\_\_\_

follows through activity by self

\_\_\_\_\_

completes activity by self

\_\_\_\_\_

stops activity by self

\_\_\_\_\_

sequences activity properly (e.g., in right order)

\_\_\_\_\_

Score \_\_\_\_\_ (10)

(c) Complex Activity

Individual performs 2 complex tasks that require using more than one object.

(i) Instruct individual to wash hands using a washcloth and soap:

initiates activity

\_\_\_\_\_

follows through activity by self

\_\_\_\_\_

completes activity by self

\_\_\_\_\_

stops activity by self

\_\_\_\_\_

sequences activity properly (e.g., in right order)

\_\_\_\_\_

(ii) Instruct individual to put on socks and shoes:

initiates activity

\_\_\_\_\_

follows through activity by self

\_\_\_\_\_

completes activity by self

\_\_\_\_\_

stops activity by self

\_\_\_\_\_

sequences activity properly (e.g., in right order)

\_\_\_\_\_

Score \_\_\_\_\_ (10)

Subtotal  
(3.a-c) \_\_\_\_\_ (29)

Self- Care Abilities Score

(a) Total score achieved = \_\_\_\_  
(add subtotals)

(b) Total score possible = 39

(c) % Score =  $\frac{(a)}{(b)} \times 100$

SOCIAL ABILITIES

1. To Give and Receive Attention

(a) Greet individual with “hello” or “good morning”.

Response is one of the following:

- (i) a verbal reply \_\_\_\_\_ (4)
- (ii) smile only \_\_\_\_\_ (3)
- (iii) eye contact only \_\_\_\_\_ (2)
- (iv) mutters \_\_\_\_\_ (1)
- (v) no change in behaviour to suggest response \_\_\_\_\_ (0)

Score \_\_\_\_\_ (4)

(b) Initiate a handshake (e.g., offer your hand to the person).

Response is one of the following:

- (i) grasps offered hand (self-initiated) \_\_\_\_\_ (3)
- (ii) other initiated (you take his/her hand) \_\_\_\_\_ (2)
- (iii) initiates letting go \_\_\_\_\_ (1)
- (iv) no response \_\_\_\_\_ (0)

Score \_\_\_\_\_ (3)

(c) Individual’s response to “How are you?” is one of the following:

- (i) verbal reply \_\_\_\_\_ (3)
- (ii) verbal but unclear \_\_\_\_\_ (2)
- (iii) non-verbal (eye gaze, nod, smile) \_\_\_\_\_ (1)
- (iv) no change in behaviour to suggest response \_\_\_\_\_ (0)

Score \_\_\_\_\_ (3)

(d) Address individual by name and give your name.

Response is one of the following:

- (i) a verbal reply \_\_\_\_\_ (4)
- (ii) facial responses (nods, smiles, looks) \_\_\_\_\_ (3)
- (iii) body language response (leans towards) \_\_\_\_\_ (2)
- (iv) mumbles \_\_\_\_\_ (1)
- (v) no response \_\_\_\_\_ (0)

Score \_\_\_\_\_ (4)

**Subtotal** \_\_\_\_\_ (14)

(1. a-d)



## 2. To Engage/Participate in Conversation

Initiate a topic of conversation with the individual. Response is *one* from topic and verbal, and *one* from non-verbal.

### (a) Topic

Stays on topic	_____ (2)
Relates improbable events	_____ (1)
No response to topic	_____ (0)
Score	_____ (2)

### (b) Verbal

Distinct verbal response	_____ (2)
Indistinct verbal response	_____ (1)
No verbal response	_____ (0)
Score	_____ (2)

### (c) Non-verbal

Takes turns, looks, listens, or nods	_____ (1)
No response	_____ (0)
Score	_____ (1)
<b>Subtotal</b>	_____ (5)

(2. a-c)

## 3. Humour Appreciation

(a) Inform individual that you have a cartoon you would like to show him/her. Show cartoon.

Response is *one* of the following:

Laughs out loud or makes relevant comments	_____ (3)
Laughs quietly	_____ (2)
Smiles	_____ (1)
No response	_____ (0)
Score	_____ (3)

(b) Inform individual that you have a joke you would like to tell him/her. Tell a *short* joke which is non-prejudicial and non-controversial. Keep a straight face at the punch line. Example: "A kangaroo walked into a bar and asked the bartender for a beer. The bartender gave the kangaroo a beer and said, 'That'll be 5 dollars.' Later the bartender returned and said 'We don't get many kangaroos in here.' The kangaroo said, 'I'm not surprised, at these prices.'" Response is *one* of the following:

Laughs at punch line or makes relevant comments	_____ (3)
Changes facial expression at the punch line	_____ (2)
Unexpected response at punch line (e.g., crying, anger, etc.)	_____ (1)
No response	_____ (0)

Score \_\_\_\_\_ (3)

**Subtotal** \_\_\_\_\_ (6)

(3. a-b)

### Social Abilities Score

(a) Total score achieved = \_\_\_\_

(add subtotals)

(b) Total score possible = 25

(c) % Score =  $\frac{(a)}{(b)} \times 100$

### INTERACTIONAL ABILITIES

#### 1. Comprehension Abilities

##### (a) Understanding of Commands

Yes No

(1) (0)

##### (i) One-Part - Self

Ask individual to follow 4, 1-part (1 verb, 1 noun) commands relating to self:

Touch your nose.

\_\_\_\_\_

Raise your arms.

\_\_\_\_\_

Point to your feet.

\_\_\_\_\_

Close your eyes.

\_\_\_\_\_

##### (ii) One-Part - Object

Ask individual to follow 4, 1-part (1 verb, 1 noun) commands relating to objects:

Point to the ceiling.

\_\_\_\_\_

Open the book.

\_\_\_\_\_

Touch the chair.

\_\_\_\_\_

Pick up the cup.

\_\_\_\_\_

##### (iii) Two-Part - Self

Ask individual to follow 3, 2-part (2 verbs, 2 nouns) commands relating to self:

Stamp your feet and then close your eyes.

\_\_\_\_\_

Touch your cheek and pat your head.

\_\_\_\_\_

Blow through your lips and then point to your teeth.

\_\_\_\_\_

##### (iv) Two-Part - Object

Ask individual to follow 3, 2-part (2 verbs, 2 nouns) commands relating to objects:

Give me the pen, then point to the window.

\_\_\_\_\_

Touch the chair and point to the bed.

\_\_\_\_\_

Look at the floor and touch my ring.

\_\_\_\_\_

(v) Three-Part - Simple

Ask individual to follow 2 simple (1 verb, 3 nouns) 3-part commands:

Point to your knees, then point to your head, then point  
to your stomach.

\_\_\_\_\_

Pick up the pen, pick up the cloth, and then pick up the spoon.

\_\_\_\_\_

(vi) Three-Part - Complex

Direct individual to follow two complex (3 verbs, 3 nouns) 3-part commands:

Point to my face, raise your arms, and clap your hands.

\_\_\_\_\_

Put your hands on the chair arms, slide your bottom forward,  
and stand on your feet.

\_\_\_\_\_

Score \_\_\_\_\_ (18)

(b) Reading Comprehension

For the following, show the individual written commands of increasing complexity (1-part to 3-part commands). Each command should be on a separate page or card and be written large enough for the person to see. Present one at a time. Ask the individual to follow through on the written command. Then ask the person to read the command aloud.

(i) One-Part

Ask individual to follow through on 3, 1-part commands. Ask the person to read the command aloud:

	Follow through	No	Read	No
	(1)	(0)	(1)	(0)
Point to the ceiling.	_____	_____	_____	_____
Touch my arm.	_____	_____	_____	_____
Hand me the pen.	_____	_____	_____	_____

(ii) Two-Part

Repeat and score for 3, 2-part written commands:

Raise your arm(s) and close your eyes.	_____	_____	_____	_____
Point to the ceiling and touch my arm.	_____	_____	_____	_____
Grasp the arms of the chair and turn your head.	_____	_____	_____	_____

## Caregiving Strategies for Older Adults with Delirium, Dementia and Depression

	Follow through (1)	No (0)	Read (1)	No (0)
(iii) Three-Part				
Repeat and score for 2, 3-part written commands:				
Point to the floor, touch the arm of the chair and then take my hand.	_____	_____	_____	_____
Put your hands on your knees, look at me and count to three.	_____	_____	_____	_____
Score:				
Follow through _____ (8) + Read _____ (8) = _____ (16)				
<b>Subtotal</b>				_____ (34)
<b>(1. a-b)</b>				

### 2. Expression Abilities

#### (a) Verbal object identification

Use 4 objects, which are familiar and seen daily, e.g., pen, comb, fork, spoon. Each is held up and the person is asked to name the object.

	Yes (1)	No (0)
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
Score		_____ (4)
	Yes (1)	No (0)

#### (b) Word Retrieval

Completes the last word of 4 familiar sentences:

The grass is _____ (green).	_____	_____
Ice is _____ (cold).	_____	_____
Violets are _____ (blue).	_____	_____
They fought like cats and _____ (dogs).	_____	_____
Score		_____ (4)

#### (c) Description

Ask the individual to describe the room in which the assessment is taking place:

Description includes 4 or more objects (including floor, ceiling, walls) used in sentence form.	_____ (5)
Description includes 4 or more objects but sentences are incomplete.	_____ (4)
Description includes less than 4 objects but they are correct.	_____ (3)
Description includes less than 4 objects but they are incorrect.	_____ (2)
Verbal response attempted but no object words used.	_____ (1)
No response or verbal reaction.	_____ (0)
Score	_____ (5)

(d) Written Expression

(i) Show individual an object and ask individual to write its name: e.g., cup, pen, book:

	Yes	No
	(1)	(0)
_____	_____	_____
_____	_____	_____
_____	_____	_____

(ii) Show the individual 3 familiar objects and ask him/her to write what these objects are used for: e.g., to drink, to write, to read

	Yes	No
	(1)	(0)
_____	_____	_____
_____	_____	_____
_____	_____	_____
Score	_____ (6)	
<b>Subtotal</b>	_____ (19)	
(2. a-d)		

Interactional Abilities Score

(a) Total score achieved = \_\_\_\_\_  
(add subtotals)

(b) Total score possible = 53

(c) % Score =  $\frac{(a)}{(b)} \times 100$

INTERPRETIVE ABILITIES

1. Recognition

	Yes	No
	(1)	(0)
(a) Self-Recognition		
(i) identifies self in mirror	_____	_____
(ii) ask person to read her/his own name and then ask whose name it is	_____	_____
Score	_____ (2)	

(b) Facial Affect Recognition

Inform individual that you would like him/her to tell you how the person in the picture is feeling by the expression on his/her face. Record description. If no verbal description, ask individual to choose if facial expression is sad, angry or happy.

	Yes	No
(i) sad	_____	_____
(ii) angry	_____	_____
(iii) happy	_____	_____
Score	_____ (3)	

(c) Object Recognition by Touch

(i) Ask individual to close eyes and identify 4 small objects placed in hand, one at a time by touch (e.g., comb, ring, key, spoon, or fork).

Yes	No
_____	_____
_____	_____
_____	_____
_____	_____

(ii) Ask individual to close eyes. Put large cup in one hand and a small cup in the other. Ask individual to identify the hand holding the larger cup.

Yes	No
_____	_____
Score	_____ (5)

(d) Recognition of Time

(i) Clock

Show the individual a drawing of a clock showing a specific on-the-hour time and ask the person to say what time is indicated on the clock.

Yes	No
_____	_____

Show individual a drawing of a clock showing hour and minute time and ask the person to say what time is indicated on the clock.

Yes	No
_____	_____
Score	_____ (2)

(ii) Date

Show individual a monthly calendar and ask to point out two dates.

_____	_____
_____	_____

Point to two dates on a monthly calendar and ask individual to read these dates.

_____	_____
_____	_____

Score	_____ (4)
<b>Subtotal</b>	<b>_____ (16)</b>
<b>(1. a-d)</b>	

## 2. Recall

### (a) Recall of familiar objects and places (FACT test).

Ask individual to recall as many fruits as possible. Repeat for animals, colours, and towns

	3 (8-10 Items)	2 (5-7)	1 (1-4)	0 (0)
Fruits	_____	_____	_____	_____
Animals	_____	_____	_____	_____
Colours	_____	_____	_____	_____
Towns	_____	_____	_____	_____
			Score	_____ (12)
			Subtotal	_____ (12)

## 3. Feeling States

### (a) Subjective

Inform the individual that you would like to talk with him/her about how he/she has been feeling in the last week. When asking the following questions, it may be necessary to preface with probes (e.g., “Do you have feelings now of \_\_\_\_\_?” or “Have you ever had feelings of \_\_\_\_\_?”).

- (i) sadness (no) \_\_\_\_\_
- (ii) anxiety (no) \_\_\_\_\_
- (iii) happiness (yes) \_\_\_\_\_
- (iv) worry (no) \_\_\_\_\_
- (v) contentment (yes) \_\_\_\_\_
- (vi) boredom (no) \_\_\_\_\_

Score 1 if answers given are as shown. Score 0 if answers given are not shown

Score \_\_\_\_\_ (6)

Subtotal \_\_\_\_\_ (6)

### (b) Depression

Suspect depression if the individual expresses “no” to (iii) and (v) and “yes” to (i) (ii) (iv) and (vi). Refer to doctor.

## Interpretive Abilities Score

(a) Total score achieved = \_\_\_\_\_ (b) Total score possible = 34

(add subtotals)

(c) % Score =  $\frac{(a)}{(b)} \times 100$

## FINAL SCORE

Total Possible Score \_\_\_\_\_ (151) % of total possible score \_\_\_\_\_

Developed by Pam Dawson, Donna Wells and Karen Kline.

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Dawson, P. Wells, D.L., Kline, K. (1993). *Enhancing the Abilities of Persons with Alzheimer's and Related Dementias: A Nursing Perspective*. New York: Springer Publishing Co.



## Appendix Q: Pain Assessment in Advanced Dementia (PAINAD)

### Item definitions

#### Breathing

1. **Normal breathing.** DESCRIPTION: Normal breathing is characterized by effortless, quiet, rhythmic (smooth) respirations.
2. **Occasional labored breathing.** DESCRIPTION: Occasional labored breathing is characterized by episodic bursts of harsh, difficult, or wearing respirations.
3. **Short period of hyperventilation.** DESCRIPTION: Short period of hyperventilation is characterized by intervals of rapid, deep breaths lasting a short period of time.
4. **Noisy labored breathing.** DESCRIPTION: Noisy labored breathing is characterized by negative sounding respirations on inspiration or expiration. They may be loud, gurgling, wheezing. They appear strenuous or wearing.
5. **Long period of hyperventilation.** DESCRIPTION: Long period of hyperventilation is characterized by an excessive rate and depth of respirations lasting a considerable time.
6. **Cheyne-Stokes respirations.** DESCRIPTION: Cheyne- Stokes respirations are characterized by rhythmic waxing and waning of breathing from very deep to shallow respirations with periods of apnea (cessation of breathing).

#### Negative Vocalization

1. **None.** DESCRIPTION: None is characterized by speech or vocalization that has a neutral or pleasant quality.
2. **Occasional moan or groan.** DESCRIPTION: Occasional moaning is characterized by mournful or murmuring sounds, wails, or laments. Groaning is characterized by louder than usual inarticulate involuntary sounds, often abruptly beginning and ending.
3. **Low level speech with a negative or disapproving quality.** DESCRIPTION: Low level speech with a negative or disapproving quality is characterized by muttering, mumbling, whining, grumbling, or swearing in a low volume with a complaining, sarcastic, or caustic tone.

4. **Repeated troubled calling out.** DESCRIPTION: Repeated troubled calling out is characterized by phrases or words being used over and over in a tone that suggests anxiety, uneasiness, or distress.
5. **Loud moaning or groaning.** DESCRIPTION: Loud moaning or groaning is characterized by mournful or murmuring sounds, wails, or laments in much louder than usual volume. Loud groaning is characterized by louder than usual inarticulate involuntary sounds, often abruptly beginning and ending.
6. **Crying.** DESCRIPTION: Crying is characterized by an utterance of emotion accompanied by tears. There may be sobbing or quiet weeping.

## Facial Expression

1. **Smiling or inexpressive.** DESCRIPTION: Smiling is characterized by upturned corners of the mouth, brightening of the eyes, and a look of pleasure or contentment. Inexpressive refers to a neutral, at ease, relaxed, or blank look.
2. **Sad.** DESCRIPTION: Sad is characterized by an unhappy, lonesome, sorrowful, or dejected look. There may be tears in the eyes.
3. **Frightened.** DESCRIPTION: Frightened is characterized by a look of fear, alarm, or heightened anxiety. Eyes appear wide open.
4. **Frown.** DESCRIPTION: Frown is characterized by a downward turn of the corners of the mouth. Increased facial wrinkling in the forehead and around the mouth may appear.
5. **Facial grimacing.** DESCRIPTION: Facial grimacing is characterized by a distorted, distressed look. The brow is more wrinkled as is the area around the mouth. Eyes may be squeezed shut.

## Body Language

1. **Relaxed.** DESCRIPTION: Relaxed is characterized by a calm, restful, mellow appearance. The person seems to be taking it easy.
2. **Tense.** DESCRIPTION: Tense is characterized by a strained, apprehensive or worried appearance. The jaw may be clenched (exclude any contractures).
3. **Distressed pacing.** DESCRIPTION: Distressed pacing is characterized by activity that seems unsettled. There may be a fearful, worried, or disturbed element present. The rate may be faster or slower.

4. **Fidgeting.** DESCRIPTION: Fidgeting is characterized by restless movement. Squirming about or wiggling in the chair may occur. The person might be hitching a chair across the room. Repetitive touching, tugging, or rubbing body parts can also be observed.
5. **Rigid.** DESCRIPTION: Rigid is characterized by stiffening of the body. The arms and/or legs are tight and inflexible. The trunk may appear straight and unyielding (exclude any contractures).
6. **Fists clenched.** DESCRIPTION: Fists clenched is characterized by tightly closed hands. They may be opened and closed repeatedly or held tightly shut.
7. **Knees pulled up.** DESCRIPTION: Knees pulled up is characterized by flexing the legs and drawing the knees up toward the chest. An overall troubled appearance (exclude any contractures).
8. **Pulling or pushing away.** DESCRIPTION: Pulling or pushing away is characterized by resistiveness upon approach or to care. The person is trying to escape by yanking or wrenching him or herself free, or shoving you away.
9. **Striking out.** DESCRIPTION: Striking out is characterized by hitting, kicking, grabbing, punching, biting, or other form of personal assault.

#### Consolability

1. **No need to console.** DESCRIPTION: No need to console is characterized by a sense of well-being. The person appears content.
2. **Distracted or reassured by voice or touch.** DESCRIPTION: Distracted or reassured by voice or touch is characterized by a disruption in the behaviour when the person is spoken to or touched. The behaviour stops during the period of interaction with no indication that the person is at all distressed.
3. **Unable to console, distract or reassure.** DESCRIPTION: Unable to console, distract or reassure is characterized by the inability to sooth the person or stop a behavior with words or actions. No amount of comforting, verbal or physical, will alleviate the behaviour.

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Warden, V., Hurley, A.C., & Volicer, L. (2003). Development and psychometric evaluation of the pain assessment in advanced dementia (PAINAD) scale. *Journal of the American Medical Directors Association*, (January/February), 9-15.

Appendix Q: Pain Assessment in Advanced Dementia (PAINAD)

	0	1	2	Score
Breathing Independent of vocalization	Normal	Occasional labored breathing Short period of hyperventilation	Noisy labored breathing Long period of hyperventilation Cheyne-stokes respirations	
Negative Vocalization	None	Occasional moan or groan Low level speech with a negative or disapproving quality	Repeated troubled calling out Loud moaning or groaning Crying	
Facial expression	Smiling, or inexpressive	Sad. Frightened. Frown	Facial grimacing	
Body Language	Relaxed	Tense. Distressed pacing. Fidgeting	Rigid. Fists clenched. Knees pulled up. Pulling or pushing away Striking out	
Consolability	No need to console	Distracted or reassured by voice or touch	Unable to console, distract or reassure	
				TOTAL

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Warden, V., Hurley, A.C., & Volicer, L. (2003). Development and Psychometric evaluation of the pain assessment in advanced dementia (PAINAD) scale. *Journal of the American Medical Directors Association, (January/February)*, 9-15.



# Appendix R: Individualized Dysfunctional Behaviour Rating Instrument (IDBRI)

Process and use of this scale:

1. Identify 1-4 problematic behaviours to target.
2. Monitor these for 72 hours.
3. Choose intervention to target the behaviour and implement with team.
4. Continue to rate frequencies and evaluate every 72 hours.
5. If behaviour not reduced, alter intervention and reassess.

Frequencies:

- 0 – never
- 1 – once per shift
- 2 – twice per shift
- 3 – several times per shift
- 4 – constantly

Please circle the number that corresponds to the frequency on your shift.

Date:		
Shift: 0700 – 1500	1500 - 2100	2100 – 0700
Behaviours	Behaviours	Behaviours
1. Yelling 0 1 2 3 4	1. Yelling 0 1 2 3 4	1. Yelling 0 1 2 3 4
2. Crying 0 1 2 3 4	2. Crying 0 1 2 3 4	2. Crying 0 1 2 3 4
3. Banging on things 0 1 2 3 4	3. Banging on things 0 1 2 3 4	3. Banging on things 0 1 2 3 4
4. Up at night 0 1 2 3 4	4. Up at night 0 1 2 3 4	4. Up at night 0 1 2 3 4
0 1 2 3 4	0 1 2 3 4	0 1 2 3 4

Developed by: Geriatric Consultation Team, Henderson Site, Hamilton Health Sciences, 1995.  
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# Appendix S: Cohen-Mansfield Agitation Inventory

Client: \_\_\_\_\_

## Frequency

- 1 = Never
- 2 = Less than once a week
- 3 = Once or twice a week
- 4 = Several times a week
- 5 = Once or twice a day
- 6 = Several times a day
- 7 = Several times an hour
- 9 = Don't know

## Disruptiveness

- 1 = Not at all
- 2 = A little
- 3 = Moderately
- 4 = Very much
- 5 = Extremely
- 9 = Don't know

Please read each of the 30 agitated behaviours, and circle the frequency and disruptiveness of each during the past two weeks. (Level of disruptiveness: How disturbing it is to staff, other residents, or family members. If disruptive to anyone, rate the highest it is for those for whom it disrupts.)

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	Frequency	Disruptiveness
1. Pace, aimless wandering	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
2. Inappropriate dress, disrobing	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
3. Spitting (include at meals)	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
4. Cursing or verbal aggression	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
5. Constant unwarranted request attention or help	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
6. Repetitive sentences/questions	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
7. Hitting (including self)	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
8. Kicking	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
9. Grabbing onto people	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
10. Pushing	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
11. Throwing things	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
12. Strange noises (weird laughter or crying)	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
13. Screaming	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
14. Biting	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
15. Scratching	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
16. Trying to get to a different place (e.g., out of the room or building)	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
17. Intentional falling	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
18. Complaining	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
19. Negativism	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
20. Eating/drinking/inappropriate substances	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
21. Hurt self or others (with cigarette, hot water, etc.)	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
22. Handling things inappropriately	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
23. Hiding things	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
24. Hoarding things	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
25. Tearing things or destroying property	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
26. Performing repetitious mannerisms	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
27. Making verbal sexual advances	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
28. Making physical sexual advances	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
29. General restlessness	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9
30. Other inappropriate behaviour. Specify: _____	1 2 3 4 5 6 7 9	1 2 3 4 5 6 7 9

Cohen-Mansfield, 1986. All rights reserved.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Reference: Cohen-Mansfield, J. (1986). Agitated behaviours in the elderly II: Preliminary results in the cognitively deteriorated. *Journal of the American Geriatrics Society*, 34(10), 722-727.

Cohen-Mansfield, J., Marx, M.S., & Rosenthal, A.S. (1989). A description of agitation in a nursing home. *Journal of Gerontology*, 44, M77-M84.

## Appendix T: Care Strategies for Dementia

### Early-Stage Manifestations and Behavioural Interventions

Manifestations	Behavioural Interventions
<ul style="list-style-type: none"> <li>• Impaired recall of recent events</li> </ul>	<ul style="list-style-type: none"> <li>• Use reminders (notes, single-day calendars, cues)</li> <li>• Talk with the client about recent events</li> </ul>
<ul style="list-style-type: none"> <li>• Impaired functioning, especially complex tasks</li> <li>• Gradual withdrawal from activities</li> <li>• Lowered tolerance of new ideas and changes in routine</li> </ul>	<ul style="list-style-type: none"> <li>• Avoid stressful situations</li> <li>• Do not ask for more than the client can do</li> <li>• Keep the environment, schedule, routine the same</li> <li>• Maintain normal mealtime routine</li> <li>• Have items in the same place and in view</li> </ul>
<ul style="list-style-type: none"> <li>• Difficulty finding words</li> </ul>	<ul style="list-style-type: none"> <li>• Anticipate what the client is trying to say</li> <li>• Provide word or respond to thought/feeling</li> </ul>
<ul style="list-style-type: none"> <li>• Repetitive statements</li> </ul>	<ul style="list-style-type: none"> <li>• Be tolerant and respond like it is the first time stated or heard</li> </ul>
<ul style="list-style-type: none"> <li>• Decreased judgment and reasoning</li> </ul>	<ul style="list-style-type: none"> <li>• Assess safety of driving and other desired activities</li> <li>• Allow performance of skills as long as safe</li> </ul>
<ul style="list-style-type: none"> <li>• Becoming lost</li> </ul>	<ul style="list-style-type: none"> <li>• Accompany on walks</li> <li>• Provide safe and secure walking area</li> </ul>
<ul style="list-style-type: none"> <li>• Inconsistency in ordinary tasks of daily living</li> </ul>	<ul style="list-style-type: none"> <li>• Ignore inconsistencies</li> <li>• Help to maintain consistency by keeping needed items in view and maintaining routines</li> </ul>
<ul style="list-style-type: none"> <li>• Increasing tendency to misplace things</li> </ul>	<ul style="list-style-type: none"> <li>• Keep items in the same place and in view</li> <li>• Find things and replace or hand to the client without focusing on the forgetfulness</li> </ul>
<ul style="list-style-type: none"> <li>• Narrowing of interest</li> <li>• Living in the past</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain familiar social, physical, mental, and work activities</li> </ul>
<ul style="list-style-type: none"> <li>• Self-centred thoughts; restlessness or apathy</li> </ul>	<ul style="list-style-type: none"> <li>• Focus on the client and listen</li> <li>• Allow pacing or sleeping</li> </ul>
<ul style="list-style-type: none"> <li>• Preoccupation with physical functions</li> </ul>	<ul style="list-style-type: none"> <li>• Assist in maintaining normal physical functions (basic and instrumental activities of daily living)</li> </ul>

## Intermediate-Stage Manifestations and Environmental Interventions

Manifestations	Behavioural Interventions
<ul style="list-style-type: none"> <li>• Increased forgetfulness (meals, medications, people, self)</li> </ul>	<ul style="list-style-type: none"> <li>• Place food where client can see and reach it</li> <li>• Hand medications to client</li> <li>• Remove mirrors</li> </ul>
<ul style="list-style-type: none"> <li>• Untidiness, hoarding, rummaging</li> </ul>	<ul style="list-style-type: none"> <li>• Put things away as desired; do not expect client to put them away</li> <li>• Provide a chest of drawers for hoarding or rummaging</li> </ul>
<ul style="list-style-type: none"> <li>• Difficulty with basic activities of daily living</li> </ul>	<ul style="list-style-type: none"> <li>• Keep needed objects in sight/reach</li> <li>• Do for the client what he or she cannot, but allow the client to do as much as possible</li> <li>• Provide assistive equipment: shower stool, elevated seat</li> </ul>
<ul style="list-style-type: none"> <li>• Wandering, becoming lost</li> </ul>	<ul style="list-style-type: none"> <li>• Close and perhaps lock doors on stairways and rooms that the client should not access</li> <li>• Fence the yard</li> <li>• Place cues to help recognize rooms or objects</li> <li>• Avoid physical and chemical restraints while providing areas for wandering and resting</li> </ul>
<ul style="list-style-type: none"> <li>• Uncoordinated motor skills, poor balance</li> </ul>	<ul style="list-style-type: none"> <li>• Have non-shiny floors without contrasting colours or patterns.</li> <li>• Provide soft environment.</li> </ul>
<ul style="list-style-type: none"> <li>• Repetition of words or activities</li> </ul>	<ul style="list-style-type: none"> <li>• Provide environment where repetitive activities can safely be done</li> </ul>
<ul style="list-style-type: none"> <li>• Reversed sleep-wake cycles</li> </ul>	<ul style="list-style-type: none"> <li>• Provide activities in daytime</li> <li>• Provide room where the client can safely be up alone for a time.</li> <li>• Put back to bed with usual bedtime routine</li> </ul>
<ul style="list-style-type: none"> <li>• Loss of contact with reality; hallucinations, confusion</li> </ul>	<ul style="list-style-type: none"> <li>• Make available materials for activities that the client enjoyed throughout life</li> <li>• Keep picture albums with old pictures</li> <li>• Keep the client's room location and layout unchanged</li> <li>• Remove confusing stimuli</li> <li>• Ignore hallucinations unless they are distressing to the client; remain calm; act normally</li> </ul>
<ul style="list-style-type: none"> <li>• Withdrawal</li> </ul>	<ul style="list-style-type: none"> <li>• Provide meaningful stimuli</li> <li>• Provide place for quiet time</li> </ul>
<ul style="list-style-type: none"> <li>• Agitation</li> </ul>	<ul style="list-style-type: none"> <li>• Remove objects that could be damaging</li> <li>• Provide space</li> </ul>
<ul style="list-style-type: none"> <li>• Impaired judgment</li> </ul>	<ul style="list-style-type: none"> <li>• Provide safe environment</li> <li>• Have unsafe objects out of sight</li> </ul>
<ul style="list-style-type: none"> <li>• Altered sensory-perceptual functioning</li> </ul>	<ul style="list-style-type: none"> <li>• Provide good lighting</li> <li>• Have non-shiny floors without contrasting colours or patterns</li> </ul>

Reprinted with permission.

Sparks, M. (2001). Assessment and management of Alzheimer's disease. Medscape [On-line]

Available: <http://www.medscape.com/viewarticle/408411>.



## Appendix U: Drugs That Can Cause Symptoms of Depression

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<b>Antihypertensives</b> Reserpine Methyldopa Propranolol Clonidine Hydralazine Guanethidine  <b>Antimicrobials</b> Sulfonamides Isoniazid  <b>Others</b> Cimetidine Cancer chemotherapeutic agents Alcohol	<b>Analgesics</b> <i>Narcotic</i> Morphine Codeine Meperidine Pentazocine Propoxyphene  <i>Non-narcotics</i> Indomethacin  <b>Cardiovascular Preparations</b> Digitalis Diuretics Lidocaine  <b>Hypoglycemic Agents</b>	<b>Antiparkinsonism Drugs</b> Levodopa  <b>Steroids</b> Corticosteroids Estrogen  <b>Psychotropic Agents</b> <i>Sedatives</i> Barbiturates Benzodiazepines Meprobamate  <i>Antipsychotics</i> Chlorpromazine Haloperidol Thiothixene  <i>Hypnotics</i> Chloral hydrate Benzodiazepines Flurazepam
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### References:

Kane, R. L., Ouslander, J. G., & Abrass, I. B. (1999). *Essentials of clinical geriatrics*. (4th ed.). New York: McGraw-Hill.

Levenson, A. J. & Hall, R. C. W. (1981). *Neuropsychiatric manifestations of physical disease in the elderly*. New York: Raven Press.

Piven M. L. S. (1998). Evidence-Based Protocol: Detection of depression in the cognitively intact older adult. In M. G. Titler (Series Ed.), *Series on Evidence-Based Practice for Older Adults*. Iowa City, IA: The University of Iowa College of Nursing Gerontological Nursing Interventions Research Center, Research Dissemination Core.

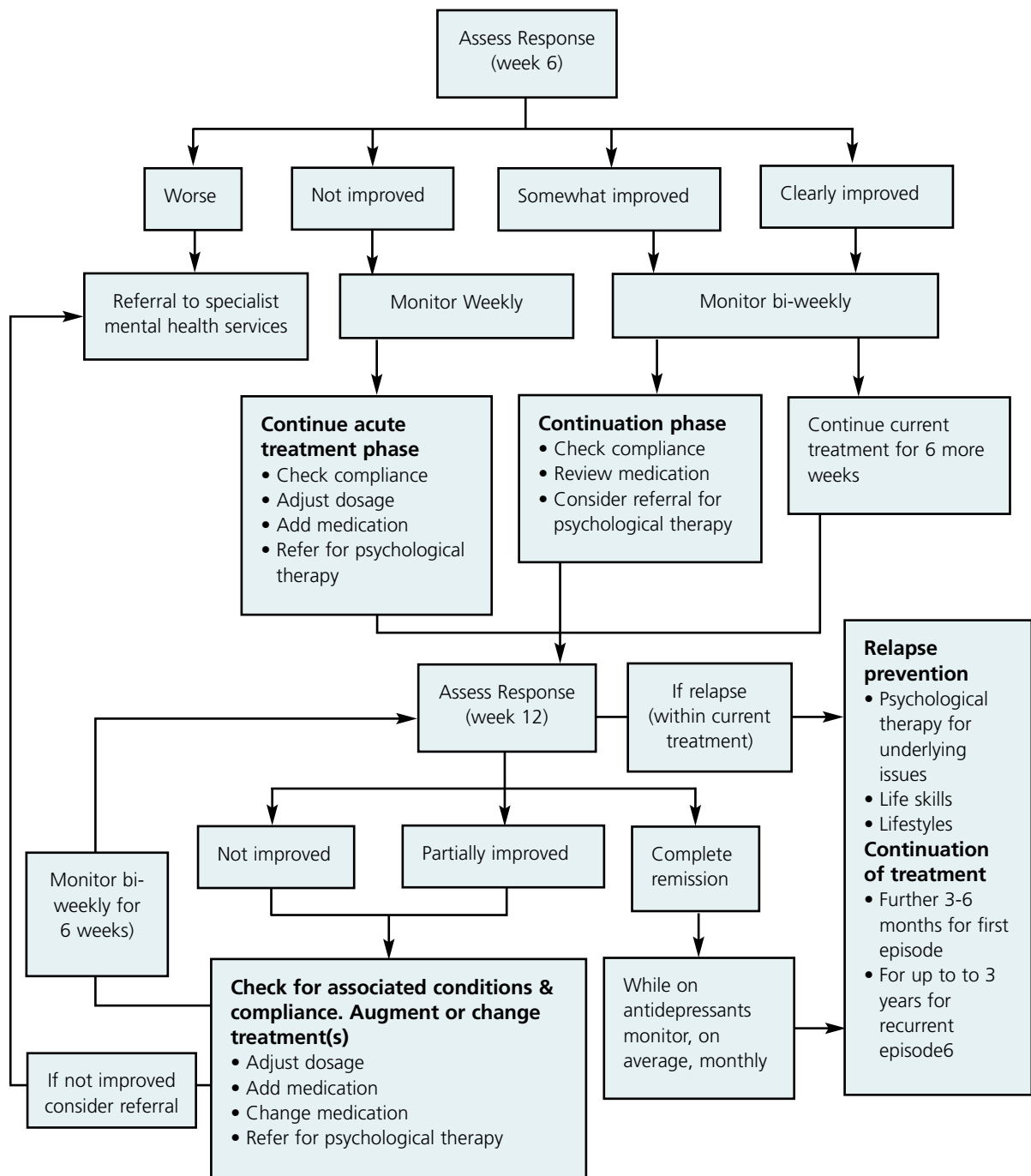
## Appendix V: Indications for the Selection of an Appropriate Psychological Therapy

Primary Objectives	Examples
1. Symptom removal	Cognitive-Behavioural and Interpersonal Psychotherapy
2. Restoration of normal psychological and occupational functioning	Case management; Cognitive-Behavioural, psychoeducational, occupational, marital or family therapy
3. Prevention of relapse/recurrence	Maintenance therapy (Cognitive-Behavioural, interpersonal, other)
4. Correction of “causal” psychological problems with secondary symptom resolution	Marital, family, cognitive, interpersonal, brief dynamic, and other therapy
5. Increased adherence to medication	Clinical case management, specific Cognitive-Behavioural, or other psychoeducational techniques or packages
6. Correction of secondary consequences of the major Depressive Disorder (e.g., marital discord, low self-esteem)	Occupational, marital, family interpersonal, cognitive therapy, other therapies focused on specific problems

Reprinted with permission: National Advisory Committee on Health and Disability (1996). *Guidelines for the treatment and management of depression by primary healthcare professionals*. New Zealand: New Zealand Guidelines Group.

## Appendix W: Outline of Key Factors in Continuing Treatment for Depression

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Reprinted with permission: National Advisory Committee on Health and Disability (1996). *Guidelines for the treatment and management of depression by primary healthcare professionals*. New Zealand: New Zealand Guidelines Group.

## Appendix X: Detection of Depression Monitor

For each client receiving the Detection of Major Depression protocol, the nurse/physician should complete the Detection of Depression Monitor on at least a weekly basis throughout the depression detection program. For each patient receiving the intervention, please keep a record of the changes observed in his or her client records.

### Criteria Key

Y - Yes/met criteria

N - No/criteria not met

J - Justified Variation/patient not included in the monitor (Note *why* patient is not Included)

Please place the appropriate key next to the two outcomes for each assessment period

Patient Record For At Risk Individual	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
<b>Outcome 1:</b> Patient record reveals that depression screen was completed.								
<b>Outcome 2:</b> Patient record reveals that further psychiatric evaluation was ordered as needed.								
<b>Comments:</b> Week 1: _____ Week 2: _____ Week 3: _____ Week 4: _____ Week 5: _____ Week 6: _____ Week 7: _____ Week 8: _____								

Reprinted with Permission:

Piven, M. L. S. (1998). Evidence-Based Protocol: Detection of depression in the cognitively intact older adult. In M. G. Titler (Series Ed.), *Series on Evidence-Based Practice for Older Adults* (p.16) Iowa City, IA: The University of Iowa College of Nursing Gerontological Nursing Interventions Research Center, Research Dissemination Core.

## Appendix Y: Medical Illnesses Associated with Depression

<p><b>Metabolic Disturbances</b> Dehydration Azotemia, uremia Acid-base disturbances Hypoxia Hypo and hypernatremia Hypo and hyperglycemia Hypo and hypercalcemia</p> <p><b>Cardiovascular</b> Congestive heart failure Myocardial infarction, angina</p> <p><b>Genitourinary</b> Urinary incontinence</p> <p><b>Other</b> Anemia (of any cause) Vitamin deficiencies Hematologic or other systemic malignancy</p>	<p><b>Endocrine</b> Hypo and hyperthyroidism Hyperparathyroidism Diabetes mellitus Cushing's disease Addison's disease</p> <p><b>Pulmonary</b> Chronic obstructive pulmonary disease Malignancy</p> <p><b>Musculoskeletal</b> Degenerative arthritis Osteoporosis with vertebral compression or hip fracture Polymyalgia rheumatica Paget's disease</p>	<p><b>Infections</b> <i>Viral</i> Pneumonia Encephalitis</p> <p><i>Bacterial</i> Pneumonia Urinary tract infection Meningitis Endocarditis</p> <p><b>Other</b> Tuberculosis Fungal meningitis Neurosyphilis Brucellosis</p> <p><b>Gastrointestinal</b> Malignancy (especially pancreatic) Irritable bowel Hepatitis Other (e.g., ulcer, diverticulosis)</p> <p><b>Neurological</b> Cerebrovascular disease Transient ischemic attacks Strokes Dementia (all types) Intracranial mass Primary or metastatic tumors Parkinson's disease</p>
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References:

Kane, R. L., Ouslander, J. G., & Abrass, I. B. (1999). *Essentials of clinical geriatrics*. (4th ed.). New York: McGraw-Hill.

Levenson, A. J. & Hall, R. C. W. (1981). *Neuropsychiatric manifestations of physical disease in the elderly*. New York: Raven Press.

Piven M .L. S. (1998). Evidence-Based Protocol: Detection of depression in the cognitively intact older adult. In M. G. Titler (Series Ed.), *Series on Evidence-Based Practice for Older Adults*. Iowa City, IA: The University of Iowa College of Nursing Gerontological Nursing Interventions Research Center, Research Dissemination Core.

## Appendix Z: Description of the Toolkit

### Toolkit: Implementing Clinical Practice Guidelines

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

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

1. Identifying a well-developed, evidence-based clinical practice guideline
2. Identification, assessment and engagement of stakeholders
3. Assessment of environmental readiness for guideline implementation
4. Identifying and planning evidence-based implementation strategies
5. Planning and implementing evaluation
6. Identifying and securing required resources for implementation

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* is available through the Registered Nurses Association of Ontario. The document is available in a bound format for a nominal fee, and is also available free of charge from the RNAO website. For more information, an order form or to download the *Toolkit*, please visit the RNAO website at [www.rnao.org/bestpractices](http://www.rnao.org/bestpractices)



## Best Practice Guideline

## CAREGIVING STRATEGIES FOR OLDER ADULTS WITH DELIRIUM, DEMENTIA AND DEPRESSION

Guideline supplement

### Revision Panel Members

**Dianne Rossy, RN, BN, MScN, GNC(C)**

#### Revision Panel Leader

Advanced Practice Nurse, Geriatrics  
The Ottawa Hospital &  
The Regional Geriatric Program  
Ottawa, Ontario

**Deborah Burne, RN, BA (Psych), CPMHN(C)**

Educator and Consultant  
Sheridan College & Institute of Technology &  
Advanced Learning  
Oakville, Ontario

**Katherine McGilton, RN, PhD**

Senior Scientist, Toronto Rehabilitation Institute  
Associate Professor, Lawrence S Bloomberg  
Faculty of Nursing, University of Toronto  
Toronto, Ontario

**Susan Phillips, RN, MScN, GNC(C)**

Geriatric Nurse Specialist  
The Ottawa Hospital, Civic Campus  
Ottawa, Ontario

**Athina Perivolaris, RN, BScN, MN**

Advanced Practice Nurse  
Nursing Practice and Professional Services  
Centre for Addiction and Mental Health  
Toronto, Ontario

**Tiziana Rivera, RN, BScN, MSc, GNC(C)**

Chief Practice Officer  
York Central Hospital  
Richmond Hill, Ontario

**Carmen Rodrigue, RN, BScN, MSc, CPMHN(C)**

Advanced Practice Nurse  
Bruyere Continuing Care  
Ottawa, Ontario

**Anne Stephens, RN, BScN, MEd, GNC(C)**

Clinical Nurse Specialist - Seniors Care  
Toronto Central CCAC  
Toronto, Ontario

**Ann Tassonyi, RN, BScN, GNC(C)**

Psychogeriatric Resource Consultant  
St. Catharines, Ontario

**Brenda Dusek, RN, BN, MN**

Program Manager  
International Affairs and Best Practice  
Guidelines Program  
Registered Nurses' Association of Ontario  
Toronto, Ontario

**Catherine Wood, BMOS**

Administrative Assistant  
International Affairs and Best Practice  
Guidelines Program  
Registered Nurses' Association of Ontario  
Toronto, Ontario

### Supplement Integration

Similar to the original guideline publication, this 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. This supplement should be used in conjunction with the original guideline: *Caregiving Strategies for Older Adults with Delirium, Dementia and Depression* (Registered Nurses Association of Ontario [RNAO], 2004) 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.

### Background

Nurses will continue to be instrumental in the provision of caregiving strategies for delirium, dementia and depression. These three diagnoses are often unrecognized among the geriatric population, due to their complexity, multi-faceted nature, lack of formal assessment, and under appreciation of their clinical consequences. Nurses must recognize and provide timely screening and tailored interventions for persons with delirium, dementia and depression to improve outcomes (RNAO, 2010).

All behaviours have meaning and often older adults exhibit responsive

behaviours such as agitation and anxiety because of an unmet need (e.g., physical, psychological, emotional, social, cognitive, environmental) as a response to circumstances within the social or physical environment that may be frustrating or frightening for the person (Dupuis, Wiersma, & Loiselle, 2004). Therefore, it is essential to assess the client's needs and to implement interventions that focus on meeting those needs (Dupuis & Wiersma, 2008).

Due to the high incidence of delirium in older persons (RNAO, 2010; Voyer, Cole, McCusker, St. Jacques, & Laplante, 2008) caregiving strategies will need to follow timely screening. Emerging evidence supports the best approach to delirium management is the identification of the underlying causes and avoidance of the term "confusion" in documentation (Voyer et al.) as it is not a useful term for outcome evaluation. Non-pharmacological caregiving strategies have had mixed





results and include: targeting risk factors; access to specialized geriatric expertise; review and reduction of medications; circadian rhythm and light therapy in the intensive care unit (ICU), and educational strategies for staff. There is little evidence to support pharmacological interventions (Hollyd-Leduc, Khandwala, & Sink, 2010).

Individuals with dementia are at risk for delirium (Feldman et al., 2008) and some degree of depressive symptoms, including anxiety and apathy which are common in the course of Alzheimer's disease (Feldman et al., 2004). Specific nursing care strategies can be implemented to positively affect the quality of a client's journey with dementia such as relating well, changing the environment, a focus on person's abilities and knowing the person (McGilton et al., 2007). Research continues to support effective nursing care strategies that are individualized, multimodal and tailored according to each individual's unique characteristics (Work Group on Alzheimer's Disease and Other Dementias, 2007). Protective approaches now encourage activities such as active brain exercises, physical activity and healthy diet (Alzheimer Society of Canada, 2010).

Prevalence rates for depression vary in the community, hospitals and long-term care settings (Canadian Coalition for Seniors' Mental Health [CCSMH], 2006b; RNAO, 2010). Treatment of depression in older adults is enhanced with maintenance of the treatment program for greater than 6-12 months (National Institute for Health and Clinical Excellence, 2009) and recognition that depression can reoccur, especially in those with previous history of depression. Emerging evidence suggests a need to continue the training of therapists in psychotherapies such as Cognitive Behavioural Therapy (National Institute for Health and Clinical Excellence, 2009).

## Revision Process

The Registered Nurses' Association of Ontario has made a commitment to ensure that this practice guideline is based on the best available evidence. In order to meet this commitment, a monitoring and revision process has been established for each guideline.

A panel of nurses was assembled for this review, comprised of members from the original development panel as well as other recommended individuals with particular expertise in this practice area. A structured evidence review based on the scope of the original guideline and supported by three clinical questions was conducted to capture the relevant literature and guidelines published since the publication of the original guideline in 2004. The following research questions were established to guide the literature review:

1. What are the caregiving strategies for nurses working with clients with delirium, dementia or depression?
2. What are the educational supports needed by nurses and other allied health care professionals to engage in caregiving strategies?
3. What are the organizational and administrative supports needed to support the caregiving strategies for clients with delirium, dementia or depression?

Initial findings regarding the impact of the current evidence, based on the original recommendations, were summarized and circulated to the review panel. The revision panel members were given a mandate to review the original guideline in light of the new evidence, specifically to ensure the validity, appropriateness and safety of the guideline recommendations as published in 2004.

## Literature Review

One individual searched an established list of websites for guidelines and other relevant content. The list was compiled based on existing knowledge of evidence-based practice websites and recommendations from the literature.

Members of the panel critically appraised 17 national and international guidelines, published since 2004, using the "Appraisal of Guidelines for Research and Evaluation" instrument (The AGREE Collaboration, 2001). From this review, the following nine guidelines were identified to inform the review processes:

- CCSMH. (2006a). National guidelines for seniors' mental health: The assessment and treatment of delirium. Toronto, ON: CCSMH.
- CCSMH. (2006b). National guidelines for seniors' mental health: The assessment and treatment of depression. Toronto, ON: CCSMH.
- CCSMH. (2006c). National guidelines for seniors' mental health: The assessment and treatment of mental health issues in long term care homes (focus on mood and behaviour symptoms). Toronto, ON: CCSMH.
- CCSMH. (2006d). National guidelines for seniors' mental health: The assessment of suicide risk and prevention of suicide. Toronto, ON: CCSMH.
- National Institute for Health and Clinical Excellence. (2009). Depression: The treatment and management of depression in adults. London, UK: National Institute for Health and Clinical Excellence.

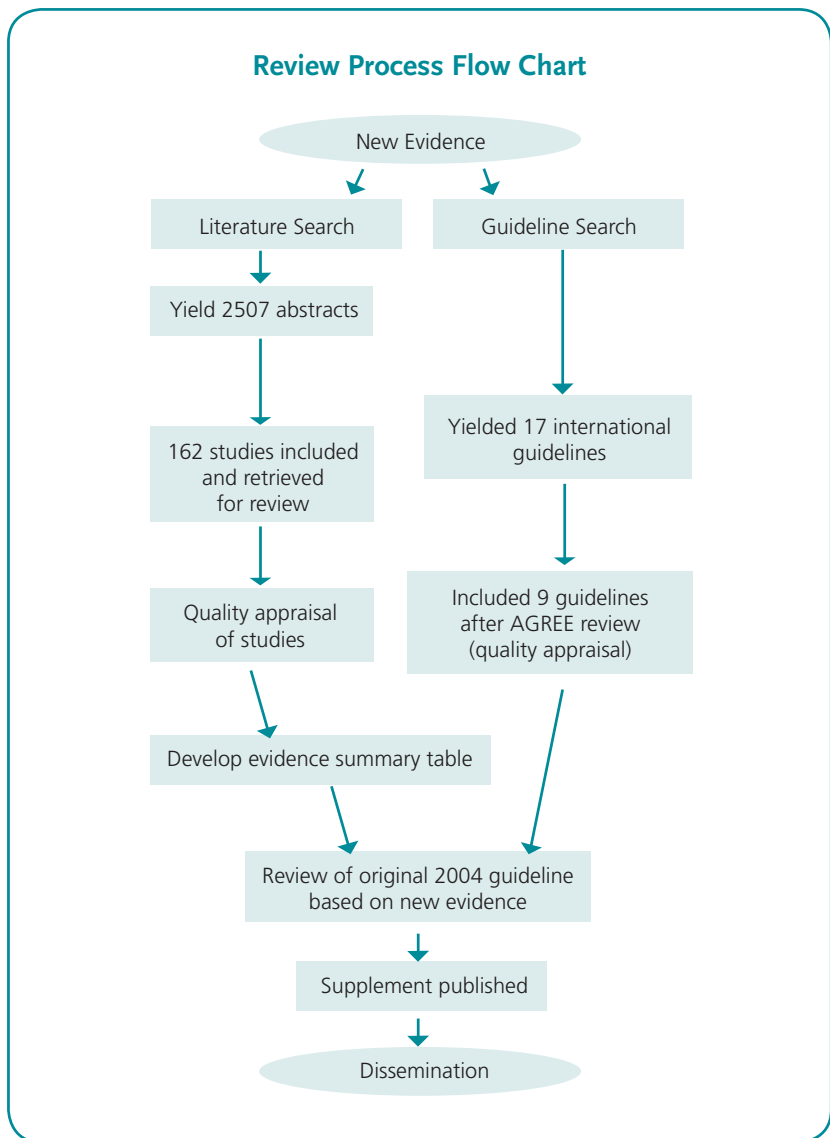


- New Zealand Guidelines Group. (2008). Identification of common mental disorders and management of depression in primary care: An evidence-based best practice guideline. Wellington, NZ: New Zealand Guidelines Group.
- RNAO. (2009). Assessment and care of adults at risk for suicidal ideation and behaviour. Toronto, Canada: RNAO.
- RNAO. (2010). Screening for delirium, dementia and depression in older adults (revised). Toronto, Canada: Registered Nurses' Association of Ontario.
- Work Group on Alzheimer's Disease and Other Dementias. (2007). Practice guideline for the treatment of patients with Alzheimer disease and other dementias of late life. Second Edition. Arlington, VA: American Psychiatric Association.

Concurrent with the review of existing guidelines, a search for recent literature relevant to the scope of the guideline was conducted with guidance from the Team Leader. A search of electronic databases, (Medline, CINAHL and EMBASE) was conducted by a health sciences librarian. A Research Assistant completed the inclusion/exclusion review, quality appraisal and data extraction of the retrieved studies, and prepared a summary of the literature findings. The comprehensive data tables and reference list were provided to all panel members.

## Review Findings

In October 2009, the panel was convened to achieve consensus on the need to revise the existing set of recommendations. A review of the most recent studies and relevant guidelines published since June 2004 does not support dramatic changes to the recommendations, but rather suggests some refinements and stronger evidence for the approach. A summary of the review process is provided in the Review/Revision Process flow chart.



# Summary of Evidence

The following content reflects the changes made to the original publication (2004) based on the consensus of the review panel. The literature review does not support dramatic changes to the recommendations, but rather suggests some refinements and stronger evidence for the approach.

✓ unchanged  
✎ changed  
+ additional information  
NEW new recommendation

**Changes have been made to the terminology** of the following recommendations:

• **Recommendation 1.5.7:**

- The term “behavioural interventions” has been changed to “**behavioural strategies**”, and the term “**disturbing behaviour**” has been changed to “**responsive behaviours**”. These changes reflect new language in regards to demonstrated client behaviours.
- The final sentence in the recommendation on restraints has been modified. The **revised recommendation** is as follows: Behavioural Strategies: Nurses have a role in the prevention, identification and implementation of delirium care approaches to minimize responsive behaviours of the person and provide a safe environment. Further, it is recommended that restraints should only be used as a last resort to prevent harm to self and others.

• **Recommendation: 2.8:**

- Terms have been changed to indicate nurses’ active role.
- The **revised recommendation** is as follows: Nurses caring for clients with dementia should be knowledgeable about pharmacological interventions and should contribute to the decisions and education regarding the risks and benefits of medication for targeted symptoms, monitor for efficacy and side effects, document response, and advocate for re-evaluation and withdrawal of psychotropics after a period of behavioural stability.

**A new recommendation has been added** to reflect the importance of prevention strategies for dementia as follows:

- **Recommendation 2.9:** Nurses caring for older adults should promote healthy aging and protective strategies to minimize the risk of future cognitive changes.
- **Recommendation 4.1 has revised terminology** related to Power of Attorney for personal care and finances. The term **finances has been changed** to **property** throughout the recommendation.







## Practice Recommendations

<p><b>Recommendations for Delirium</b></p> <p>1.1 Nurses should maintain a high index of suspicion for the prevention, early recognition and urgent treatment of delirium to support positive outcomes.</p> <p>(Level of Evidence = IIa)</p>	
<p><i>The discussion of evidence for this recommendation found on page 34 of the original guideline has been revised to reflect the additional literature supports. The following paragraph has been added regarding ongoing assessment for delirium in the critically ill in specialty areas:</i></p> <p><b>Discussion of Evidence</b></p> <p>Active surveillance of delirium using a reliable and validated screening tool such as the CAM-ICU or the Intensive Care Delirium Screening Checklist [ICDSC] (Bergeron, Dubois, Dumont, Dial, &amp; Skrobik, 2001) is an important caregiving strategy to support positive outcomes for the critically ill client population (Luetz et al., 2010; Martin et al., 2010; Pisani et al., 2006; Van den Boogaard et al., 2009; Wei, Fearing, Sternberg, &amp; Inouye, 2008). The CAM-ICU received the highest validity and specificity in comparison to other screening tools (Luetz et al.).</p> <p>It is estimated that up to 87% of ICU clients develop delirium, however studies indicate that delirium is severely under recognized in the ICU by Intensivists and ICU nurses (Spronk, Riekerk, Hofhuis, &amp; Rommes, 2009; Van den Boogaard et al.). Routine screening of all clients in the ICU for delirium is crucial to its successful management. Nurses working closely with clients in the ICU are able to detect, manage and even prevent delirium (Arend &amp; Christensen, 2009). The management of critically ill clients includes targeted monitoring of analgesia, sedation and delirium (Martin et al., 2010). Signs and symptoms of delirium fluctuate therefore routine screening should be performed at least every 8 to 12 hours (Martin et al.; Spronk et al.; Van den Boogaard et al.). Monitoring for delirium includes close attention to risk factors including anticholinergic medication, client factors (e.g., age, comorbidities, surgery, pain), severity of illness (use of sedatives, mechanical ventilation and intubation), psychological and social factors, environmental and iatrogenic factors (Martin et al.). Additionally, prophylactic maintenance of day-night rhythm, re-orientation methods, cognitive stimulation and early mobilization are important non-pharmacological treatment modalities (Martin et al.).</p>	
<p>Additional Literature Supports</p> <p>CCSMH (2006a)</p> <p>Ouimet et al. (2007)</p> <p>Potter &amp; George (2006)</p> <p>Rigney (2006)</p>	

<p>1.2 Nurses should use the diagnostic criteria from the Diagnostic and Statistical Manual (DSM) IV-R to assess for delirium, and document mental status observations of hypoactive and hyperactive delirium.</p> <p>(Level of Evidence = IV)</p>	✓
<p><i>The discussion of evidence for this recommendation found on page 35 of the original guideline has been revised to reflect the additional literature supports. The following paragraph has been added regarding prevention and implementation of multi-component intervention strategies for care once assessment is completed:</i></p> <p><b>Discussion of Evidence</b></p> <p>The RNAO (2010) outlines screening for types of delirium including subsyndromal delirium (SSD). It should be noted that some older adults who are hospitalized may never develop all the symptoms required for a DSM IV-R diagnosis of delirium; however, the client may present with some symptoms of delirium (Bergeron, Dubois, Dumont, Dial, &amp; Skrobik, 2001). These clients, while falling short of the threshold for “overt” clinical delirium by DSM IV-R for diagnosis, may have some clinically important SSD symptomology. The Intensive Care Delirium Screening Checklist (ICDSC), which is well correlated with a formal psychiatric diagnosis of delirium, may assist in the identification of SSD (Ouimet, et al. 2007). These clients are at significant risk of prolonged ICU and hospital length of stay (LOS) with poorer outcomes compared to those with no delirium.</p> <p>SSD occurs in 21% to 76% of older adult medical clients (Cole et al. 2008) and is highest among clients with pre-existing cognitive impairment (Voyer et al. 2008). Nurses should document and monitor any changes in client’s mental status and notify the interprofessional team immediately. Utilizing delirium prevention strategies and looking for reversible causes are important in the management of these clients and in improving outcomes.</p>	+
<p>Additional Literature Supports</p> <p>CCSMH (2010, in press; 2006a)</p> <p>Ceriana et al. (2009)</p> <p>Girard, Pandharipande, &amp; Ely (2008)</p> <p>Marcantonio et al. (2005)</p> <p>McCusker, Cole, &amp; Bellavance (2009)</p> <p>Tabet &amp; Howard (2009)</p> <p>Yang et al. (2009)</p>	+
<p>1.3 Nurses should initiate standardized screening methods to identify risk factors for delirium on initial and ongoing assessments.</p> <p>(Level of Evidence = IIa)</p>	✓
<p>The discussion of evidence for this recommendation found on page 36 and 37 of the original guideline has been revised to reflect the additional literature supports. The following additional paragraph has been added regarding the need to monitor for delirium at end-of-life:</p>	+





<p><b>Discussion of Evidence</b></p> <p>Emerging evidence supports that nurses who care for clients at the end of life should assess for delirium and liaise with the interprofessional team to implement treatment strategies that will reduce distress and preserve quality of life for the client and family (CCSMH, 2010, in press). Delirium is prevalent at the end of life and is present in 28-42% of clients admitted to palliative care units and up to 90% of clients with terminal illness (Breitbart &amp; Alici, 2008; Leonard et al., 2008). Management of delirium at end-of-life focuses on assessing and treating reversible causes in combination with environmental, psychological and pharmacological interventions to control symptoms (Harris, 2007). It is estimated that up to 50% of delirium episodes occurring in palliative care are reversible (Leonard et al.). Treating reversible causes of delirium such as dehydration and/or the use of psychoactive medications may improve quality of life and communication. Treatment for delirium needs to be balanced with other treatment needs such as pain relief or sedation and be administered according to symptom management guidelines (Fraser Health Authority, 2009).</p>	
<p>Additional Literature Supports</p> <p>CCSMH (2006a)</p> <p>Gemert van LA et al. (2007)</p> <p>Kelly, McClement, &amp; Chochinov (2006)</p> <p>Potter &amp; George (2006)</p> <p>Websites</p> <p>National Institute for the Care of the Elderly, When Someone Close to You is Dying, What You Can Expect and How You can Help - <a href="http://www.nicenet.ca/files/EOL-Booklet_(v.11).pdf">http://www.nicenet.ca/files/EOL-Booklet_(v.11).pdf</a></p> <p>Optimizing End-of-Life Care for Seniors - <a href="http://www.cihr-irsc.gc.ca/e/25210.html#4">http://www.cihr-irsc.gc.ca/e/25210.html#4</a></p> <p>American Academy of Hospice and Palliative Medicine: Clinical Guidelines and Order Sets for Delirium - <a href="https://www.aahpm.org/">https://www.aahpm.org/</a></p> <p>Promoting Seniors Mental Health In Cancer Care: A Guide for Front-line Care Providers - <a href="http://www.bcpqa.bc.ca/CancerManual.pdf">http://www.bcpqa.bc.ca/CancerManual.pdf</a></p>	+
<p>1.4 Nurses have a role in prevention of delirium and should target prevention efforts to the clients' individual risk factors.</p> <p>(Level of Evidence = 1b)</p>	✓
<p><i>The discussion of evidence for this recommendation found on page 38 of the original guideline has been revised to reflect the additional literature supports. The following paragraph has been added regarding prevention of delirium:</i></p> <p><b>Discussion of Evidence</b></p> <p>Nurses within the interprofessional team have a role in the primary prevention of delirium and can identify individual predisposing risk factors such as cognitive and visual impairment upon admission to hospital. Targeted prevention efforts include monitoring for precipitating factors such as dehydration, catheter use and infections in 'at risk' vulnerable older adults. The rate of hospital acquired delirium is considered a quality indicator of hospital care in frail older adults (Alagiakrishnan et al, 2009; Arora et al. 2007). Nurses play a key role in assessing, managing and preventing delirium in all practice</p>	+

settings. The Hospital Elder Life Program [HELP]: A Model of Care to Prevent Cognitive and Functional Decline in Older Hospitalized Patients is one example of a comprehensive program that details preventative interventions. It targets the following six risk factors in the elderly: cognitive impairment, sleep deprivation, immobility, visual impairment, hearing impairment and dehydration. This program was effective in reducing delirium by approximately 25% in the medically complex or surgical hospitalized older adults (Inouye et al. 2007; Inouye, Bogardus, Baker, Summers, & Cooney, 2000). An individualized approach towards prevention is recommended (CCSMH, 2006a). Nurses and the interprofessional team have a role in knowing the risks of delirium and with close monitoring can provide early identification of impending delirium allowing care providers to target potential causes (Inouye et al.).	
Additional Literature Supports Josh (2007) Lundstrom et al. (2005) Potter & George (2006)	+
1.5 In order to target the individual root causes of delirium, nurses working with other disciplines must select and record multi-component care strategies and implement them simultaneously to prevent delirium.  (Level of Evidence = III)	✓
1.5.1 Consultation/Referral: Nurses should initiate prompt consultation to specialized services.	✓
1.5.2 Physiological Stability/Reversible Causes Nurses are responsible for assessing, interpreting, managing, documenting and communicating the physiological status of their client on an ongoing basis.	✓
1.5.3 Pharmacological Nurses need to maintain awareness of the effect of pharmacological interventions, carefully review the older adults' medication profiles and report medications that may contribute to potential delirium.	✓
1.5.4 Environmental Nurses need to identify, reduce or eliminate environmental factors that may contribute to delirium.	✓
1.5.5 Education Nurses should maintain current knowledge of delirium and provide delirium education to the older adult and family.	✓

<p>1.5.6 Communication/Emotional Support</p> <p>Nurses need to establish and maintain a therapeutic supportive relationship with older adults based on the individual's social and psychological aspects.</p>	
<p>1.5.7 Behavioural Strategies</p> <p>Behavioural Strategies: Nurses have a role in the prevention, identification and implementation of delirium care approaches to minimize responsive behaviours of the person and provide a safe environment. Further, it is recommended that restraints should only be used as a last resort to prevent harm to self and others.</p>	
<p><i>Recommendation 1.5, subsection 1.5.7 found on page 11 of the original guideline has been changed from behavioural interventions to <b>behavioural strategies</b>. This subsection has had a change in terminology from disturbing behaviour to <b>responsive behaviours of the person</b> to reflect new language in regards to demonstrated client behaviours. The last sentence of recommendation has been changed to <b>reflect restraints should only be used as a last resort to prevent harm to self and others</b>.</i></p>	
<p><i>The discussion of evidence for this recommendation found on page 39 of the original guideline has been revised to reflect the following additional literature supports. The following paragraphs have been added regarding multi-component intervention strategies and the effect of medication treatment on clients:</i></p> <p><b>Discussion of Evidence</b></p> <p>Lundstrom et al., (2005) conducted a prospective intervention study with clients using a multifactorial intervention program of staff education focusing on assessment, prevention, and treatment of delirium with caregiver-client interaction that demonstrated outcomes of reduced duration of delirium, length of stay and mortality in delirious clients. Due to their frequent contact with older clients, nurses are in a unique position to assess, document, respond to and monitor the course of delirium (Voyer et al. 2008). There is a need for interprofessional teams to develop care strategies that focus on prevention and improve the management of delirium (Siddiqi, Allan, &amp; Holmes, 2006). Nurses should be aware that the use of physical restraints in delirious patients may prolong delirium and worsen clinical outcomes (Inouye et al. 2007).</p> <p>Nurses should be aware that antipsychotic medications used to treat delirium may, in fact, also cause delirium (Alagiakrishnan &amp; Wiens, 2004). Pharmacological interventions should only be instituted when a pharmacological review, adjustment to treatment regime, and non-pharmacological measures have not eased a client's distress. Pharmacological interventions should be considered for delirious clients who are suffering from significant distress, agitation, or psychotic symptoms with behaviour that interferes with care and treatment, posing a risk of harm to self or others (CCSMH, 2006; Fraser Health, 2006; Melbourne Health, 2006). Pharmacological interventions should be monitored, titrated, and discontinued when targeted symptoms of delirium resolve. For the older adults lower doses of haloperidol 0.25-0.5 mg o.d.-b.i.d., (may need titration), are suggested as haloperidol has an advantage over atypical antipsychotics because of its' multiple routes of administration, but may have side effects such as sedation, extrapyramidal side effects, and prolonged QT interval (CCSMH; Melbourne Health).</p>	

<p>Second generation antipsychotics have been shown to be useful in caring for some deliriums with fewer extrapyramidal side effects than typical antipsychotics (CCSMH, 2006; Melbourne Health, 2006). It should be noted that atypical antipsychotics have been associated with increased risk of cerebrovascular events and mortality in clients with dementia. Selection of atypical antipsychotics to treat delirium should be considered if the client shows signs of extrapyramidal symptoms such as in Parkinsons disease or Lewy Body dementia to avoid worsening of symptoms (CCSMH; Melbourne Health). Initial dosing recommendations for older persons with delirium receiving atypical antipsychotics include risperidone 0.25 mg od-bid, olanzapine 1.25- 2.5 mg per day or quetiapine 12.5-50 mg. per day (CCSMH).</p> <p>Recommendations for pharmacological treatment of delirium in terminal states can be found in Hospice and Palliative Medicine Guidelines (American Academy of Hospice and Palliative Medicine: Clinical Guidelines and Order Sets for Delirium - <a href="https://www.aahpm.org/">https://www.aahpm.org/</a>; Fraser Health).</p>	
<p>Additional Literature Supports</p> <p>Bogardus et al. (2003)</p> <p>CCSMH, (2010a,b; 2006a)</p> <p>Holroyd-Leduc, Khandwala, &amp; Sink (2010)</p> <p>Michaud et al. (2007)</p> <p>Milisen, Lemiengre, Braes, &amp; Foreman (2005)</p> <p>Tabet &amp; Howard (2009)</p>	+
<p>1.6 Nurses must monitor, evaluate and modify the multi-component intervention strategies on an ongoing basis to address the fluctuating course associated with delirium.</p> <p>(Level of Evidence = IIb)</p>	✓
<p>Additional Literature Supports</p> <p>CCSMH (2006a)</p> <p>Ceriana et al. (2009)</p> <p>Cole et al. (2009)</p> <p>Mayer (2006)</p> <p>Ouimet et al. (2007)</p> <p>Lundstrom et al. (2005)</p> <p>RNAO (rev.2010)</p> <p>Websites</p> <p>Melbourne Health, Clinical Epidemiology and Health Service Evaluation Unit - Clinical Practice Guidelines for the Management of Delirium in Older People (2006) - <a href="http://www.health.vic.gov.au/acute-agedcare/delirium-cpg.pdf">http://www.health.vic.gov.au/acute-agedcare/delirium-cpg.pdf</a></p>	+
<p><b>Recommendations for Dementia</b></p> <p>2.1 Nurses should maintain a high index of suspicion for the early symptoms of dementia to initiate appropriate assessments and facilitate individualized care.</p> <p>(Level of Evidence = IIa)</p>	✓



<p>Additional Literature Supports CCSMH (2006c) Fick &amp; Mion (2008)</p>	
<p>2.2 Nurses should have knowledge of the most common presenting symptoms of: Alzheimer Disease, Vascular Dementia, Frontotemporal Lobe Dementia, Lewy Body Dementia, and be aware that there are mixed dementias.</p> <p>(Level of Evidence = IV)</p>	
<p><i>The discussion of evidence for this recommendation found on page 51 &amp; 52 of the original guideline has been revised to reflect the additional literature support. A paragraph updating the statistical information on incidence of the different types of dementias Alzheimer's disease, Vascular dementia and Lewy Body has been added to the discussion of evidence as follows:</i></p> <p><b>Discussion of Evidence</b></p> <p>Ongoing experience and research in assessing for dementia encourages a new understanding of the differences between the types of dementia and the likelihood for presentation in populations. Following the 3rd Canadian Consensus Conference on Dementia in 2007, experts discussed the evolving diagnosis of dementias and the increased possibility for the occurrence of mixed dementias. Vascular risk factors may increase with age (e.g. hypertension, hyperlipidemia) and must be considered for diagnosis, prevention and treatment. Incidence of clients presenting with the different types of dementia for assessment in memory clinics are as follows:</p> <ul style="list-style-type: none"> <li>• Alzheimer's disease: 47%;</li> <li>• Vascular dementia: 9%;</li> <li>• Mixed Alzheimer/Vascular: 19%;</li> <li>• Lewy Body: 2% mixed; Alzheimer/Lewy Body: 3%;</li> <li>• Frontotemporal: 5%; mixed Alzheimer/Frontotemporal: 2%;</li> <li>• Other/mixed;</li> </ul> <p>(Chertkow, 2008; Feldman, Jacova et al., 2008; Feldman et al., 2003).</p>	
<p>Additional Literature Supports CCSMH (2006c) Ouldred (2004)</p> <p>Website: Third Canadian Consensus Conference on Diagnosis and Treatment of Dementia (2007) - <a href="http://www.cccdd.ca/pdfs/Final_Recommendations_CCCDTD_2007.pdf">http://www.cccdd.ca/pdfs/Final_Recommendations_CCCDTD_2007.pdf</a> Melbourne Health, Clinical Epidemiology and Health Service Evaluation Unit - Clinical Practice Guidelines for the Management of Delirium in Older People (2006) - <a href="http://www.health.vic.gov.au/acute-agedcare/delirium-cpg.pdf">http://www.health.vic.gov.au/acute-agedcare/delirium-cpg.pdf</a> Work Group on Alzheimer's Disease and Other Dementias (2007) - <a href="http://www.psychiatryonline.com/pracGuide/pracGuideTopic_3.aspx">http://www.psychiatryonline.com/pracGuide/pracGuideTopic_3.aspx</a></p>	

<p>2.3 Nurses should contribute to comprehensive standardized assessments to rule out or support the identification and monitoring of dementia based on their ongoing observations and expressed concerns from the client, family and interdisciplinary team.</p> <p>(Level of Evidence = III)</p>	✓
<p><i>The discussion of evidence for this recommendation found on page 52 &amp; 53 of the original guideline has been revised to reflect the additional literature supports. The following paragraph has been added to outline the need to include clients' own identification of unmet needs in care:</i></p> <p><b>Discussion of Evidence</b></p> <p>Orrell et al. (2008) suggests that clients with dementia (including mild to severe) are able to report their met and unmet needs. In the study, the clients reported high unmet needs for psychological distress, company, daytime activities and eyesight/hearing problems. Nurses are encouraged to ask their clients about their care needs without making the assumption that clients living with dementia cannot identify their own unmet needs. Nurses also need to observe client behaviours as they are a key indicator of unmet needs.</p>	+
<p>Additional Literature Supports</p> <p>CCSMH (2006c)</p>	+
<p>2.4 Nurses should create partnerships with family members or significant others in the care of clients. This is true for clients who live in either the community or in healthcare facilities.</p> <p>(Level of Evidence = III)</p>	✓
<p>Additional Literature Supports</p> <p>Andren &amp; Elmstahl (2008)</p> <p>Callahan et al. (2006)</p> <p>CCSMH (2006c)</p> <p>Jablonski, Reed, &amp; Maas (2005)</p> <p>Lee and Cameron (2004)</p> <p>Mittelman, Haley, Clay, &amp; Roth (2006)</p> <p>Spijker et al. (2008)</p> <p>Website:</p> <p>Alzheimer Society of Canada - <a href="http://www.alzheimer.ca/english/index.php">http://www.alzheimer.ca/english/index.php</a></p> <p>American Academy of Hospice and Palliative Medicine [AAHPM] website - <a href="http://www.aahpm.org/">http://www.aahpm.org/</a></p> <p>Ontario Dementia Caregiver Needs Project: Four reports of the project are available at Murray Alzheimer Research and Education Program [MAREP] - <a href="http://www.marep.uwaterloo.ca/research/">http://www.marep.uwaterloo.ca/research/</a>.</p> <ul style="list-style-type: none"> <li>• In their own voices: A Profile of Dementia Caregivers in Ontario - <a href="http://www.marep.uwaterloo.ca/PDF/InTheirOwnVoices1-SurveyResults.pdf">Stage 1: Survey Results -http://www.marep.uwaterloo.ca/PDF/InTheirOwnVoices1-SurveyResults.pdf</a></li> <li>• In their own voices: Dementia Caregivers Identify the Issues - Stage 2: Focus Groups - <a href="http://www.marep.uwaterloo.ca/PDF/InTheirOwnVoices2-FocusGroupsResults.pdf">http://www.marep.uwaterloo.ca/PDF/InTheirOwnVoices2-FocusGroupsResults.pdf</a></li> </ul>	+

<ul style="list-style-type: none"> <li>• In their own voices: Guiding Principles and Strategies for Change Identified by and for Caregivers in Ontario - Stage 3: Working Focus Group - <a href="http://www.marep.uwaterloo.ca/PDF/InTheirOwnVoices3-PrinciplesStrategies.pdf">http://www.marep.uwaterloo.ca/PDF/InTheirOwnVoices3-PrinciplesStrategies.pdf</a></li> <li>• Caregivers of Persons with Dementia: Roles, Experiences, Supports and Coping - A Literature Review - <a href="http://www.marep.uwaterloo.ca/PDF/InTheirOwnVoices-LiteratureReview.pdf">http://www.marep.uwaterloo.ca/PDF/InTheirOwnVoices-LiteratureReview.pdf</a></li> </ul>	
<p>2.5 Nurses should know their clients, recognize their retained abilities, understand the impact of the environment, and relate effectively when tailoring and implementing their caregiving strategies.</p> <p>(Level of Evidence = III)</p>	✓
<p><i>The discussion of evidence for this recommendation found on page 54 to 56 of the original guideline has been revised to reflect the additional literature supports. The following paragraphs have been added regarding the importance of personhood and use of elderspeak in caregiving strategies:</i></p> <p><b>Discussion of Evidence</b></p> <p>Thomas Kitwood created a new paradigmatic view of dementia in which 'the person comes first'. (Kitwood, 1997). Recognition, respect, and trust are key components of personhood. Person centered care is based on developing thorough knowledge of the person, their abilities and needs. Person centered care focuses on appreciating the uniqueness of each person, developing a better understanding of the perspectives of the person with dementia and creating an interpersonal bond that successfully engages the client with dementia in meaningful activities. Evidence of dementia care mapping and person centered care has shown that these are effective approaches in reducing agitation in care-home residents with dementia (Chenoweth et al., 2009). Topics of interest (e.g. hobbies, families, etc.) for conversations that will engage the patient in meaningful interactions should be obtained from the patient and their family by the interprofessional team to enable the team to provide care to clients knowing what their interests and preferences are to help limit the client's behavioural symptoms (Kovach et. al., 2006).</p> <p>Emerging evidence suggests that the impact of elderspeak, a form of speech which is infantilizing and may be threatening to positive self-concept and personhood on persons with dementia, may increase demonstrations of resistant behaviour to care (Williams, Herman, Gajewki, &amp; Wilson, 2009). Nursing staff should individualize communication strategies in the plan of care to ensure the approach to communication meets the client's needs and is in keeping with retained abilities (Williams et al.).</p> <p>Initial descriptive articles support the use of Montessori dementia-based activities for clients. These studies have shown that older adults with dementia show constructive engagement, positive affect, pleasure, positive behaviours and ability to participate in group activities when engaged in Montessori activities based on past interests and tailored to present abilities (Mahendra et al., 2006; Skrajner &amp; Camp, 2007; Skrajner et al., 2007).</p>	+
<p>Additional Literature Supports</p> <p>Ancoli et al. (2003)</p> <p>Ayalon, Gum, Feliciano, &amp; Arean (2006)</p> <p>CCSMH (2006c)</p>	+

<p>de Boer et al. (2007)</p> <p>Dunne, Nærgaard, Cipolloni, &amp; Cronin (2004)</p> <p>Hopper et al. (2005)</p> <p>LeBlanc, Cherup, Feliciano, &amp; Sidener (2006)</p> <p>Mamhidir, Karlsson, Norberg, &amp; Mona, (2007)</p> <p>McGilton, Rivera, &amp; Dawson (2003)</p> <p>Nolan &amp; Mathews (2004)</p>	
<p>2.6 Nurses caring for clients with dementia should be knowledgeable about pain assessment and management in this population to promote physical and emotional well-being.</p> <p>(Level of Evidence = IV)</p>	✓
<p>Additional Literature Supports</p> <p>CCSMH (2006c)</p> <p>Cheung &amp; Choi (2008)</p> <p>Fuchs-Lacelle &amp; Hadjistavropoulos (2004)</p> <p>Fuchs-Lacelle &amp; Hadjistavropoulos (2005)</p> <p>Fuchs-Lacelle &amp; Hadjistavropoulos (2008)</p> <p>Hadjistavropoulos et al. (2007)</p> <p>Hadjistavropoulos &amp; Martin (2008)</p> <p>Holmes, Knights, Dean, Hodkinson, &amp; Hopkins (2006)</p> <p>Horgas &amp; Miller (2008)</p> <p>Husebo et al. (2007)</p> <p>Leong, Chong, &amp; Gibson (2006)</p> <p>Zwakhalen, Hamers, Abu-Saad, &amp; Berger (2006)</p> <p>Zwakhalen, Hamers, &amp; Berger (2006)</p> <p>Zwakhalen, Koopmans, Geels, Berger, &amp; Hamers (2009)</p> <p>Website:</p> <p>How to, Try This: Pain Assessment With People with Dementia - <a href="http://www.nursingcenter.com/pdf.asp?AID=800535">http://www.nursingcenter.com/pdf.asp?AID=800535</a></p>	+
<p>2.7 Nurses caring for clients with dementia should be knowledgeable about non-pharmacological interventions for managing behaviour to promote physical and psychological well-being.</p> <p>(Level of Evidence = III)</p>	✓
<p><i>The discussion of evidence for this recommendation found on page 60 to 61 of the original guideline has been revised to reflect the additional literature supports under specific non-pharmacological therapies. The discussion of evidence has been expanded on page 61 to include the following additional paragraph:</i></p>	+

## Discussion of Evidence

Emerging evidence continues to support person-centered care which includes a holistic approach. Recent studies also indicate non-pharmacological interventions such as psychosocial treatments for managing client's behavioural responses have specific therapeutic properties (O'Connor, Ames, Gardner, & King, 2009a,b). Strategies such as music, physical activity, family presence, novel bathing techniques, recreation, spiritual care, aromatherapy, relaxation, reminiscence therapy, sensory enrichment and validation therapy work best if they are tailored to the client's individual needs (Ryan, Martin, & Beauman, 2005; O'Connor et al).

### Additional Literature Supports

CCSMH (2006c)

Fossey et al. (2006)

Judge, Camp, & Orsulic-Jeras (2000)

Kovach et al. (2006)

Mahendra (2001)

Mahendra et al. (2006)

National Institute for Health and Clinical Excellence (2009)

Spijker et al. (2008)

Verkaik, Van Weert, & Francke (2005)

Cognitive Stimulation Therapy/Cognitive Training/Cognitive Rehabilitation/Computerized Cognitive Therapy and Interpersonal Therapy for mild to moderate depression:

- Bottino et al. (2005)
- Chapman, Weiner, Rackley, Hynan, & Zientz (2004)
- Clare, Woods, Moniz Cook, Orrell, & Spector (2003)
- Livingston, Johnston, Katona, Paton, & Lyketsos (2005)
- Matsuda (2007)
- National Collaborating Centre for Mental Health (2009)
- Sitzler, Twamley, & Jest (2006)
- Spector et al. (2003)

### Exercise

- National Collaborating Centre for Mental Health (2009)
- Robinson et al. (2007)
- Rolland et al. (2007)
- Stevens & Killen (2006)
- Teri et al. (2003)



### Massage and Touch

- Viggo Hansen, Jorgensen, & Ortenblad (2006)
- Woods, Craven, & Whitney (2005)

### Music

- Hicks-Moore (2005)
- Holmes et al. (2006)
- Livingston et al. (2005)
- O'Connor et al. (2009b)
- Richeson & Neill (2004)
- Robinson et al. (2007)
- Svansdottir & Snaedal (2006)



<p>Reminiscence</p> <ul style="list-style-type: none"> <li>• Livingston et al. (2005)</li> <li>• National Institute for Health and Clinical Excellence (2009)</li> </ul> <p>Snoezelen</p> <ul style="list-style-type: none"> <li>• Livingston et al. (2005)</li> <li>• Van Weert et al. (2004)</li> <li>• Van Weert et al. (2005a, b, c)</li> </ul> <p>Validation Therapy</p> <ul style="list-style-type: none"> <li>• Livingston et al. (2005)</li> </ul> <p>Websites:</p> <p>The Kenneth G. Murray Alzheimer Research and Education Program [MAREP]: Managing &amp; Accommodating Responsive Behaviours in Dementia Care Resource Guide &amp; Dementia Care Education Series, Facilitator's Guide - <a href="http://www.marep.uwaterloo.ca/products/">http://www.marep.uwaterloo.ca/products/</a></p> <p>Gentle Persuasive Approaches Curriculum: The development and pilot evaluation of an educational program to train long-term care frontline staff in the management of responsive behaviours of a more catastrophic nature associated with dementia - <a href="http://marep.uwaterloo.ca/research/GPAPProjectFinalReportJuly2005.pdf.pdf">http://marep.uwaterloo.ca/research/GPAPProjectFinalReportJuly2005.pdf.pdf</a></p>	
<p>2.8 Nurses caring for clients with dementia should be knowledgeable about pharmacological interventions, and contribute to the decisions and education regarding the risks and benefits of medication for targeted symptoms, monitor for efficacy and side effects, document response, and advocate for re-evaluation and withdrawal of psychotropics after a time period of behavioural stability.</p> <p>(Level of Evidence = Ia)</p>	
<p><i>The discussion of evidence for this recommendation found on page 62 of the original guideline has been revised to reflect the additional literature supports. The updated pharmacology statements are as follows:</i></p> <p><b>Discussion of Evidence</b></p> <p><b>Cognitive enhancers:</b></p> <ul style="list-style-type: none"> <li>• Improve cognition and global outcomes, and have positive effects on behaviour (CCSMH, 2006c; Herrmann &amp; Lanctot, 2007).</li> </ul> <p><b>Atypical antipsychotics:</b></p> <ul style="list-style-type: none"> <li>• Show decreased incidents of extrapyramidal effects such as Parkinsonism and tardive dyskinesia with use, but demonstrate an increased risk of cerebrovascular events and mortality. Use is recommended only in the presence of agitation, severe distress and behavioural disturbance that pose a risk to the client or others, and should be avoided in clients with Lewy Body dementia as they may develop severe adverse effects (CCSMH, 2006c).</li> </ul> <p><b>Antidepressants:</b></p> <ul style="list-style-type: none"> <li>• Selective Serotonin Reuptake Inhibitors (SSRIs) have been shown to be effective in treatment of depression in dementia (Hermann &amp; Lanctot, 2007).</li> </ul>	

<p><b>Carbamazepine:</b></p> <ul style="list-style-type: none"> <li>• Use demonstrates benefits for agitation and aggression (CCSMH, 2006c; Herrmann &amp; Lanctot, 2007).</li> </ul> <p><b>Benzodiazepines:</b></p> <ul style="list-style-type: none"> <li>• Adverse events in the elderly such as sedation, falls and cognitive impairment is demonstrated with use. It is recommended that if initiated they should be used only for brief periods (CCSMH, 2006c; Hermann &amp; Lanctot, 2007).</li> </ul> <p>Treatment of severe sexual disinhibition can include hormone therapy, Selective Serotonin Reuptake Inhibitors or atypical antipsychotics, although evidence is limited to primarily case reports (CCSMH, 2006c).</p>	
<p>Additional Literature Supports</p> <p>Dahl, Wright, Xiao, Keeven, &amp; Carr (2008)</p> <p>Jones et al. (2004)</p> <p>Langa, Foster, &amp; Larson (2004)</p> <p>Lindsey (2009)</p> <p>Mowla, Mosavinasab, Haghshenas, &amp; Haghighi (2007)</p> <p>Websites</p> <p>College of Nurses of Ontario – Practice Standard: Medication, Revised 2008 - <a href="http://www.cno.org/docs/prac/41007_Medication.pdf">http://www.cno.org/docs/prac/41007_Medication.pdf</a></p> <p>PIECES Canada: Psychotropic Template (2009) - <a href="http://www.piecescanada.com/pdf/Psychotropic_Template_Jan09.pdf">http://www.piecescanada.com/pdf/Psychotropic_Template_Jan09.pdf</a></p>	+
<p>2.9 Nurses caring for older adults should promote healthy aging and protective strategies to minimize the risk of future cognitive changes.</p> <p style="text-align: right;">(Level of Evidence = IIa )</p>	<b>NEW</b>
<p><i>The Review Panel added Recommendation 2.9 to reflect the importance of prevention strategies for dementia. This recommendation follows Recommendation 2.8 on page 62 of the original guideline. Discussion of Evidence as follows:</i></p> <p><b>Discussion of Evidence</b></p> <p>Emerging literature suggest a need for management of risk factors (e.g. blood pressure, cardiovascular disease, diabetes), the use of protective strategies (e.g. healthy diet, exercise, brain exercise) and the early recognition of cognitive changes to allow for appropriate treatment including education and support for caregivers. Recent studies have provided evidence that physical exercise, a healthy diet, leisure activity and social networking provide protection against cognitive impairment. There is also increasing evidence surrounding risk factors for cognitive impairment and how management of these risk factors is important in reducing the risk of cognitive decline. For example, cerebrovascular disease is increasingly common in older adults. It is commonly found in older adults who have Alzheimer’s Disease and is thought to possibly accelerate the pathological process. Modifiable risk factors for cardiovascular disease include hypertension, diabetes, obesity, hypercholesterolemia, and smoking all have been associated with cognitive impairment. Aggressive control of these factors is important to reduce the occurrence of cognitive dysfunction (Masellis &amp; Black, 2008).</p>	<b>NEW</b>

<p>Additional Literature Supports</p> <p>Alzheimer's Disease International (2009)</p> <p>CCSMH (2006c)</p> <p>Smetanin et al. (2009)</p>	NEW
<p><b>Recommendations for Depression</b></p> <p>3.1 Nurses should maintain a high index of suspicion for early recognition/early treatment of depression in order to facilitate support and individualized care.</p> <p>(Level of Evidence = IV)</p>	✓
<p>Additional Literature Supports</p> <p>CCSMH (2006b,d)</p> <p>Korner et al. (2006)</p> <p>MacMillan, Patterson, Wathen, &amp; The Canadian Task Force on Preventive Health Care (2005)</p>	+
<p>3.2 Nurses should use the diagnostic criteria from the Diagnostic and Statistical Manual (DSM) IV-R to assess for depression.</p> <p>(Level of Evidence = IV)</p>	✓
<p>Additional Literature Supports</p> <p>CCSMH (2006b,d)</p>	+
<p>3.3 Nurses should use standardized assessment tools to identify the predisposing and precipitating risk factors associated with depression.</p> <p>(Level of Evidence = IV)</p>	✓
<p><i>The discussion of evidence for this recommendation found on page 71 of the original guideline has been revised to reflect the additional literature supports. The following paragraph as been added:</i></p> <p><b>Discussion of Evidence</b></p> <p>Nurses should also be aware of the importance of assessing for, and reporting signs and symptoms of depression in persons with underlying cognitive impairment/dementia. Depression is often a predisposing or precipitating condition in these situations and is very responsive to treatment (National Institute for Health and Clinical Excellence, 2009). The Geriatric Depression Scale (GDS) 15 item version may be helpful in screening for late-life depression in non-demented older adults and is not influenced by severity of clinical or functional factors or sociodemographics (Marc, Raue, &amp; Bruce, 2008). RAO, 2004, p. 78 of the original guideline outlined the Geriatric Depression Scale (GDS-4: Short Form). While shorter GDS 15 item versions (GDS-4, GDS-5) are available for use in screening, they have not been validated across all healthcare settings or with all client populations. The GDS -15 remains the most common version of the depression tool utilized. It is suggested the clinician review the patient population and setting before selecting a shorter version (Marc, Raue, &amp; Bruce, 2008; Roman &amp; Callen, 2008).</p>	+



<p>Additional Literature Supports</p> <p>CCSMH (2006b,d)</p> <p>Edwards (2004)</p> <p>Hoyl, et al. (1999)</p> <p>Website:</p> <p>Vancouver Island Health Authority: End of Life Program Practice Guidelines - <a href="http://www.viha.ca/NR/rdonlyres/46F4FFD9-6CDE-4420-A131-88CAF4346BDF/0/EOLGuidelines2.pdf">http://www.viha.ca/NR/rdonlyres/46F4FFD9-6CDE-4420-A131-88CAF4346BDF/0/EOLGuidelines2.pdf</a></p>	+
<p>3.4 Nurses must initiate prompt attention for clients exhibiting suicidal ideation or intent to harm others.</p> <p>(Level of Evidence = IV)</p>	✓
<p>Additional Literature Support</p> <p>CCSMH (2006d)</p> <p>RNAO (2009)</p> <p>Website:</p> <p>A Desperate Act: Suicide and the Elderly - <a href="http://ffh.film.com/id/1056/A_Desperate_Act_Suicide_and_the_Elderly.htm">http://ffh.film.com/id/1056/A_Desperate_Act_Suicide_and_the_Elderly.htm</a></p> <p>CCSMH: Late Life Suicide Prevention Toolkit: Life Saving Tools for Health Care Providers - <a href="http://www.ccsmh.ca/en/projects/suicide.cfm">http://www.ccsmh.ca/en/projects/suicide.cfm</a></p> <p>The Geriatrics, Interprofessional Practice and Inter-organizational Collaboration (GiiC) Toolkit - <a href="http://rgps.on.ca/giic-toolkit">http://rgps.on.ca/giic-toolkit</a></p> <p>Toronto Best Practice Implementation Steering Committee: The 3-D's Resource Guide (2007) - <a href="http://rgp.toronto.on.ca/torontobestpractice/ThreeDresourceguide.pdf">http://rgp.toronto.on.ca/torontobestpractice/ThreeDresourceguide.pdf</a></p>	+
<p>3.5 Nurses must be aware of multi-component care strategies for depression:</p> <p>3.5.1 Non-pharmacological interventions</p> <p>3.5.2 Pharmacological caregiving strategies</p> <p>(Level of Evidence = Ib)</p>	✓
<p>Additional Literature Supports</p> <p>CCSMH (2006b,d)</p> <p>National Institute for Health and Clinical Excellence (2009)</p> <p>Non-Pharmacological (also see Recommendation 2.7, Additional Literature Supports)</p> <p>Bortolotti, Menchetti, Bellini, Montaguti, &amp; Berardi (2008)</p> <p>Chao et al. (2006)</p> <p>Stinson &amp; Kirk (2006)</p> <p>Wilson, Mottram, &amp; Vassilas (2007)</p> <p>Pharmacological</p> <p>Mottram, Wilson, Strobl (2006)</p> <p>Rajji, Mulsant, Lotrich, Lokker, &amp; Reynolds (2008)</p> <p>Website:</p> <p>The Geriatrics, Interprofessional Practice and Inter-organizational Collaboration (GiiC) Toolkit - <a href="http://rgps.on.ca/giic-toolkit">http://rgps.on.ca/giic-toolkit</a></p>	+

<p>3.6 Nurses need to facilitate creative client/family/community partnerships to ensure quality care that is individualized for the older client with depression.</p> <p>(Level of Evidence = IV)</p>	✓
<p>Additional Literature Supports</p> <p>CCSMH (2006b,d)</p> <p>National Institute for Health and Clinical Excellence (2009)</p>	+
<p>3.7 Nurses should monitor the older adult for re-occurrence of depression for 6 months to 2 years in the early stages of recovery and ongoing for those with chronic depression.</p> <p>(Level of Evidence = Ib)</p>	✓
<p>Additional Literature Supports</p> <p>CCSMH (2006b)</p> <p>National Institute for Health and Clinical Excellence (2009)</p>	+
<p><b>Recommendations for Delirium, Dementia and Depression</b></p> <p>4.1 In consultation/collaboration with the interdisciplinary team:</p> <ul style="list-style-type: none"> <li>• Nurses should determine if a client is capable of personal care, treatment and property decisions.</li> <li>• If client is incapable, nurses should approach substitute decision makers regarding care issues.</li> <li>• Nurses should determine whom the client has appointed as Powers of Attorney (POA) for personal care, and property and whenever possible include the Powers of Attorney along with the client in decision-making, consent, and care planning.</li> <li>• If there is no Power of Attorney for Personal Care, nurses should encourage and facilitate the process for older adults to appoint Powers of Attorney for Personal Care and to have discussions about end of life treatment and wishes while mentally capable.</li> </ul> <p>(Level of Evidence = IV)</p>	
<p><i>The terminology in Recommendation 4.1 found on page 12 &amp; 80 of the original guideline has been changed from Power of Attorney for Personal Care and Finances throughout the recommendation to reflect correct terminology as Power of Attorney (POA) for personal care and <b>property</b>.</i></p>	
<p>Additional Literature Supports</p> <p>CCSMH (2006a,c)</p> <p>Website:</p> <p>The Advocacy Centre for the Elderly: Advanced Care Planning, Consent &amp; Capacity - <a href="http://www.acelaw.ca/">http://www.acelaw.ca/</a></p>	+

<p>4.2 In care settings where Resident Assessment Instrument (RAI) and Minimum Data Set (MDS) instruments are mandated assessment tools, nurses should utilize the MDS data to assist with assessment for delirium, dementia and depression.</p> <p>(Level of Evidence = III)</p>	✓
<p>Additional Literature Supports</p> <p>CCSMH (2006a,b,c)</p> <p>Website:</p> <p>interRAI Instruments - <a href="http://www.interrai.org/section/view/?fnode=10">http://www.interrai.org/section/view/?fnode=10</a></p>	+
<p>4.3 Nurses should avoid physical and chemical restraints as first line care strategies for older adults with delirium, dementia and depression.</p> <p>(Level of Evidence = III)</p>	✓
<p>Additional Literature Supports</p> <p>Arora et al. (2007)</p> <p>CCSMH (2006a,b,c)</p> <p>Conn et al. (2006)</p> <p>Herrmann &amp; Lanctot (2007)</p> <p>Work Group on Alzheimer's Disease and Other Dementias (2007)</p> <p>Website</p> <p>Ontario Patient Restraint Minimization Act, 2001 - <a href="http://www.e-laws.gov.on.ca/html/source/statutes/english/2001/elaws_src_s01016_e.htm">http://www.e-laws.gov.on.ca/html/source/statutes/english/2001/elaws_src_s01016_e.htm</a></p>	+



## Education Recommendations

<p>5.1 All entry-level nursing programs should include specialized content about the older adult such as normal aging, involvement of client and family throughout the process of nursing care, diseases of old age, assessment and management of delirium, dementia and depression, communication techniques and appropriate nursing interventions.</p> <p>(Level of Evidence = IV)</p>	✓
<p><i>The discussion of evidence for this recommendation found on page 88 of the original guideline has been revised to reflect the additional literature supports. The following paragraphs have been added:</i></p> <p><b>Discussion of Evidence</b></p> <p>The Canadian population is aging and the number of Canadians over 80, who are the frailest members of society, is increasing dramatically. One in seven Canadian seniors receives home care, seniors are three times as likely as younger Canadians to be admitted to hospital and are also more likely to be readmitted (Statistics Canada, 2006). In Canada, as in the U.S. and other Western countries, care of older adults is the “core business of health care” (Burbank, Dowling-Castronovo, Crowther, &amp; Capezuti, 2006).</p> <p>Today’s students in nursing will care for an increasing number of elderly patients in their practices, regardless of their future specialty, yet most nurses receive limited education to care for older adults, especially those with complex needs.</p> <p>There is an urgent need to enhance gerontological content in nursing education (McCleary et al., 2009). Providing optimum care for seniors requires specific skills and knowledge, including an understanding of the differences between dementia, delirium and depression.</p>	+
<p>Additional Literature Supports</p> <p>CCSMH (2006a,b,c)</p> <p>Foreman &amp; Milisen (2004)</p> <p>Fossey et al. (2006)</p> <p>Irvine, Ary, &amp; Bourgeois (2003)</p> <p>McCleary, McGilton, Boscart, &amp; Oudshoorn (2009)</p> <p>Teri, Huda, Gibbons, Young &amp; van Leynseele (2005)</p> <p>Testad, Aasland, &amp; Aarsland (2005)</p>	+

## Organization and Policy Recommendations

<p>6.1 Organizations should consider integration of a variety of professional development opportunities to support nurses in effectively developing knowledge and skills to provide care for older adults with delirium, dementia and depression.</p> <p>(Level of Evidence = IV)</p>	✓
<p><i>The discussion of evidence for this recommendation found on page 91 of the original guideline has been revised to reflect the additional literature supports. The following paragraph has been added:</i></p> <p><b>Discussion of Evidence</b></p> <p>Organizations skilled at acquiring and disseminating knowledge while modifying behaviour to reflect new knowledge are defined as Learning Organizations (RNAO, 2006). A standard for nurse leaders is that they create an environment that supports knowledge development and integration for the development of best eldercare practices (RNAO). Emerging evidence supports organizations developing education programs should include content related to coping strategies for nurses to utilize when they face ethical dilemmas regarding the use of restraints (Yamamoto &amp; Aso, 2009).</p>	+
<p>Additional Literature Supports</p> <p>CCSMH (2006a)</p> <p>Conn et al. (2005)</p> <p>Deudon (2009)</p> <p>Foreman &amp; Milisen, 2004</p> <p>Fossey et al. (2006)</p> <p>Minister's Advisory Group on Mental Health and Addictions (2009)</p> <p>Teri et al. (2005)</p> <p>Testad et al. (2005)</p> <p>Website:</p> <p>Dementia Education Needs Assessment (DENA) - <a href="http://www.akeresourcecentre.org/files/DENA/DENA%20Tool.pdf">www.akeresourcecentre.org/files/DENA/DENA%20Tool.pdf</a></p>	+
<p>6.2 Healthcare agencies should implement a model of care that promotes consistency of the nurse/client relationship.</p> <p>(Level of Evidence = IIb)</p>	✓
<p>Additional Literature Supports</p> <p>CCSMH (2006a,b,c)</p> <p>Zimmerman, Sloane et al. (2005)</p> <p>Zimmerman, Williams et al. (2005)</p>	+
<p>6.3 Agencies should ensure that nurses' workloads are maintained at levels conducive to care for persons with delirium, dementia and depression.</p> <p>(Level of Evidence = IV)</p>	✓

Additional Literature Supports CCSMH (2006a,b,c) Sung, Chang & Tsai (2005)	+
6.4 Staffing decisions must consider client acuity, complexity level, and the availability of expert resources.  (Level of Evidence = III)	✓
Additional Literature Supports CCSMH (2006a,b,c) Sung et al. (2005)	+
6.5 Organizations must consider the nurses' well-being as vital to provide the care to persons with delirium, dementia and depression.  (Level of Evidence = III)	✓
<i>The discussion of evidence for this recommendation found on page 93 &amp; 94 of the original guideline has been revised to reflect the additional literature supports. The following paragraph has been added:</i>  <b>Discussion of Evidence</b> It is beneficial for leaders within organizations to provide a work environment that is supportive of the employees' physical and mental health (RNAO, 2008). The quality of nursing leadership has been shown to determine the quality of the working environments in which nurses deliver care (RNAO, 2006). Environments where nurses experienced lower job strain and had a positive caring environment resulted in older adults with dementia demonstrating fewer responsive symptoms (Edvardsson, Sandman, Nay, & Karlsson, 2008).	+
Additional Literature Supports CCSMH (2006a,b,c) Sung et al. (2005)	+
6.6 Healthcare agencies should ensure the coordination of care through the appropriate processes to transfer information (e.g., appropriate referrals, communication, documentation, policies that support formal methods of information transfer, and networking between healthcare providers).  (Level of Evidence = IV)	✓
<i>The discussion of evidence for this recommendation found on page 94 &amp; 95 of the original guideline has been revised to reflect the additional literature supports. The following paragraph has been added:</i>  <b>Discussion of Evidence</b> The interprofessional team is responsible for the effectiveness and coordination of communication of information among providers and with the client/family at all transfer or transition points across the continuum of care (Accreditation Canada, 2008).	+

Additional Literature Supports CCSMH (2006a,b,c)	+
6.7 (Delirium) Brief screening questions for delirium should be incorporated into nursing histories and/or client contact documents with opportunity to implement care strategies.  (Level of Evidence = IV)	✓
Additional Literature Supports CCSMH (2006a)	+
6.8 (Delirium) Organizations should consider Delirium Programs that contain screening for early recognition and multi-component interventions for treatment of clients with, but not limited to, hip fractures, post-operation surgery, and those with complex medical conditions.  (Level of Evidence = IV)	✓
<p><i>The discussion of evidence for this recommendation found on page 96 of the original guideline has been revised to reflect the additional literature supports. The following paragraphs have been added on early recognition and prevalence of delirium as follows:</i></p> <p><b>Discussion of Evidence:</b></p> <p>Nurses should be aware that postoperative delirium remains the most frequent complication associated with hip fracture post surgery in older adults with a prevalence ranging between 5% and 61%, depending on the patient population (Marcantonio, Flacker, Wright, &amp; Resnick, 2001; RNAO, 2006; Robertson &amp; Robertson, 2006). Many studies have shown that patients with postoperative delirium have an increased risk of mortality and are less likely to return to their pre-injury level of function and be placed in long term care facilities (RNAO, Robertson &amp; Robertson).</p> <p>Delirium can be prevented in up to one-third of at-risk patients and when delirium cannot be prevented, the prevalence of severe delirium can be reduced by up to 50% (RNAO, 2006; Robertson &amp; Robertson, 2006). Organizations that support screening programs and effective teamwork among the interprofessional team to support early recognition ensure optimal treatment of delirium (RNAO).</p>	+
Additional Literature Supports CCSMH (2006a)  Website: Bone & Joint Health Network - <a href="http://www.boneandjointhealthnetwork.ca/">http://www.boneandjointhealthnetwork.ca/</a>	+
6.9 (Depression) Caregiving activities for the older adult presenting with depression and/or suicide should encompass primary, secondary and tertiary prevention practices.  Level of Evidence = IV)	✓

Additional Literature Supports CCSMH (2006b,d)	+
<p>6.10 Nursing best practice guidelines can be successfully implemented only where there are adequate planning, resources, organizational and administrative support, as well as appropriate facilitation. Organizations may wish to develop a plan for implementation that includes:</p> <ul style="list-style-type: none"> <li>• An assessment of organizational readiness and barriers to implementation.</li> <li>• Involvement of all members (whether in a direct or indirect supportive function) who will contribute to the implementation process.</li> <li>• Dedication of a qualified individual to provide the support needed for the education and implementation process.</li> <li>• Ongoing opportunities for discussion and education to reinforce the importance of best practices.</li> <li>• Opportunities for reflection on personal and organizational experience in implementing guidelines</li> </ul> <p>In this regard, RNAO (through a panel of nurses, researchers and administrators) has developed the Toolkit: Implementation of Clinical Practice Guidelines, based on available evidence, theoretical perspectives and consensus. The RNAO strongly recommends the use of this Toolkit for guiding the implementation of the best practice guideline on Caregiving Strategies for Older Adults with Delirium, Dementia and Depression.</p> <p>(Level of Evidence = IV)</p>	✓
Additional Literature Supports CCSMH (2006, 2006a,b,c) National Institute for Health and Clinical Excellence (2009) Ploeg, Davies, Edwards, Gifford, & Elliott-Miller (2007) Sung et al. (2005)	+

The Review Panel has identified the updates to some of the appendices as follows:

## Appendix B: Glossary of Terms

Found on page 118 & 119 has been updated with the following additional definitions:

- **Subsyndromal Delirium (SSD):**

SSD is a condition in which a client has one or more symptoms of delirium, however, does not progress to a full-blown delirium (Cole et al. 2008; Voyer, Richard, Doucet, & Carmichael, 2009). Although there are no officially recognized diagnostic criteria for SSD, it appears to be a clinically important syndrome that falls on a continuum between no symptoms and DSM-defined delirium (Cole et al., 2009; Cole et al., 2008).

- **Persistent Delirium (PerD):**

PerD has important considerations for detection and monitoring for delirium (Cole et al., 2008). PerD is defined as a cognitive disorder that meets accepted diagnostic criteria for delirium at admission (or shortly after admission) and continues to meet criteria for delirium at the time of discharge or beyond (Cole et al., 2009; Cole et al., 2008).

- **Mild Cognitive Impairment (MCI):**

MCI is known as incipient dementia or isolated memory impairment. MCI is demonstrated when there is noticeable short-term memory deficit without any limitations in function. Persons with MCI appear to be at higher risk of converting to dementia and this stage may be referred to as a prodromal stage in dementia development (Marsellis & Black, 2008; Nasreddine, 2005).



## Appendix G: Medications Known to Contribute to Delirium in Older Adults

Found on page 130 of the original guideline has been replaced with the following updated chart of *Categories of Drugs that Can Cause \*Acute Change in Mental Status\**

Mnemonic Drug Category	Examples of Drugs
<b>Antiparkinsonian drugs</b>	Trihexyphenidyl, Benztropine, Bromocriptine, Levodopa, Selegiline(deprenyl)
<b>Corticosteroids</b>	Prednisolone: Decadron, Prednisone
<b>Urinary incontinence drugs</b>	Oxybutinin (Ditropan), Flavoxate (Urispas), Tolterodine (Detrol)
<b>Theophylline</b>	Theophylline
<b>Emptying drugs (motility drugs)</b>	Metoclopramide (Reglan)
<b>Cardiovascular drugs (including anti-hypertensives)</b>	Digoxin, Quinidine, Methyldopa, Reserpine, Beta Blockers (Propranolol—to a lesser extent), Diuretics, ACE inhibitors (Captopril & Enalapril), Calcium Channel antagonists (Nifedipine, Verapamil & Diltiazem)
<b>H<sub>2</sub> blockers</b>	Cimetidine (uncommon on it's own but ↑ risk with renal impairment), Ranitidine
<b>Antimicrobials</b>	Cephalosporins, Penicillin, Quinolones,
<b>NSAIDS</b>	Indomethacin, Ibuprofen, Naproxen, High dose ASA
<b>Geropsychiatry drugs</b>	1. Tricyclic antidepressants (e.g. Amitriptyline, Desipramine; to a lesser extent Imipramine, Nortriptyline) 2. SSRIs - safer but watch if hyponatremia present. 3. Benzodiazepines (e.g. diazepam, lorazepam) 4. Antipsychotics (e.g. Haloperidol, Chlorpromazine, Risperidone, Olanzapine)
<b>ENT drugs</b>	Antihistamines/ decongestants/cough syrups in over-the-counter preparations
<b>Insomnia</b>	Nitrazepam, Flurazepam, Diazepam, Temazepam
<b>Narcotics</b>	Meperidine, morphine, codeine
<b>Muscle relaxants</b>	Cyclobenzaprine (Flexeril), Methocarbamol (Robaxin)
<b>Seizure drugs</b>	Phenytoin, Primidone, gabapentin, pregabalin

## Appendix I: Delirium Resources

Found on page 134-136 of the original guideline have been changed as follows:

**A-Program/Educational Support chart** (Contact information changes as indicated)

Available Programs/Educational Opportunities	Contact
<b>#1. Elders at Risk:</b> <b>Deborah Burne, RN, BA (Psych), CPMHN(C)</b> Educator, Geriatrics and Mental Health Consultant Sheridan College & Institute of Technology Advanced Learning Oakville, Ontario)	Change as follows: Deborah <a href="mailto:Burne@sympatico.ca">Burne@sympatico.ca</a>
<b>#3. Delirium: Look, Screen and Intervene (rev. 2009).</b>	Changed to: <a href="http://www.rgpeo.com">http://www.rgpeo.com</a>
<b>#4. Putting the P.I.E.C.E.S together</b>	Changed to: <a href="http://www.piecescanada.com/">http://www.piecescanada.com/</a>
<b>#5. Clinical Practice Guideline: Delirium in the Elderly (2002).</b>	Change to: <a href="http://www.fraserhealth.ca">http://www.fraserhealth.ca</a>

**C-Pharmacological Reference Supports - (See updated Appendix G). Note:**

Alexopoulos, G., Silver, J., Kahn, D., Frances, A. & Carpenter, D. (1998). The expert consensus guideline series: Treatment of Agitation in Older Persons with Dementia. [No longer available online]

**D-Videos – Note:** Tassonyi, A. Recognizing Delirium in the Elderly  
<http://www.piecescanada.com/> [Video is no longer available online]

**Add:** Website: Resources on delirium -  
<http://www.viha.ca/mhas/resources/delirium/>

## Appendix K: Dementia Resources

Found on page 141-144 of the original guideline have been changed as follows:

**C. Websites** - Alzheimer's Research Exchange websites for the following have been changed to:

- Alzheimer Knowledge Exchange Resource Centre - <http://akeresourcecentre.org/Home>
- Putting the P.I.E.C.E.S Together: A Psychogeriatric Guide and Training Program for Professionals in Long-Term Care in Ontario - <http://www.piecescanada.com/>
- The Office of the Public Guardian and Trustee, Ministry of the Attorney General - <http://www.attorneygeneral.jus.gov.on.ca/english/family/pgt/>

**Add:** Bathing Without a Battle DVD - <http://www.bathingwithoutabattle.unc.edu/>

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June 2004

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*This project is funded by the  
Ontario Ministry of Health and Long-Term Care*



ISBN 0-920166-45-8



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