

November 2003

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

# *Screening for Delirium, Dementia and Depression in Older Adults*



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.

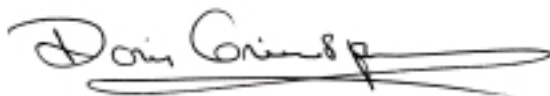
Now comes the true test in this phenomenal journey: will nurses utilize the guidelines in their day-to-day practice?

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. It is not necessary, nor practical that every nurse have a copy of the entire guideline. 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 this 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

Nancy Bol, RN, BScN, MScN

**Team Leader**

*Clinical Nurse Specialist*

*Geriatric Psychiatry*

*Regional Mental Healthcare London*

*St. Joseph's Healthcare London*

*London, Ontario*

Madeline Edwards, RN, BA(Sociology),  
Certificate in Dispute Resolution

*Canada Pension Plan Disability Tribunal*

*Toronto, Ontario*

Marielle Heuvelmans, RN, HBSN, GNC(C)

*Client Services Leader*

*Community Care Access Centre for*

*Eastern Counties*

*Cornwall, Ontario*

Nadine Janes, RN, BScN, MSc, ACNP,  
GNC(C)

*Doctoral Student*

*Faculty of Nursing*

*University of Toronto*

*Toronto, Ontario*

Linda Kessler, RN, BScN, MHSc

*Administrative Director*

*Geriatric Psychiatry Service*

*PCCC-Mental Health Services*

*Kingston, Ontario*

Elizabeth Phoenix, RN, MScN, CPMHN(C)

*Nurse Practitioner/Clinical Nurse Specialist*

*Child and Adolescent Centre*

*Mental Healthcare Program*

*London, Ontario*

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

*Clinical Nurse Specialist/Nurse Practitioner*

*Baycrest Centre for Geriatric Care*

*Toronto, Ontario*

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

*Advanced Practice Nurse, Geriatrics*

*The Ottawa Hospital & The Regional*

*Geriatric Assessment Program*

*Ottawa, Ontario*

**Josephine Santos, RN, MN**

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

**Kathleen Sayle, RPN**

*Registered Practical Nurses Association  
of Ontario  
Supervisor, Occupational Health and  
Safety Programs  
Centre for Addiction and Mental Health  
Toronto, Ontario*

**Agnes Scott, RN, CPMHN(C), BSN, MA**

*Community Nurse Clinician  
Whitby Mental Health Centre  
Seniors Mental Health Program  
Whitby, Ontario*

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

*Assistant Administrator/  
Chief Nursing Officer  
North Bay Psychiatric Hospital  
North Bay, Ontario*

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

*Coordinator, Geriatric Outreach Services  
North York General Hospital  
Toronto, Ontario*

**Ann Tassonyi, RN, BScN**

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

**Catherine Wallis-Smith, RN, CPMNH(C)**

*Supervisor of Nursing and Home Support  
Paramed Home Healthcare  
Instructor – Palliative Care, Georgian College  
Barrie, Ontario*

**Kevin Woo, RN, BScN, MSc, PhD(cand),  
ACNP, GNC(C)**

*Nurse Practitioner/Clinical Nurse Specialist  
Mount Sinai Hospital  
Toronto, Ontario*

## *Screening for Delirium, Dementia and Depression in Older Adults*

*Project team:*

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

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

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

***Myrna Mason***, RN, MN, GNC(C)  
Coordinator – Best Practice Champions Network

***Carrie Scott***  
Administrative Assistant

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

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

Registered Nurses Association of Ontario  
Nursing Best Practice Guidelines Project  
111 Richmond Street West, Suite 1208  
Toronto, Ontario M5H 2G4  
Website: [www.rnao.org/bestpractices](http://www.rnao.org/bestpractices)

## Stakeholder Acknowledgment

**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

*Research Associate/Geriatric Assessor  
Regional Geriatric Assessment Program  
Nepean, Ontario*

### Gail Ancill

*Nurse Clinician  
Neuropsychiatry Program  
Riverview Hospital  
Port Coquitlam, British Columbia*

### Teri Begg

*Nurse Case Manager  
Niagara Geriatric Mental Health  
Outreach Program  
St. Catharines, Ontario*

### Diane Buchanan

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

### Margaret Buck

*Etobicoke, Ontario*

### Dr. William Dalziel

*Chief, Regional Geriatric Assessment  
Program of Ottawa – Carleton  
Associate Professor, Division of Geriatric  
Medicine, University of Ottawa  
Ottawa Hospital  
Ottawa, Ontario*

### Pamela Dawson

*Dawson – Gerontabilities  
Toronto, Ontario*

### Denise Dodman

*Psychogeriatric Resource Consultant  
Chatham/Kent Community  
Care Access Centre  
Chatham, Ontario*

### Anne Evans

*Clinical Nurse Specialist  
Regional Psychogeriatric Program  
St. Joseph's Healthcare  
London, Ontario*

### Bonnie Hall

*Advanced Practice Resource Nurse  
SCO Health Service  
St. Vincent Hospital  
Ottawa, Ontario*

### Elaine Palmer

*Geriatric Case Manager  
Grey Bruce Community Care Access Centre  
Port Elgin, Ontario*

### Jackie Roberts

*Professor, School of Nursing  
McMaster University  
Hamilton, Ontario*



**Patricia Stiles**

*Clinical Nurse Specialist  
Homewood Health Centre  
Guelph, Ontario*

**Dr. Lisa Van Bussel**

*Geriatric Psychiatrist  
Regional Psychogeriatric Program  
St. Joseph's Healthcare  
London, Ontario*

**Donna Wells**

*Associate Professor  
Faculty of Nursing  
University of Toronto  
Toronto, Ontario*

Special acknowledgment also goes to **Barb Willson, RN, MSc** and **Anne Tait, RN, BScN**, who served as Project Coordinators at the onset of the guideline development.





RNAO also wishes to acknowledge the following organizations in Toronto, Ontario for their role in pilot testing this guideline:

**Pilot Project Sites**

- Toronto Rehabilitation Institute
- University Health Network
- Mount Sinai Hospital

As well, RNAO sincerely acknowledges the leadership and dedication of the researchers who have directed the evaluation phase of the Nursing Best Practice Guidelines Project. The Evaluation Team is comprised of:

**Principal Investigators:**

Nancy Edwards, RN, PhD  
Barbara Davies, RN, PhD  
University of Ottawa

**Evaluation Team:**

Maureen Dobbins, RN, PhD  
Jenny Ploeg, RN, PhD  
Jennifer Skelly, RN, PhD  
McMaster University  
Patricia Griffin, RN, PhD  
University of Ottawa

**Project Staff:**

University of Ottawa  
Barbara Helliwell, BA(Hons); Marilyn Kuhn, MHA; Diana Ehlers, MA(SW), MA(Dem);  
Christy-Ann Drouin, BBA; Sabrina Farmer, BA; Mandy Fisher, BN, MSc(cand); Lian Kitts, RN;  
Elana Ptack, BA

## Contact Information

**Registered Nurses Association  
of Ontario**

Nursing Best Practice Guidelines Project  
111 Richmond Street West, Suite 1208  
Toronto, Ontario  
M5H 2G4

**Registered Nurses Association  
of Ontario**

Head Office  
438 University Avenue, Suite 1600  
Toronto, Ontario  
M5G 2K8

# Screening for Delirium, Dementia and Depression in Older Adults

## Disclaimer

*These best practice guidelines are related only to nursing practice and not intended to take into account fiscal efficiencies. These guidelines are not binding for nurses and their use should be flexible to accommodate client/family wishes and local circumstances. They neither constitute a liability or discharge from liability. While every effort has been made to ensure the accuracy of the contents at the time of publication, neither the authors nor RNAO give any guarantee as to the accuracy of the information contained in them, nor accept any liability, with respect to loss, damage, injury or expense arising from any such errors or omissions in the contents of this work. Any reference throughout the document to specific pharmaceutical products as examples does not imply endorsement of any of these products.*

## Copyright

*With the exception of those portions of this document for which a specific prohibition or limitation against copying appears, the balance of this document may be produced, reproduced and published in its entirety, in any form, including in electronic form, for educational or non-commercial purposes only, without requiring the consent or permission of the Registered Nurses Association of Ontario, provided that an appropriate credit or citation appears in the copied work as follows:*

Registered Nurses Association of Ontario (2003). *Screening for Delirium, Dementia and Depression in Older Adults*. Toronto, Canada: Registered Nurses Association of Ontario.

## *table of contents*

Guiding Principles – Assumptions .....	11
Summary of Recommendations .....	12
Interpretation of Evidence .....	14
Responsibility for Development .....	15
Purpose and Scope .....	15
Guideline Development Process .....	16
Definition of Terms .....	18
Background Context .....	20
Practice Recommendations .....	22
Education Recommendations .....	36
Organization & Policy Recommendations .....	37
Evaluation & Monitoring .....	37
Implementation Tips .....	39
Process for Update/Review of Guideline .....	41
References .....	42
Bibliography .....	44

Appendix A – Search Strategy for Existing Evidence .....	51
Appendix B – Glossary of Terms .....	56
Appendix C – Assessment Tool Reference Guide .....	59
Appendix D – Extensive Nursing Assessment/Mental Status Questions .....	60
Appendix E – Mini-Mental State Exam (MMSE) .....	64
Appendix F – Clock Drawing Test .....	65
Appendix G – Neecham Confusion Scale .....	66
Appendix H – Confusion Assessment Method Instrument (CAM) .....	72
Appendix I – Establishing a Diagnosis of Depression in the Elderly .....	75
Appendix J – Cornell Scale for Depression .....	76
Appendix K – Geriatric Depression Scale .....	77
Appendix L – Geriatric Depression Scale (GDS-4: Short Form) .....	78
Appendix M – Suicide Risk in the Older Adult .....	79
Appendix N – Medications That May Cause Cognitive Impairments .....	80
Appendix O – List of Available Resources .....	84
Appendix P – Description of the Toolkit .....	85

## *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 therefore were used as a framework for the development of this best practice guideline.

1. Every older person has a right to timely, accurate and thorough mental health screening assessments when appropriate and related treatments are indicated.
2. Delirium, dementia and depression are not synonymous with aging, but prevalence increases with chronological age.
3. Screening assessments of geriatric mental health conditions must honour the older person's preferences, values and beliefs and involve the individual in decision making.
4. Healthcare professionals must at all times be sensitive, respectful and culturally aware to minimize the potential indignity of the assessment experience for the older person.
5. Screening assessments of geriatric mental health conditions are complex and multi-faceted. They require specialized knowledge, skills and attitudes towards geriatric mental health, enhanced by a continuing relationship between nurse and client and refined through practical experience.
6. Geriatric mental health assessments are enhanced when standardized assessment tools are utilized.
7. Geriatric mental health screening assessments and care planning are most comprehensive when conducted from an interdisciplinary approach and when family/significant others are welcomed as partners in the process.
8. Confounding factors such as age, education level, and cultural background should be considered in the selection of mental status screening assessment tools and in the interpretation of all assessment results/scores.
9. Geriatric mental health screening assessment must be a dynamic and ongoing process that responds to the changing needs of the older person.

## Summary of Recommendations

	RECOMMENDATION	*STRENGTH OF EVIDENCE
Practice Recommendations	1. Nurses should maintain a high index of suspicion for delirium, dementia and depression in the older adult.	B
	2. Nurses should screen clients for changes in cognition, function, behaviour and/or mood, based on their ongoing observations of the client and/or concerns expressed by the client, family and/or interdisciplinary team, including other specialty physicians.	C
	3. Nurses must recognize that delirium, dementia and depression present with overlapping clinical features and may co-exist in the older adult.	B
	4. Nurses should be aware of the differences in the clinical features of delirium, dementia and depression and use a structured assessment method to facilitate this process.	C
	5. Nurses should objectively assess for cognitive changes by using one or more standardized tools in order to substantiate clinical observations.	A
	6. Factors such as sensory impairment and physical disability should be assessed and considered in the selection of mental status tests.	B
	7. When the nurse determines the client is exhibiting features of delirium, dementia and/or depression, a referral for a medical diagnosis should be made to specialized geriatric services, specialized geriatric psychiatry services, neurologists, and/or members of the multidisciplinary team, as indicated by screening findings.	C
	8. Nurses should screen for suicidal ideation and intent when a high index of suspicion for depression is present, and seek an urgent medical referral. Further, should the nurse have a high index of suspicion for delirium, an urgent medical referral is recommended.	C

\* See page 14 for details regarding "Interpretation of Evidence"

	RECOMMENDATION	STRENGTH OF EVIDENCE
Education Recommendations	9. All entry-level nursing programs should include specialized content about the older adult, such as normal aging, screening assessment and caregiving strategies for delirium, dementia and depression. Nursing students should be provided with opportunities to care for older adults.	C
	10. Organizations should consider screening assessments of the older adult's mental health status as integral to nursing practice. Integration of a variety of professional development opportunities to support nurses in effectively developing skills in assessing the individual for delirium, dementia and depression is recommended. These opportunities will vary depending on model of care and practice setting.	C
Organization & Policy Recommendations	<p>11. 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 Toolkit for guiding the implementation of the best practice guideline on <i>"Screening for Delirium, Dementia and Depression in Older Adults"</i>.</p>	C



## *Interpretation of Evidence*

**This RNAO guideline** is a synthesis of a number of source guidelines. In order to fully inform the reader, every effort has been made to maintain the original level of evidence cited in the source document. No alterations have been made to the wording of the source documents involving recommendations based on randomized controlled trials or research studies. Where a source document has demonstrated an “expert opinion” level of evidence, wording may have been altered and the notation of RNAO Consensus Panel 2003 added.

In the guidelines reviewed, the panel assigned each recommendation a rating of A, B or C to indicate the strength of the evidence supporting the recommendation. It is important to clarify that these ratings represent the strength of the supporting research evidence to date.

14

**STRENGTH OF EVIDENCE A:** Requires at least two randomized controlled trials as part of the body of literature of overall quality and consistency addressing the specific recommendations.

**STRENGTH OF EVIDENCE B:** Requires availability of well conducted clinical studies, but no randomized controlled trials on the topic of recommendations.

**STRENGTH OF EVIDENCE C:** Requires evidence from expert committee reports or opinions and/or clinical experience of respected authorities. Indicates absence of directly applicable studies of good quality.

## *Responsibility for Development*

**The Registered Nurses Association of Ontario (RNAO)**, with funding from the Ontario Ministry of Health and Long-Term Care, has embarked on a multi-year project of nursing best practice guideline development, pilot implementation, evaluation and dissemination. **Screening for Delirium, Dementia and Depression in Older Adults** is one of six best practice guidelines developed in the third cycle of the project. The RNAO convened a panel to develop this guideline, conducting its work independent of any bias or influence from the Ministry of Health and Long-Term Care.

## *Purpose and Scope*

**This guideline has been developed** to improve the screening assessment of older adult clients for delirium, dementia and depression. This guideline does not include recommendations for the management of these conditions in day-to-day nursing practice.

Best practice guidelines are systematically developed statements to assist nurses and clients in decision making about appropriate healthcare (Field & Lohr, 1990). This guideline focuses on: (1) Practice recommendations: directed at the nurse to guide practice regarding assessment and screening for delirium, dementia and depression in older adults; (2) Education recommendations: directed at educational institutions and organizations in which nurses work to support its implementation; (3) Organization and policy recommendations: directed at practice settings and the environment to facilitate nurses' practice; (4) Evaluation and monitoring indicators.

Although this guideline is written to guide nursing practice, geriatric mental healthcare is an interdisciplinary endeavour. Many settings have formalized interdisciplinary teams and the panel strongly supports this structure. Collaborative assessment and treatment planning with the client and family are essential.

It is acknowledged that the screening for delirium, dementia and depression needs to be studied in a more clearly defined way, and that there are gaps in the research evidence. However, this guideline will enable nurses to apply the best available evidence to clinical practice, and to promote the most appropriate use of healthcare resources.

All nurses are in a position to flag changes in a client's mental health status and direct the client to appropriate care. It is expected that individual nurses will perform only those aspects of geriatric mental health assessment and intervention/management within their scope of practice. Both RNs and RPNs should seek consultation in instances where the client's care needs surpass the individual nurse's ability to act independently.

## Guideline Development Process

16

**In February of 2001**, 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 twenty clinical practice guidelines related to geriatric mental health assessment and management. An initial screening was conducted with the following inclusion criteria:

- 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.

Ten guidelines were short-listed for critical appraisal using the "Appraisal Instrument for Clinical Practice Guidelines" (Cluzeau et al., 1997). This tool allowed for the evaluation in three key dimensions: rigour, content and context and application. *(For a listing of guidelines that were included in the appraisal process, see Appendix A.)*

Following the appraisal process, the panel identified the following seven guidelines, and related updates, to develop the recommendations cited in this guideline:

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), 251-280.

American Psychiatric Association (1997). Practice guidelines for the treatment of patients with Alzheimer's disease and other dementias of late life. *American Journal of Psychiatry*, 154(5), 1-39.

American Psychiatric Association (1999). Practice guideline for the treatment of patients with delirium. *American Journal of Psychiatry*, 156(5), 1-20.

Costa, P.T. Jr., Williams, T.F., Somerfield, M., et al. (1996). *Recognition and initial assessment of Alzheimer's disease and related dementias. Clinical practice guideline No. 19*. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Agency for Healthcare Policy and Research.

New Zealand Guidelines Group (1996). Guidelines for the treatment and management of depression by primary healthcare professionals. Ministry of Health Guidelines, New Zealand [On-line]. Available: <http://www.nzgg.org.nz/library.cfm>

Rapp, C. G. & The Iowa Veterans Affairs Nursing Research Consortium (1998). *Research based protocol: Acute confusion/delirium*. Iowa City: The University of Iowa Gerontological Nursing Interventions Research Center, Research Development and Dissemination Core.

Scottish Intercollegiate Guidelines Network (1998). Interventions in the management of behavioural and psychological aspects of dementia. Scottish Intercollegiate Guidelines Network [On-line]. Available: <http://www.show.nhs.uk/sign/home/htm>

A critique of systematic review articles and pertinent literature was conducted to update the existing guidelines. Through a process of evidence gathering, synthesis and consensus, a draft set of recommendations was established. This draft document was submitted to a set of external stakeholders for review and feedback – an acknowledgment of these reviewers is provided at the front of this document. Stakeholders represented various healthcare professional groups, clients and families, 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 pilot testing.

A pilot implementation practice setting was identified through a “Request for Proposal” (RFP) process. Practice settings in Ontario were asked to submit a proposal if they were interested in pilot testing the recommendations of the guideline. These proposals were then subjected to a review process, from which a successful practice setting was identified. A nine-month pilot implementation was undertaken to test and evaluate the recommendations in three hospitals in Toronto, Ontario. An acknowledgment of these organizations is included at the front of this document. The development panel reconvened after the pilot implementation in order to review the experiences of the pilot sites, consider the evaluation results and review any new literature published since the initial development phase. All these sources of information were used to update/revise the document prior to publication.

## *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 proposition 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

**Prevalence studies indicate that** the size of the older adult population is increasing and is projected to continue to increase. The Canadian Study on Health and Aging Working Group (1994b) estimated that in 1991, 12 percent of the population was over the age of sixty-five years and reported that this figure will rise to 21.8 percent by the year 2011.

Delirium, dementia and depression are often unrecognized among the geriatric population, due to their complexity and multi-faceted nature. This lack of recognition impacts on the quality of life, morbidity and mortality of the older client. Enabling the nurse to recognize and provide timely screening for delirium, dementia and depression may result in improved outcomes for the client.

**Delirium** is a temporary disordered mental state, characterized by acute and sudden onset of cognitive impairment, disorientation, disturbances in attention, decline in level of consciousness or perceptual disturbance. A prevalent disorder, it is estimated that 14 to 80 percent of all elderly clients hospitalized for the treatment of acute physical illnesses experience an episode of delirium. Studies have shown a marked variability in the epidemiology of delirium results from the differences in study populations, diagnostic criteria, case finding and research techniques (Foreman, Wakefield, Culp & Milisen, 2001).

### **Research findings have shown that delirium in older adults result in:**

- **greater in-hospital functional decline** (Foreman et al., 2001; Inouye, Rushing, Foreman, Palmer & Pompei, 1998).
- **greater intensity of nursing care** (Brannstrom, Gustafson, Norberg & Winblad, 1989; Foreman et al., 2001).
- **more frequent use of physical restraints** (Foreman et al., 2001; Ludwick, 1999; Sullivan-Marx, 1994).
- **increased length of hospitalization, and higher hospital mortality rates** (Foreman et al., 2001; Inouye et al., 1998).
- **worse outcomes in severe delirium (e.g., ADL decline, ambulatory decline, and nursing home placement or death) than mild delirium, particularly at 6 months** (Marcantonio, Ta, Duthie & Resnick, 2002).



**Dementia** is a syndrome of progressive decline in multiple areas of cognitive function eventually leading to a significant inability to maintain occupational and social performance. The estimates of the prevalence of dementia range from 2.4 percent among persons aged 65-74 years, to 34.5 percent among those aged 85 and over (Loney, Chambers, Bennett, Roberts & Stratford, 1998). Research shows there are presently over 250,000 seniors with dementia in Canada, and it is estimated to rise to 778,000 by 2031 (Canadian Study on Health and Aging, 1994b; Patterson et al., 2001). The incidence suggests that there will be approximately 60,150 new cases of dementia in Canada each year. Patterson et al. (2001) conclude that because of the increasing burden of suffering which dementing disorders impose on individuals, their caregivers and the healthcare system, recommendations on the assessment and management of these conditions are both timely and important.

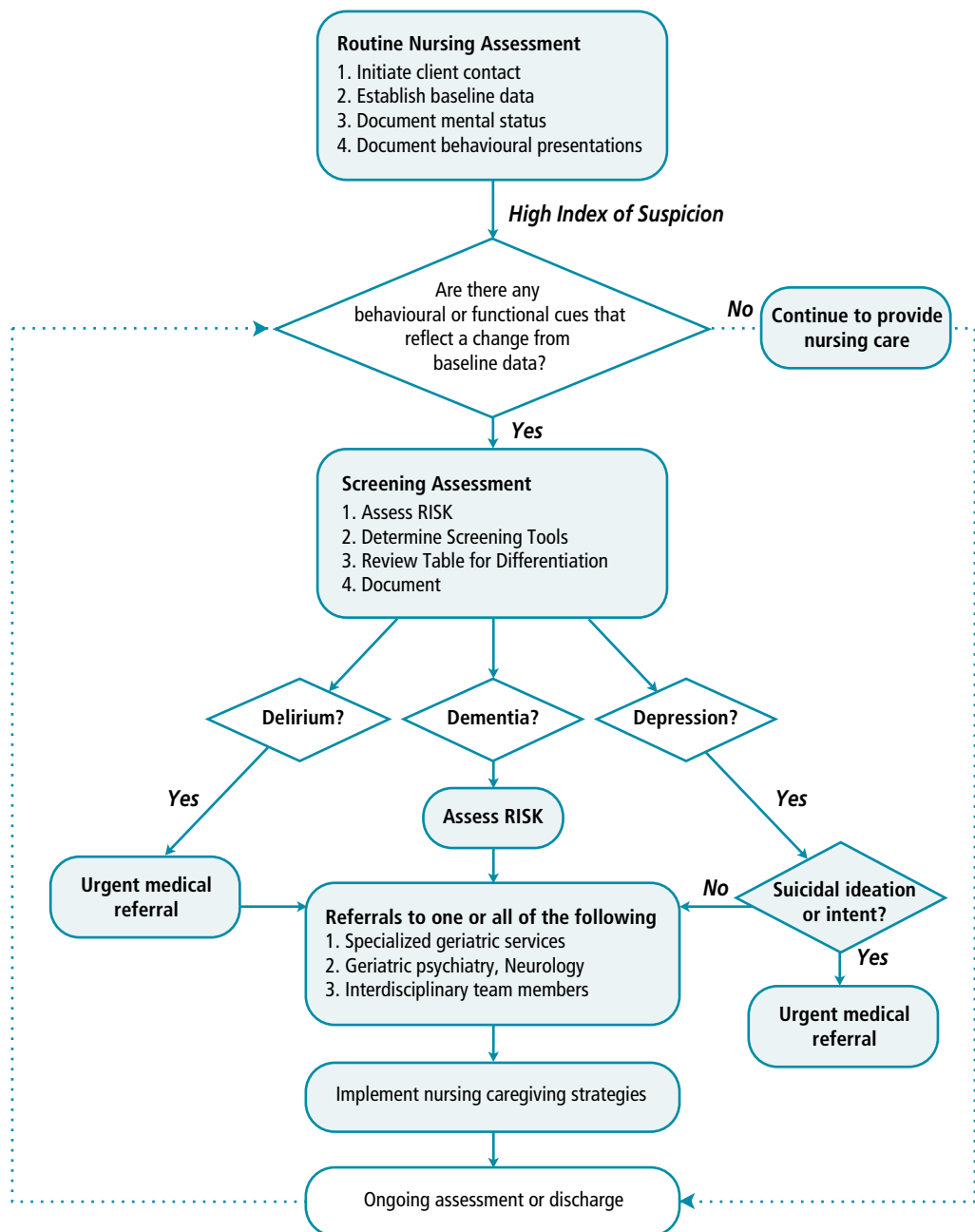
**Depression** is a syndrome comprised of a constellation of affective, cognitive and somatic or physiological manifestations in varying severity from mild to severe (Kurlowicz & NICHE Faculty, 1997; National Institute of Health Consensus Development Panel, 1992). Depressive symptoms occur in 15 to 20 percent of community-based elders requiring clinical attention and 37 percent of elders in primary care settings.

Depression in late life is a major public health concern. Mortality and morbidity rates increase in the older adult experiencing depression, and there is a high incidence of comorbidity 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, cancer and chronic depression (U.S. Dept. of Health and Human Services, 1997). Untreated depression may also result in increased substance abuse, slowed recovery from medical illness or surgery, malnutrition and social isolation (Katz, 1996). The most troubling outcome of depression is elder suicide, and older adults have the highest risk of suicide rates of any age group. The suicide rate for individuals aged 85 and older is the highest at about 21 suicides per 100,000 people, a 25 percent increase from 1980 to 1986 (Conwell, 1994). Studies reveal that single, white, elderly males have the highest rate of suicide and are more likely to succeed than their female counterparts.

## Practice Recommendations

The following diagram outlines the flow of information and recommendations that are included in this guideline.

The Screening Assessment Flow Diagram for Delirium, Dementia and Depression



## **Recommendation • 1**

**Nurses should maintain a high index of suspicion for delirium, dementia and depression in the older adult. (*Strength of Evidence = B*)**

### **Discussion of Evidence**

Due to the aging population, nurses will be providing more care to the elderly in a variety of settings. While many older adults remain able to care for themselves independently or with some formal and/or informal support, a smaller proportion of adults with cognitive and medical needs consume a high level of service utilization.

There is substantial evidence supporting the theory that the presentation of delirium, dementia and/or depression is associated with increasing age, including work published by the Canadian Study on Health and Aging Working Group (1994a). While it is accepted that some aspects of cognitive performance deteriorate with age, dementia is usually “suspected” when cognitive losses are associated with decline in occupational, social, or day-to-day functioning (Patterson et al., 2001).

The literature repeatedly confirms that among healthcare providers, there is a tendency to view mild dementing changes as “just old age”, and little or no follow-up is done (Costa, Williams, Somerfield et al., 1996). At the same time, evidence is inconclusive in supporting an assessment of all asymptomatic older people, particularly for dementia.

“Given the burden of dementia for some people and their caregivers, it is important for health providers to maintain a high index of suspicion” (Patterson et al., 2001, p. 7). This theme of “index of suspicion” is echoed by the New Zealand Guidelines Group (1996), who support maintaining a high level of suspicion for depression, and feel that this could be the single most important factor contributing to early detection.



## Recommendation • 2

**Nurses should screen clients for changes in cognition, function, behaviour and/or mood, based on their ongoing observations of the client and/or concerns expressed by the client, family and/or interdisciplinary team, including other specialty physicians.**

*(Strength of Evidence = C – RNAO Consensus Panel, 2003)*

### Discussion of Evidence

The screening process incorporates an ongoing assessment of risk of injury to the client. The determination of risk will influence the immediacy and focus of subsequent referral and intervention. The literature reveals that the initial presentation of delirium, dementia and/or depression includes changes of either a subtle or noticeable nature in functioning, behavioural change, mood and cognition. Studies confirm that screening for these disorders leads to early detection with improved clinical outcomes for older clients. Conditions such as delirium, Lewy body dementia, and depression can be identified and treated (Costa et al., 1996; Rapp & The Iowa Veterans Affairs Nursing Research Consortium, 1998; Scottish Intercollegiate Guidelines Network, 1998). Patterson et al. (2001) note that regularity in visiting primary care providers has a significant impact on the early identification of cognitive deficits, and this practice is widely supported in other articles.

There is much discussion in the literature on the important role of family and caregivers as part of history taking. Studies confirm that a collateral history should be obtained from a reliable informant, since the client with delirium, dementia and/or depression may lack insight into their illnesses and their cognitive changes may limit the validity of self-report. Patterson et al. (2001) conclude that relatives and caregivers can accurately identify cognitive decline, and their concerns must always be taken seriously. Costa et al. (1996) note that reports from relatives vary greatly, depending on the relationship with the client. For example, spouses report lower levels of impairment than younger family members. Other studies expand on this theme, suggesting that information from informants can be obtained through interviews, as well as completion of rating scales (American Psychiatric Association, 1997, 1999; SIGN, 1998).

Other organizations, including the College of Nurses of Ontario (2002), support standards of practice for the care of older adults that incorporate assessment and documentation of cognitive and functional abilities.

### Recommendation • 3

**Nurses must recognize that delirium, dementia and depression present with overlapping clinical features and may co-exist in the older adult. (*Strength of Evidence = B*)**

#### Discussion of Evidence

The literature frequently focuses on the co-existence of delirium, dementia and depression. During screening assessment interviews with both the client and caregiver/informant, the nurse should be cognizant of the frequent co-existence of delirium, dementia and depression, and seek evidence to identify their presence (Costa et al., 1996). A review of articles also confirms that both delirium and depression are often mistaken for dementia, and because of the frequency of this co-existence, nurses are advised to conduct ongoing assessments to ensure prompt medical attention for treatable and reversible conditions. If delirium or depression is suspected, a prompt response of intervention and possible referral needs to happen (APA, 1999; Costa et al., 1996). (*see Screening Assessment Flow Diagram on page 22*)

### Recommendation • 4

**Nurses should be aware of the differences in the clinical features of delirium, dementia and depression and use a structured assessment method to facilitate this process. (*Strength of Evidence = C – RNAO Consensus Panel, 2003*)**

#### Discussion of Evidence

The development panel reached consensus on this recommendation, noting that as nurses conduct a geriatric mental health assessment, it is important to start with a clear understanding of the variety of altered mental states and the varying behaviours that might be encountered. Table I outlines some of the clinical features a person can exhibit regarding delirium, dementia and depression. The table can be used as a guide when assessing clients and to differentiate between delirium, dementia and depression.

**Table I: Assessment of the clinical features a person can exhibit regarding delirium, dementia and depression**

Feature	Delirium/Acute Confusion	Dementia	Depression
Onset	<ul style="list-style-type: none"> <li>Acute/subacute depends on cause, often at twilight</li> </ul>	<ul style="list-style-type: none"> <li>Chronic, generally insidious, depends on cause</li> </ul>	<ul style="list-style-type: none"> <li>Coincides with life changes, often abrupt</li> </ul>
Course	<ul style="list-style-type: none"> <li>Short, diurnal fluctuations in symptoms; worse at night in the dark and on awakening</li> </ul>	<ul style="list-style-type: none"> <li>Long, no diurnal effects, symptoms progressive yet relatively stable over time</li> </ul>	<ul style="list-style-type: none"> <li>Diurnal effects, typically worse in the morning; situational fluctuations but less than acute confusion</li> </ul>
Progression	<ul style="list-style-type: none"> <li>Abrupt</li> </ul>	<ul style="list-style-type: none"> <li>Slow but even</li> </ul>	<ul style="list-style-type: none"> <li>Variable, rapid-slow but uneven</li> </ul>
Duration	<ul style="list-style-type: none"> <li>Hours to less than 1 month, seldom longer</li> </ul>	<ul style="list-style-type: none"> <li>Months to years</li> </ul>	<ul style="list-style-type: none"> <li>At least 2 weeks, but can be several months to years</li> </ul>
Awareness	<ul style="list-style-type: none"> <li>Reduced</li> </ul>	<ul style="list-style-type: none"> <li>Clear</li> </ul>	<ul style="list-style-type: none"> <li>Clear</li> </ul>
Alertness	<ul style="list-style-type: none"> <li>Fluctuates; lethargic or hypervigilant</li> </ul>	<ul style="list-style-type: none"> <li>Generally normal</li> </ul>	<ul style="list-style-type: none"> <li>Normal</li> </ul>
Attention	<ul style="list-style-type: none"> <li>Impaired, fluctuates</li> </ul>	<ul style="list-style-type: none"> <li>Generally normal</li> </ul>	<ul style="list-style-type: none"> <li>Minimal impairment but is distractible</li> </ul>
Orientation	<ul style="list-style-type: none"> <li>Fluctuates in severity, generally impaired</li> </ul>	<ul style="list-style-type: none"> <li>May be impaired</li> </ul>	<ul style="list-style-type: none"> <li>Selective disorientation</li> </ul>
Memory	<ul style="list-style-type: none"> <li>Recent and immediate impaired</li> </ul>	<ul style="list-style-type: none"> <li>Recent and remote impaired</li> </ul>	<ul style="list-style-type: none"> <li>Selective or patchy impairment, "islands" of intact memory</li> </ul>
Thinking	<ul style="list-style-type: none"> <li>Disorganized, distorted, fragmented, slow or accelerated incoherent</li> </ul>	<ul style="list-style-type: none"> <li>Difficulty with abstraction, thoughts impoverished, make poor judgments, words difficult to find</li> </ul>	<ul style="list-style-type: none"> <li>Intact but with themes of hopelessness, helplessness or self-deprecation</li> </ul>
Perception	<ul style="list-style-type: none"> <li>Distorted; illusions, delusions and hallucinations, difficulty distinguishing between reality and misperceptions</li> </ul>	<ul style="list-style-type: none"> <li>Misperceptions often absent</li> </ul>	<ul style="list-style-type: none"> <li>Intact; delusions and hallucinations absent except in severe cases</li> </ul>

Reprinted with permission. Adapted from: New Zealand Guidelines Group (1998). *Guideline for the Support and Management of People with Dementia*. New Zealand: Enigma Publishing.

The following information will aid in the interpretation and use of Table I (Assessment of the clinical features a person can exhibit regarding delirium, dementia and depression), and will also aid in differentiating between the disorders.

## **Delirium**

**DSM-IV-TR is the standard for identifying the following diagnostic criteria for delirium:**

- A. Disturbances of consciousness (e.g., reduced clarity of awareness of the environment) with reduced ability to focus, sustain or shift attention.
- B. A change in cognition (such as memory deficit, disorientation, language disturbance) or the development of a perceptual disturbance that is not better accounted for by a preexisting, established or evolving dementia.
- C. The disturbance develops over a short period of time (usually hours to days) and tends to fluctuate during the course of the day.
- D. There is evidence from the history, physical examination or laboratory findings that the disturbance is caused by the direct physiological consequences of a general medical condition.

Reprinted with permission from the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision. Copyright 2000 American Psychiatric Association.

**Delirium** also has associated features such as sleep-wake cycle disturbances and altered psychomotor behaviour. Behavioural manifestations of individuals with delirium may also include:

- attempts to escape one's environment (often resulting in falls).
- removal of medical equipment (e.g., intravenous lines, catheters).
- disturbances in vocalizations (e.g., screaming, calling out, complaining, cursing, muttering, moaning).
- hyperactivity (restless state, constant motion), hypoactivity (inactive, withdrawn, sluggish state) or a combination of the two.
- a predilection to attack others (APA, 1995; Lipowski, 1983).

In the community, care providers might see behavioural manifestations of delirium including inappropriate phone calls to emergency rooms, mismanaging medications, taking things apart and/or leaving water running.



## Dementia

DSM-IV-TR is also the standard for diagnostic criteria for dementia:

- A. The development of multiple cognitive deficits manifested by both
  1. memory impairment (impaired ability to learn new information or to recall previously learned information).
  2. one (or more) of the following cognitive disturbances:
    - a) aphasia (language disturbance).
    - b) apraxia (impaired ability to carry out motor activities despite intact motor function).
    - c) agnosia (failure to recognize or identify objects despite intact sensory function).
    - d) disturbance in executive functioning (e.g., planning, organizing, sequencing, abstracting).
- B. The cognitive deficits in the above criteria (Criteria A1 and A2) each cause significant impairment in social or occupational functioning and represent a significant decline from a previous level of functioning.
- C. The course is characterized by gradual onset and continuing cognitive decline.
- D. The cognitive deficits listed above are not due to any of the following:
  1. other central nervous system conditions that cause progressive deficits in memory and cognition (e.g., cerebrovascular disease, Parkinson's disease, Huntington's disease, subdural hematoma, normal-pressure hydrocephalus, brain tumour).
  2. systemic conditions that are known to cause dementia (e.g., hypothyroidism, vitamin B12 or folic acid deficiency, niacin deficiency, hypercalcemia, neurosyphilis, HIV infection).
  3. substance-induced conditions.
- E. The deficits do not occur exclusively during the course of a delirium.
- F. The disturbance is not better accounted for by another Axis I disorder (e.g., Major Depressive Disorder, Schizophrenia).

Reprinted with permission from the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision. Copyright 2000 American Psychiatric Association.

**Dementia** is not a disease in itself, but characterizes a group of symptoms that accompany certain disease processes. The essential features of dementia include:

- memory loss that affects day-to-day function
- difficulty performing tasks
- problem with language
- disorientation of time and place
- poor or decreased judgment
- problems with abstract thinking
- misplacing things
- changes in mood or behaviour
- changes in personality
- **loss of initiative** (list of 10 common symptoms listed above obtained from Alzheimer Society of Canada)
- **gait disorders** (Patterson et al., 2001)



## **Depression**

**DSM-IV-TR is also the standard for identifying the following diagnostic criteria for major depression:**

Five (or more) of the following symptoms have been present during the same two-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure.

1. depressed mood most of the day, nearly every day
2. marked diminished interest or pleasure in normal activities
3. significant weight loss or gain
4. insomnia or hypersomnia nearly every day
5. psychomotor agitation or retardation nearly every day
6. fatigue or loss of energy nearly every day
7. feelings of worthlessness or excessive guilt
8. diminished ability to think or concentrate, or indecisiveness
9. recurrent thoughts of death or suicidal thoughts/actions

Adapted and reprinted with permission from the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision. Copyright 2000 American Psychiatric Association.

**Depressive** symptomatology in the older adult is unique. Older adults report more somatic or physical symptoms rather than depressed mood, which is the most prominent feature of depression in younger persons. Other differences in the presenting symptoms for the older adult experiencing depression are as follows:

- older adults are likely to accept their “unhappiness” and direct inquiry about their mood may lead only to such replies as “No, I have nothing to be depressed about.”
- apathy and withdrawal are common
- feelings of guilt are less common
- loss of self-esteem is prominent
- inability to concentrate, with resulting memory impairment and other cognitive dysfunction is common (Kane, Ouslander & Abrass, 1994)

### **Recommendation • 5**

**Nurses should objectively assess for cognitive changes by using one or more standardized tools in order to substantiate clinical observations. (*Strength of Evidence = A*)**

### **Discussion of Evidence**

Studies consistently suggest that clinical interview/observation is the most effective method of detection, and should consist of multiple and varied sources of information (Costa et al., 1996). The Agency for Healthcare Policy and Research (1993) states that this interaction with the client is the basis for including symptoms specific to depression, with the subsequent use of specific tools to augment the diagnosis, as a valuable addition. The use of consistent, standardized tools to enhance documentation of client behaviours, mood, cognition and changes in functional ability, is strongly supported (AHCPR, 1993; Costa et al., 1996). It is stressed that screening tools can augment, but not replace a comprehensive “head to toe” nursing assessment. Further, the Scottish Intercollegiate Guidelines Network (1998) reports that these standardized measures do provide valuable baseline data, and can assist in monitoring of response to intervention.

The tools outlined in this guideline are as follows, and are also summarized in “The Assessment Tool Reference Guide” (Appendix C). This list is not inclusive, and the tools are to be considered suggestions only. The evidence does not support a specific tool, and the RNAO development panel does not consider one tool superior to another.

- Mini-Mental Status Exam (*Appendix E*)
- Clock Drawing Test (*Appendix F*)
- Neecham Confusion Scale (*Appendix G*)
- Confusion Assessment Method Instrument (CAM) (*Appendix H*)
- Establishing a Diagnosis of Depression in the Elderly (*Appendix I*)
- Cornell Scale for Depression (*Appendix J*)
- Geriatric Depression Scale (*Appendix K and L*)
- Suicide Risk in the Older Adult (*Appendix M*)

### Mini-Mental Status Exam

Structured mental status assessments quantify a baseline for screening an illness such as delirium, dementia and/or depression, but are not diagnostic in nature. There is currently no single mental status test that has demonstrated superiority (Costa et al., 1996). On reviewing the established reliability and validity of a tool/guideline, the clinician should choose the instrument best suited to their clinical practice and that will best augment their assessment. The Mini-Mental Status Exam (MMSE) is the most widely used mental status assessment (see Appendix E). Lower scores on MMSE do increase the likelihood of a subsequent decline (Patterson & Gass, 2001).

### **Clock Drawing Test**

The Clock Drawing Test (see Appendix F) assists in supporting a diagnosis of dementia or in indicating to a clinician areas of difficulty experienced by a client (NZGG, 1998). To date there are about fifteen original scoring systems for the clock drawing test (Heinik, Solomesh, Shein & Becker, 2002). The decline in clock-drawing performance over the dementia process has been studied by several authors. In a study by Heinik et al. (2002), it was found that some scoring systems may have greater sensitivity than others in monitoring progression of cognitive deterioration. The correlation between different clock drawing tests and the variables such as demographic, cognitive and activities of daily living is not ubiquitous and it changes with the dementia severity.

### **Confusion Assessment Method Instrument**

Delirium and dementia can be difficult to differentiate. Although both conditions are hallmarked by global disturbance in cognition, delirium is distinguished from dementia by: disruption of consciousness and attention; clinical course; development over a short period of time; and fluctuation through the course of the day (Costa et al., 1996). Assessment tools adopted must capture these essential components. One such tool is the Confusion Assessment Method Instrument (CAM) (see Appendix H). The CAM-ICU is another tool specifically designed to objectively assess the same characteristics in an intensive care unit population (Ely et al., 2001).

### **Cornell Scale for Depression**

Depression screening in persons suspected of dementia should include information from the client and caregiver, as well as the nurse's observation of symptoms. The Cornell Scale for Depression (see Appendix J) requires an assessment interview by a clinician obtaining information from both the client and the informant.

### **Geriatric Depression Scale**

Following the clinical interview and the identification of risk factors or client symptoms, the nurse may substantiate the potential for depression with the use of a questionnaire such as the Geriatric Depression Scale (GDS) (see Appendix K for GDS-15 and Appendix L for GDS-4). The GDS long or short form is valid and reliable for the screening and quantification of depression in mild-to-moderate dementia (Isella, Villa & Appollonio, 2001). The findings from Isella, Villa and Appollonio's study (2001) support the use of GDS-4 for the screening of depression and of the GDS-15 for its severity assessment.

### Recommendation • 6

Factors such as sensory impairment and physical disability should be assessed and considered in the selection of mental status tests. *(Strength of Evidence = B)*

#### Discussion of Evidence

Patterson et al. (2001) note that a focused, comprehensive examination includes an assessment of vision, hearing, symptoms of cardiac failure, poor respiratory function or problems in mobility and balance. The interpretation of this clinical and quantitative assessment data is complicated by several factors, including the client's age, premorbid intelligence, education level, cultural background, psychiatric illness, sensory deficits and comorbid conditions. Evidence supports the recommendation that care providers are cautioned to consider these factors when applying the assessment framework in specific client situations. The development panel suggests that nurses refer to the discussion of the specific assessment tools to determine when tools are/are not appropriate for a particular client.

### Recommendation • 7

When the nurse determines the client is exhibiting features of delirium, dementia and/or depression, a referral for a medical diagnosis should be made to specialized geriatric services, specialized geriatric psychiatry services, neurologists, and/or members of the multidisciplinary team, as indicated by screening findings.

*(Strength of Evidence = C – RNAO Consensus Panel, 2003)*

#### Discussion of Evidence

Although there is substantial evidence that further assessment should be conducted if abnormal findings are obtained for both mental status and functional status tests, specific guidance on the referral process is lacking (Costa et al., 1996). The development panel suggests that the referral process should include a careful evaluation for a general medical, psychiatric or psychosocial problem that may underlie the disturbance.

It is widely believed that the core of the treatment of demented clients is psychiatric management, and this intervention must be based on a solid alliance with the client and family, and consist of thorough psychiatric, neurological and general medical evaluations of the nature and cause of the cognitive deficits (APA, 1998).



Several studies note that newly developing or acutely worsening agitation can be a sign of a deteriorating medical condition (APA, 1997). Clinicians should bear in mind that the elderly and clients with dementia in general, are at high risk for delirium associated with medical problems, medications and surgery. *For a listing of medications that may cause cognitive impairments, see Appendix N.*

### **Recommendation • 8**

**Nurses should screen for suicidal ideation and intent when a high index of suspicion for depression is present, and seek an urgent medical referral. Further, should the nurse have a high index of suspicion for delirium, an urgent medical referral is recommended.**

*(Strength of Evidence = C – RNAO Consensus Panel, 2003)*

35

### **Discussion of Evidence**

Several studies suggest that depressive disorders are poorly recognized and under treated. Consequently, healthcare workers need to maintain a high index of suspicion and not rely on the client to raise the possibility that they are suffering from a mental health problem (NZGG, 1998). An urgent medical referral is recommended if the nurse has a high index of suspicion that the client has depression, because of the higher risk of morbidity and mortality (Foreman et al., 2001; Inouye, et al., 1998).

A further search of the literature found strong evidence that clients with depression should be carefully evaluated for suicide potential, as well as the potential for violence (APA, 1999). The New Zealand Guidelines Group (1998) also reports that suicidal thoughts and behaviour are closely associated with mental illness, and the evaluation of such symptoms should always include a full psychiatric assessment, usually by an appropriately trained team of mental health professionals. It is widely believed that an interdisciplinary team offers a greater range of skills to meet the differing needs of clients who may be suicidal, and can also provide supervision and support to its members (APA, 1997).

Several articles agree that while predicting suicide risk in an individual is difficult, there are certain factors that have been associated with a greater potential for suicide. Refer to Appendix M for a list of factors.

## Education Recommendations

### Recommendation • 9

All entry-level nursing programs should include specialized content about the older adult, such as normal aging, screening assessment and caregiving strategies for delirium, dementia and depression. Nursing students should be provided with opportunities to care for older adults. *(Strength of Evidence = C – RNAO Consensus Panel, 2003)*

Undergraduate curricula should routinely include:

- Education in screening assessments for delirium, dementia and depression.
- Clinical practicum focusing on the care of the elderly in all settings.
- Education and motivation of nurses to use assessment tools.

### Recommendation • 10

Organizations should consider screening assessments of the older adult's mental health status as integral to nursing practice. Integration of a variety of professional development opportunities to support nurses in effectively developing skills in assessing the individual for delirium, dementia and depression is recommended. These opportunities will vary depending on model of care and practice setting.

*(Strength of Evidence = C – RNAO Consensus Panel, 2003)*

Educational development in the area of gerontological care for nurses in all specializations and practice settings is needed to provide additional background knowledge and expertise in the care of the older person. Specifically, organizations must provide professional development opportunities for nurses that are tailored to individual and group learning styles. Nurses are responsible for pursuing professional opportunities.

## Organization & Policy Recommendations

### Recommendation • 11

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 (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 “*Screening for Delirium, Dementia and Depression in Older Adults.*”

*(Strength of Evidence = C – RNAO Consensus Panel, 2003)*

## Evaluation & Monitoring

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

## Screening for Delirium, Dementia and Depression in Older Adults

Indicator	Structure	Process	Outcome
Objectives	<ul style="list-style-type: none"> <li>To evaluate the supports available in the organization that allow for nurses to integrate in their practice the assessment and screening for delirium, dementia and depression in the older adults.</li> </ul>	<ul style="list-style-type: none"> <li>To evaluate the changes in practice that lead towards appropriate use of screening tools to assess older adults for delirium, dementia and depression.</li> </ul>	<ul style="list-style-type: none"> <li>To evaluate the impact of implementing the recommendations.</li> </ul>
Organization/Unit	<ul style="list-style-type: none"> <li>Review of best practice recommendations by organizational committee(s) responsible for policies or procedures.</li> <li>Availability of client education resources that are consistent with best practice recommendations.</li> <li>Provision of accessible resource people for nurses to consult for ongoing support after the initial implementation period.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Orientation program inclusion of delirium, dementia and depression</li> <li>Accreditation review in this aspect.</li> <li>Organization reputation directly reflecting care in this regard.</li> <li>Referrals internally and externally.</li> </ul>
Provider	<ul style="list-style-type: none"> <li>Percentage of nurses and other healthcare professionals attending the best practice guideline education sessions on geriatric mental health.</li> <li>Nurse to client ratio.</li> <li>Role changes e.g., role description, performance appraisal.</li> </ul>	<ul style="list-style-type: none"> <li>Nurses' self-assessed knowledge of:                             <ol style="list-style-type: none"> <li>normal aging</li> <li>differential features of delirium, dementia, and depression</li> <li>how to do a mental status exam.</li> <li>their role in assessing for delirium, dementia and depression as it relates to other healthcare professionals.</li> </ol> </li> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>Evidence of documentation in the client's record consistent with the guideline recommendations:                             <ol style="list-style-type: none"> <li>Referral to community resources for follow-up</li> <li>Provision of education and support to client and family members.</li> </ol> </li> <li>Client/family satisfaction.</li> </ul>
Geriatric Client	<ul style="list-style-type: none"> <li>Percentage of geriatric clients admitted to unit/facility with mental health problems.</li> </ul>	<ul style="list-style-type: none"> <li>Percentage of clients identified with delirium, dementia and/or depression upon initial screening.</li> <li>Percentage of clients/families knowledge of delirium, dementia and depression at or close to discharge.</li> </ul>	<ul style="list-style-type: none"> <li>Percentage of clients seen or on waiting list to be seen for referral (proxy interview if family member).</li> <li>Percentage of clients identified with delirium, dementia and/or depression with appropriate action plan and monitoring.</li> <li>Percentage of clients referred to specialty programs for geriatric mental health (physicians, nurse practitioner, geriatric psychiatric consultants, Alzheimer Society of Canada).</li> </ul>
Financial Costs	<ul style="list-style-type: none"> <li>Costs related to hiring of any new staff, equipment, etc in direct relation to this guideline.</li> </ul>	<ul style="list-style-type: none"> <li>Cost related to implementing this 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> </li> </ul>	<ul style="list-style-type: none"> <li>Length of stay.</li> <li>Re-admission rates.</li> <li>Costs for treatments.</li> <li>Re-integration back in the community or long-term care facility.</li> </ul>

## *Implementation Tips*

**This best practice guideline was** pilot tested at three teaching hospitals, in seven clinical settings, in Toronto, Ontario with an in-patient population. The lessons learned/ results of the pilot may be unique to the three organizations and not generalizable to a public health, community care or general hospital setting. However, there were many strategies that the pilot sites found helpful during the implementation, and those who are interested in implementing this guideline may consider these strategies or implementation tips. A summary of these strategies follows:

- Have a dedicated person such as a clinical resource nurse who will provide support, clinical expertise and leadership. The individual should also have good interpersonal, facilitation and project management skills.
- Establishment of a steering committee comprising of key stakeholders and members committed to leading the initiative. A work plan was developed as a means of keeping track of activities, responsibilities and timelines.
- Provide educational sessions and ongoing support for implementation. At the pilot sites, a core education session ranging from 2.0 to 3.5 hours in length was developed by a steering committee. The steering committee reviewed the standardized assessment tools in the RNAO best practice guideline and selected the ones to be used by the nurses during the pilot. The education session consisted of a Power Point presentation, facilitator's guide, handouts, case studies and a game to review the content material. The content of the education session drew on the recommendations contained in this guideline. Binders, posters and pocket cards listing the signs and symptoms of delirium, dementia and depression were available as ongoing reminders of the training. The steering committee also developed a set of "trigger" questions that were added to the initial client assessment form to help the nurses maintain "a high index of suspicion" for the conditions. The pilot sites found the questions helpful in identifying triggers for further assessment. The trigger questions used by the pilot sites are as follows:

- a) Any acute changes in behavioural or functional status including fluctuation throughout the day?
- b) Is the client oriented to person, place or time?
- c) Are the client's thoughts organized and coherent?
- d) Impression of the client's memory?
- e) Any depressed mood, thoughts of death, suicidal ideation?
- f) Is the client able to attend to the questions?

Samples of other implementation tools developed by the pilot sites can be found at the RNAO website, [www.rnao.org/bestpractices](http://www.rnao.org/bestpractices).

- Organizational support, such as having the structures in place to facilitate the implementation. For examples, hiring of replacement staff so participants would not be distracted by concerns about work and having an organizational philosophy 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 and through interdisciplinary work are beneficial. It is essential to be cognizant of and to tap the resources that are available in the community. An 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 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 about this toolkit can be found in Appendix P. A full version of the document in pdf file 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. Following dissemination, each nursing best practice guideline will be reviewed by a team of specialists (Review Team) in the topic area every three years following the last set of revisions.
2. During the three-year period between development and revision, RNAO Nursing Best Practice Guideline project staff will regularly monitor for new systematic reviews, meta-analysis and randomized controlled trials (RCT) in the field.
3. Based on the results of the monitor, project staff may recommend an earlier revision period. Appropriate consultation with a team of members, comprising of original panel members and other specialists in the field, will help inform the decision to review and revise the best practice guideline 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 as follows:
  - a) Invite 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) Compilation of feedback received, questions encountered during the dissemination phase, as well as other comments and experiences of implementation sites.
  - c) Compilation of new clinical practice guidelines in the field, systematic reviews, meta-analysis papers, technical reviews and randomized controlled trial research.
  - d) Detailed work plan with target dates for deliverables will be established

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

## References

- Agency for Healthcare Policy and Research (1993). *Depression in primary care: Volume 1. Detection and Diagnosis. Volume 2. Treatment for Major Depression. Clinical Guideline No. 5.* (vols. 1 & 2) Department of Health and Human Services, Public Health Service, Agency for Healthcare Policy and Research.
- 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), 251-280.
- American Psychiatric Association (1995). Practice guidelines for psychiatric evaluation of adults. *The American Journal of Psychiatry*, 152(11), 63-80.
- American Psychiatric Association (1997). Practice guidelines for the treatment of patients with Alzheimer's disease and other dementias of late life. *American Journal of Psychiatry*, 154(5), 1-39.
- American Psychiatric Association (1999). Practice guideline for the treatment of patients with delirium. *American Journal of Psychiatry*, 156(5), 1-20.
- American Psychological Association (1998). Guidelines for the evaluation of dementia and age-related cognitive decline. *American Psychologist*, 53(12), 1298-1303.
- Baker, C., Ogden, S., Prapaipanich, W., Keith, C., Beattie, L. C., & Nickleson, L. (1999). Hospital consolidation: Applying stakeholder analysis to merger life-cycle. *Journal of Hospital Administration*, 29(3), 11-20.
- Black, N., Murphy, M., Lamping, D., McKee, M., Sanderson, C., Askham, J. et al. (1999). Consensus development methods: Review of best practice in creating clinical guidelines. *Journal of Health Services Research & Policy*, 4(4), 236-248.
- Brannstrom, M., Gustafson, Y., Norberg, A., & Winblad, B. (1989). Problems of basic nursing in acutely confused hip fracture patients. *Scandinavian Journal of Caring Sciences*, 3(1), 27-34.
- Brink, T. L., YeSavage, J. A., Lumo, H. A. M., & Rose, T. L. (1982). Screening test for geriatric depression. *Clinical Gerontologist*, 1(1), 37-43.
- Bronheim, H. E., Fulop, G., Kunkel, E. J., Muskin, P. R., Schindler, B. A., Yates, W. R. et al. (1998). Practice guidelines for psychiatric consultation in the general medical setting. *The Academy of Psychosomatic Medicine*, 39(4), S8-S30.
- Canadian Study on Health and Aging Working Group (1994a). Canadian study on health and aging. *Canadian Medical Association Journal*, 150(8), 899-913.
- Canadian Study on Health and Aging Working Group (1994b). Canadian Study on health and aging: Study methods and prevalence of dementia. *Canadian Medical Association Journal*, 150(6), 910.
- Clarke, M. & Oxman, A. D. (1999). Cochrane Reviewers' Handbook 4.0 (updated July 1999) (Version 4.0) [Computer software]. Oxford: Review manager (RevMan).
- Cluzeau, F., Littlejohns, P., Grimshaw, J., et al (1997). Appraisal instrument for clinical guidelines. St. Georges Hospital Medical School, England [On-line]. Available: <http://sghms.ac.uk/phs/hceu/>
- Cockrell, R. & Folstein, M. (1988). Mini-mental state examination. *Journal of Psychiatry Research*, 24(4), 689-692.
- College of Nurses of Ontario (2002). *Nursing documentation standards (Revised 2002)*. Toronto, Ontario: College of Nurses of Ontario.
- Conn, D. K., Herrmann, N., Kaye, A., Rewilak, D., & Schogt, B. (2001). *Practical psychiatry in the long-term care facility: A handbook for staff*. Toronto, Ontario: Hogrefe and Huber Publisher.



Conwell, Y. (1994). *Diagnosis and treatment of depression in late life: Results of the NIH consensus development conference*. Washington, D.C.: American Psychiatric Press.

Costa, P. T. Jr., Williams, T. F., Somerfield, M., et al. (1996). *Recognition and initial assessment of Alzheimer's disease and related dementias. Clinical practice guideline No. 19*. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Agency for Healthcare Policy and Research.

Ely, E. W., Margolin, R., Francis, J., May, L., Truman, B., Dittus, R. et al. (2001). Evaluation of delirium in critically ill patients: Validation of the confusion assessment method for the intensive care unit (CAM-ICU). *Critical Care Medicine*, 29(7), 1370-1379.

Field, M. J. & Lohr, K. N. (1990). *Guidelines for clinical practice: Directions for a new program*. Washington, D.C.: Institute of Medicine, National Academy Press.

Folstein, M., Folstein, S., & McHugh, P. (1975). A practical method for grading the cognitive state of patients for the clinician. *Journal of Psychiatric Research*, 12(3), 189-198.

Foreman, M. D., Wakefield, B., Culp, K., & Milisen, K. (2001). Delirium in elderly patients: An overview of the state of the science. *Journal of Gerontological Nursing*, 27(4), 12-20.

Fortinash, K. M. & Holoday-Worret, P. A. (1999). *Psychiatric nursing care plans*. (3 ed.) St. Louis: Mosby.

Fortinash, K. M. (1990). Assessment of mental states. In L. Malasanos, V. Barkauskas & K. Stoltenberg-Allen (Eds.), *Health Assessment* (4 ed.), St. Louis: Mosby.

Heinik, J., Solomesh, I., Shein, V., & Becker, D. (2002). Clock drawing test in mild and moderate dementia of the Alzheimer's type: A comparative and correlation study. *International Journal of Geriatric Psychiatry*, 17(5), 480-485.

Inouye, S. K., Rushing, J. T., Foreman, M. D., Palmer, R. M., & Pompei, P. (1998). Does delirium contribute to poor hospital outcomes? A three-site epidemiologic study. *Journal of General Internal Medicine*, 13(4), 234-242.

Inouye, S. K., van Dyck, C. H., Alessi, C. A., Balkin, S., Siegal, A. P., & Horwitz, R. I. (1990). Clarifying confusion: The confusion assessment method. A new method for detection of delirium. *Annals of Internal Medicine*, 113(12), 941-948.

Isella, V., Villa, M. L., & Appollonio, I. M. (2001). Screening and quantification of depression in mild-to-moderate dementia through the GDS short forms. *Clinical Gerontologist*, 24(3/4), 115-125.

Jenike, M. A. (1989). *Geriatric Psychiatry and Psychopharmacology: A Clinical Approach*. Yearbook Medical Publishers.

Kane, R. L., Ouslander, J. G., & Abrass, I. B. (1994). *Essentials of clinical geriatrics*. (3 ed.) New York: McGraw-Hill.

Katz, I. (1996). On the inseparability of mental and physical health in aged persons: Lessons from depression and medical comorbidity. *The American Journal of Geriatric Psychiatry*, 4(1), 1-16.

Kurlowicz, L. H. & NICHE Faculty (1997). Nursing standard of practice protocol: Depression in elderly patients. *Geriatric Nursing*, 18(5), 192-200.

Lipowski, Z. J. (1983). Transient cognitive disorders (delirium/acute confusional states) in the elderly. *American Journal of Psychiatry*, 140(11), 1426-1436.

Loney, P. I., Chambers, L. W., Bennett, K. J., Roberts, J. G., & Stratford, P. W. (1998). Critical appraisal of the health research literature: Prevalence of incidence health problem. *Chronic Diseases Canada*, 19(4), 170-176.

Ludwick, R. (1999). Clinical decision making: Recognition of confusion and application of restraints. *Orthopedic Nursing*, 18(1), 65-72.

Madjar, I. & Walton, J. A. (2001). What is problematic about evidence. In J.M.Morse, J. M. Swanson & A. J. Kuzel (Eds.), *The Nature of Qualitative Evidence* (pp. 28-45). Thousand Oaks, Sage.

Marcantonio, E., Ta, T., Duthie, E., & Resnick, N. M. (2002). Delirium severity and psychomotor types: Their relationship with outcomes after hip fracture repair. *Journal of the American Geriatrics Society*, 50(5), 850-857.

National Health and Medical Research Council (1998). A guide to the development, implementation and evaluation of clinical practice guidelines. National Health and Medical Research Council [On-line]. Available: <http://www.nhmrc.gov.au/publications/pdf/cp30.pdf>

National Institute of Health Consensus Development Panel (1992). Diagnosis and treatment of depression in late life. *Journal of the American Medical Association*, 268(8), 1018-1024.

New Zealand Guidelines Group (1998). *Guidelines for the Support and Management of People with Dementia*. New Zealand: Enigma Publishing.

New Zealand Guidelines Group (1996). Guidelines for the treatment and management of depression by primary healthcare professionals. Ministry of Health Guidelines, New Zealand. [On-line]. Available: <http://www.nzgg.org.nz/library.cfm>

Ontario Public Health Association (1996). *Making a difference! A workshop on the basic policy of change*. Toronto: Government of Ontario.

Patterson, C., Gauthier, S., Bergman, H., Cohen, C., Feightner, J. W., Feldman, H. et al. (2001). The recognition, assessment and management of dementing disorders: Conclusions from the Canadian consensus conference on dementia. *Canadian Journal of Neurological Science*, 28(Suppl. 1), S3-S16.

Patterson, C. J. S. & Gass, D. A. (2001). Screening for cognitive impairment and dementia in the elderly. *Canadian Journal of Neurological Science*, 28(Suppl 1), S42-S51.

Rapp, C. G. & The Iowa Veterans Affairs Nursing Research Consortium (1998). *Research based protocol: Acute confusion/delirium*. Iowa City: The University of Iowa Gerontological Nursing Interventions Research Center, Research Development and Dissemination Core.

Registered Nurses Association of Ontario (2002). *Toolkit: Implementation of clinical practice Guidelines*. Toronto, Canada: Registered Nurses Association of Ontario.

Rivard, M.-F. (1999). Late-life depression: Diagnosis (Part I). *Parkhurst Exchange*, 64-67.

Schutte, D. L. & Titler, M. G. (1999). *Research-based protocol: Identification, referral, and support of elders with genetic conditions*. Iowa City: The University of Iowa Gerontological Nursing Interventions Research Center, Research Development and Dissemination Core.

Scottish Intercollegiate Guidelines Network (1998). Interventions in the management of behavioral and psychological aspects of dementia. Scottish Intercollegiate Guidelines Network [On-line]. Available: <http://www.show.nhs.uk/sign/home.htm>

Sullivan-Marx, E. M. (1994). Delirium and physical restraint in the hospitalized elderly. *Image: Journal of Nursing Scholarship*, 26(4), 295-300.

U.S.Department of Health and Human Services (1997). Put prevention into practice: Depression. *Journal of American Academy of Nurse Practitioners*, 9(9), 431-435.

## Bibliography

Aikman, G. G. & Oehlert, M. E. (2000). Geriatric depression scale: Long form versus short form. *Clinical Gerontologist*, 22(3/4), 63-69.

American Medical Directors Association (1998a). Altered Mental States. *American Medical Directors Association (AMDA)*.

American Medical Directors Association (1998b). Dementia. *American Medical Directors Association (AMDA)*.

American Medical Directors Association (1998c). Depression. *American Medical Directors Association (AMDA)*.

American Psychiatric Association (2000). Practice guidelines for the treatment of patients with major depressive disorder. *The American Journal of Psychiatry* [On-line]. Available: [http://www.psych.org/clin\\_res/](http://www.psych.org/clin_res/)

Anderson, I. M., Nutt, D. J., & Deakin, J. F. W. (2000). Evidence-based guidelines for treating depressive disorders with antidepressants: A revision of the 1993 British Association for Psychopharmacology guidelines. *Journal of Psychopharmacology*, 14(1), 3-20.

Banerjee, S. & Dickinson, E. (1997). Evidence based health care in old age psychiatry. *International Journal of Psychiatry in Medicine*, 27(3), 283-292.

Baxter, C. (2001). *Delirium, Depression, Dementia Self-Study Package*. Winnipeg, Manitoba: Deer Lodge Hospital.

Brodaty, H., Pond, D., Kemp, N. M., Luscombe, G., Harding, L., Berman, K. et al. (2002). The GPCOG: A new screening test for dementia designed for general practice. *Journal of the American Geriatrics Society*, 50(3), 530-534.

Brodaty, H., Dresser, R., Eisner, M., Erkunjuntti, T., Gauthier, S., Graham, N. et al. (1999). Consensus Statement: Alzheimer's Disease International and International Working Group for Harmonization of Dementia Drug Guidelines for Research Involving Human Subjects with Dementia. *Alzheimer Disease and Associated Disorders*, 13(2), 71-79.

Brown, T. M. & Boyle, M. F. (2002). ABC of psychological medicine: Delirium. *British Medical Journal*, 325, 644-647.

California Working Group on Guidelines for Alzheimer's Disease Management (1999). Guideline cuts Alzheimer's care down to size. *Patient-Focused Care and Satisfaction*, 103-105.

Canadian Task Force on Preventive Health Care – Canada (1994). Screening for cognitive impairment in the elderly. National Guideline Clearinghouse [On-line]. Available: <http://www.guideline.gov/index.asp>

Clarfield, A. M. & Foley, J. M. (1993). The American and Canadian Consensus conferences on dementia: Is there consensus? *Journal of the American Geriatrics Society*, 41(8), 883-886.

Clarke Consulting Group (1996). Final Report: Establishing benchmarks for psychogeriatric outreach programs. Toronto, Ontario: Author.

Cohen, C. I. (2000). Directions for research and policy on schizophrenia and older adults: Summary of the GAP committee report. *Psychiatric Services*, 51(3), 299-302.

Copeland, J. R. M., Prince, M., Wilson, K. C. M., Dewey, M. E., Payne, J., & Gurland, B. (2002). The geriatric mental state examination in the 21st century. *International Journal of Geriatric Psychiatry*, 17(8), 729-732.

DeLise, D. C. & Leasure, A. R. (2001). Benchmarking: Measuring the outcomes of evidence-based practice. *Outcomes Management for Nursing Practice*, 5(2), 70-74.

Dugan, E., Cohen, S. J., Bland, D. R., Preisser, J. S., Davis, C. C., Suggs, P. K. et al. (2000). The association of depressive symptoms and urinary incontinence among older adults. *Journal of the American Geriatrics Society*, 48(4), 413-416.

Eccles, M., Clarke, J., Livingstone, C., Freemantel, N., & Mason, J. (1998). North of England evidence based guidelines development project: Guideline for the primary care management of dementia. *British Medical Journal* [On-line]. Available: [www.bmj.com](http://www.bmj.com)

- Eccles, M., Freemantel, N., & Mason, J. (1999). North of England evidence-based guideline development project: Summary version of guidelines for the choice of antidepressants for depression in primary care. *Family Practice*, 16(2), 103-111.
- Evans, M. (1994). Dementia. Psychiatry on line Italia [On-line]. Available: [www.pol-it.org](http://www.pol-it.org)
- Fields, D. S. (2000). Finding and appraising useful, relevant recommendations for geriatric care. *Geriatrics*, 55(1), 59-63.
- Finkel, S. I. (1996). Behavioral and psychological signs and symptoms of dementia: Implications for research and treatment. *Official Journal of the International Psychogeriatric Association*, 8(3), 215-217.
- Fischhof, P. K., Weber, M., Gehmayr, R. M., & Neusser, M. (2001). Short dementia questionnaire for assessing the severity of cognitive impairment in patients with dementia. *Drugs of Today*, 37(10), 691-696.
- Fisk, J. D., Sdovnick, A. D., Cohen, C. A., Gauthier, S., Dossetor, J., Eberhart, A. et al. (1998). Ethical guidelines of the Alzheimer Society of Canada. *Canadian Journal of Neurological Sciences*, 25(3), 242-248.
- Foreman, M. D., Mion, L. C., Tryostad, L., & Fletcher, K. (1999). Standard of practice protocol: Acute confusion/delirium. *Geriatric Nursing*, 20(3), 147-152.
- Gateau, P. B., Letenneur, L., Deschamps, V., Peres, K., Dartigues, J. F., & Renaud, S. (2002). Fish, meat, and risk of dementia: Cohort study. *British Medical Journal*, 325, 932-933.
- Gibbons, L. E., Van Belle, G., Yang, M., Gill, C., Brayne, C., Huppert, F. A. et al. (2002). Cross-cultural comparison of the mini-mental state examination in United Kingdom and United States participants with Alzheimer's Disease. *International Journal of Geriatric Psychiatry*, 17(8), 723-728.
- Glassman, R., Farnan, L., Gharib, S., & Erb, J. (2001). Depression: A guide to diagnosis and treatment. National Guideline Clearinghouse [On-line]. Available: [www.brighamandwomens.org/medical/handbookarticles/depression/DepressionGuidelines.pdf](http://www.brighamandwomens.org/medical/handbookarticles/depression/DepressionGuidelines.pdf)
- Government of Ontario (2000). *Putting the PIECES together: A psychogeriatric guide and training program for professionals in long-term care facilities in Ontario*. (2nd ed.) Toronto, Ontario: Queen's Printer for Ontario.
- Government of Ontario (1998). *Making it happen: Operational framework for the delivery of mental health services and supports*. Toronto, Ontario: Queen's Printer for Ontario.
- Government of Ontario (1999). *Making it happen: Implementation plan for mental health reform*. Toronto, Ontario: Queen's Printer for Ontario.
- Hafner, H. (1996). Psychiatry of the elderly: Consensus statement. *European Archive of Psychiatry and Clinical Neuroscience* 246, 329-332.
- Hall, G. R. (1997). *Research-based protocol: Alzheimer's disease and chronic dementing illnesses*. Iowa City: The University of Iowa Gerontological Nursing Interventions Research Center, Research Development and Dissemination Core.
- Hall, G. R. & Buckwalter, K. C. (1998). *Research-based protocol: Bathing persons with dementia*. Iowa City: The University of Iowa Gerontological Nursing Interventions Research Center, Research Development and Dissemination Core.
- Hogan, B. D., Jennett, P., Freter, S., Bergman, H., Chertkow, H., & Gold, S. (2001). Recommendations of the Canadian consensus conference on dementia, dissemination, implementation, and evaluation of impact. *Canadian Journal of Neurological Science*, (Suppl.1), S115-S121.

Hoyl, M. T., Alessi, C. A., Harker, J. O., Josephson, K. R., Pietruszka, F. M., Koelfgen, M. et al. (1999). Development and testing of a five-item version of the geriatric depression scale. *Journal of the American Geriatrics Society*, 47(7), 873-878.

Inouye, S. K. (1993). Delirium in hospitalized elderly patients: Recognition, evaluation, and management. *Connecticut Medicine*, 57(5), 309-315.

Inouye, S. K. & Charpentier, P. A. (1996). Precipitating factors for delirium in hospitalized elderly persons. *Journal of American Medical Association*, 275(11), 852-857.

Institute for Clinical Systems Improvement (2000). Healthcare guideline: Major depression in specialty care in adults. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI). [On-line]. Available: <http://www.icsi.org/guidelst.htm#guidelines>

International Psychogeriatric Association (2000). International experts reach consensus on definitions of behavioral and psychological symptoms of dementia. International Psychogeriatric Association [On-line]. Available: <http://www.ipa-online.net>

International Psychogeriatric Association (2001a). BPSD: Introduction to behavioral and psychological symptoms of dementia. International Psychogeriatric Association [On-line]. Available: [www.ipa-online.org](http://www.ipa-online.org)

International Psychogeriatric Association (2001b). Psychogeriatrics: Definition and description of psychogeriatrics. International Psychogeriatric Association [On-line]. Available: [www.ipa-online.net](http://www.ipa-online.net)

International Psychogeriatric Association (1996). Behavioral and psychological signs and symptoms of dementia: Implications for research and treatment. *Official Journal of the International Psychogeriatric Association*, 8(3), 215-218.

Jenike, M. (1995). Neuropsychiatric assessment and treatment of geriatric depression. *Psychiatric Times*, XII(5), 1-10.

Jorm, A. F. (1997). Methods of screening for dementia: A meta-analysis of studies comparing an informant questionnaire with a brief cognitive test. *Alzheimer Disease and Associated Disorders*, 11(3), 158-162.

Katona, C. (2000). Psychiatry of the elderly: The WPA/WHO consensus statements. *International Journal of Geriatric Psychiatry*, 15(8), 751-752.

Kennedy, G. J. (2000). Symposium: Screening for depression and dementia among elderly patients: A consideration of functional outcomes, quality of life, and cost. American Association for Geriatric Psychiatry (13th Annual Meeting) – Conference summary. [On-line].

Kuslansky, G., Buschke, H., Katz, M., Sliwinski, M., & Lipton, R. B. (2002). Screening for Alzheimer's Disease: The memory impairment screen versus the conventional three-word memory test. *Journal of the American Geriatrics Society*, 50(6), 1086-1091.

Lacko, L., Bryan, Y., Dellasega, C., & Salerno, F. (1999). Changing clinical practice through research: The case of delirium. *Clinical Nursing Research*, 8(3), 235-250.

Long-Term Care Committee of the Ottawa-Carleton Regional District Health Council (1995). *Investing in independence*. Ottawa, Ontario: Ottawa Carleton District Health Council.

McCurren, C. (2002). Assessment for depression among nursing home elders: Evaluation of the MDS mood assessment. *Geriatric Nursing*, 23(2), 103-108.

McKibbon, A., Eady, A., & Marks, S. (1999). Secondary publications: Clinical practice guidelines. In *PDQ Evidence-Based Principles and Practice*. (pp. 153-172). Hamilton, B. C. Decker Inc.

- Mentes, J. C. (1995). A nursing protocol to assess causes of delirium: Identifying delirium in nursing home residents. *Journal of Gerontological Nursing*, 21(2), 26-30.
- Milton, A., Byrne, T. N., Daube, J. R., Franklin, G., Frishberg, B. M., Goldstein, M. L. et al. (1994). Practice parameter for diagnosis and evaluation of dementia (summary statement). *Neurology*, 44(11), 2203-2206.
- Neary, D., Snowden, J. S., Gustafson, L., Passant, U., Stuss, D., Black, S. et al. (1998). Frontotemporal lobar degeneration: A consensus on clinical diagnostic criteria. *Neurology* 51(6), 1546-1554.
- Parker, C. (2001). Skipping into the next century. *Canadian Nursing Home*, 24-26.
- Patten, B. S. (2000). Major depression incidence in Canada. *Canadian Medical Association Journal*, 163(6), 714-715.
- Patterson, C. (1994). Screening for cognitive impairment in the elderly. In Canadian Task Force on the Periodic Health Examination. (Ed.), *The Canadian guide to clinical preventive health care*. Ottawa, Ontario: Minister of Supply and Services Canada.
- Patterson, C. J. S., Gauthier, S., Bergman, H., Cohen, C. A., Feightner, J. W., Feldman, H. et al. (1999). Management of dementing disorders: The recognition, assessment and management of dementing disorders – Conclusions from the Canadian Consensus Conference on Dementia. *Canadian Medical Association Journal*, eCMAJ, 1999 160 (12 Suppl) [On-line]. Available: <http://www.cma.ca>
- Pignone, M., Gaynes, B. N., Rushton, J. L., Mulrow, C. D., Orleans, C. T., Whitener, B. L. et al. (2002). Systematic evidence review: Screening for depression. Research Triangle Institute-University of North Carolina Evidence-based Practice Centre [On-line]. Available: <http://hstat2.nlm.nih.gov/download/382411996837.html>
- Piven, M. L. S. (1998). *Research Based Protocol: Detection of depression in the cognitively intact older adult*. Iowa City: The University of Iowa Gerontological Nursing Interventions Research Center, Research Development and Dissemination Core.
- Piven, M. L. S. (2001). Detection of depression in the cognitively intact older adult protocol. *Journal of Gerontological Nursing*, 27(6), 8-14.
- Rabins, P. V., Black, B. S., Roca, R., German, P., McGuire, M., Beatrice, R. et al. (2000). Effectiveness of a nurse-based outreach program for identifying and treating psychiatric illness in the elderly. *Journal of American Medical Association*, 283(21), 2802-2809.
- Rachel, R. & Cucio, C. P. (2000). Late-life dementia: Review of the APA guidelines for patient management. *Geriatrics*, 55(10), 55-62.
- Reisber, B., Burns, A., Brodaty, H., Eastwood, R., Rossor, M., Sartorius, N. et al. (2000). Report of an IPA Special Meeting Work Group under the co-sponsorship of Alzheimer's Disease International, the European Federation of Neurological Societies, the World Health Organization, and the World Psychiatric Association. International Psychogeriatric Association [On-line]. Available: <http://www.ipa-online.net/>
- Reuben, D. B., Herr, K., Pacala, J. T., Potter, J. F., Semla, T. P., & Small, G. W. (2000). *Geriatrics at your fingertips, 2000 edition*. American Geriatrics Society. Belle Mead, NJ: Excerpta Medica, Inc.
- Reuben, D. B., Herr, K., Pacala, J. T., Potter, J. F., Semla, T. P., & Small, G. W. (2001). *Geriatrics at your fingertips, 2001 edition*. American Geriatrics Society. Belle Mead, NJ: Excerpta Medica, Inc.
- Ritchie, K. (2001). Mild cognitive impairment: Conceptual basis and current nosological status. Findarticle.com original article published in the *Lancet*, 2000, Vol.355, pp 225-228 [On-line]. Available: <http://www.findarticles.com>
- Rose, V. L. (1998). Consensus statement focuses on diagnosis and treatment of Alzheimer's disease and related disorders in primary care. *American Family Physician*, 57(6), 1131-1132.

Sahr, N. (1999). Assessment and diagnosis of elderly depression. *Clinical Excellence for Nurse Practitioners*, 3(3), 158-164.

Schindler, R. J. & Cucio, C. P. (2000). Late-life dementia: Review of the APA guidelines for patient management. *Geriatrics*, 55(10), 55-60, 62.

Schulberg, H. C., Katon, W., Simon, G. E., & Rush, J. (1998). Treating major depression in primary care practice, An update of the Agency for Healthcare Policy and Research practice guidelines. *Archives of General Psychiatry*, 55(12), 1121-1127.

Scott, J., Thorne, A., & Horn, P. (2002). Quality improvement report: Effect of a multifaceted approach to detecting and managing depression in primary care. *British Medical Journal*, 325, 951-954.

Semla, T. P. & Watanabe, M. D. (1998). ASHP Therapeutic position statement on the recognition and treatment of depression in older adults. *American Journal of Health-System Pharmacy*, 55(12), 2514-2518.

Shah, A. & Gray, T. (1997). Screening for depression on continuing care psychogeriatric wards. *International Journal of Geriatric Psychiatry*, 12(1), 125-127.

Silverstone, P. H., Lemay, T., Elliott, J. H. V., & Starko, R. (1996). Depression in the medically ill – The prevalence of major depression disorder and low self-esteem in medical inpatients. *The Canadian Journal of Psychiatry*, 41(2), 65-74.

Snowball, R. (1999). Critical appraisal of clinical guidelines. In M. Dawes, P. Davies, A. Gray, J. Mant, & K. Seers (Eds.), *Evidence-based practice: A primer for health care professionals* (pp. 127-131). Edinburgh: Churchill Livingstone.

Stoke, L. T. & Hassan, N. (2002). Depression after stroke: A review of the evidence base to inform the development of an integrated care pathway. Part 1: Diagnosis, frequency and impact. *Clinical Rehabilitation*, 16(3), 231-247.

Stokes, J. & Lindsay, J. (1996). *Major causes of death and hospitalization in Canadian seniors*. Ottawa, Ontario: Division of Aging and Seniors, Population Health Directorate, Health Promotion and Programs Branch, Health Canada – Tunney's Pasture.

The 10/66 Dementia Research Group (2000). Dementia in developing countries: A consensus statement from the 10/66 Dementia Research Group *International Journal of Geriatric Psychiatry*, 15(1), 14-20.

The Canadian Study of Health and Aging Working Group. (2000). The incidence of dementia in Canada. *Neurology*, 55(1), 66-73.

The NAMI.net (2001). Depression in older persons. The Nation's Voice on Mental Illness [On-line]. Available: <http://www.nami.org>

The University of Iowa Gerontological Nursing Interventions Research Centre-Research Development and Dissemination Core (1996). *Alzheimer's disease and chronic dementing illnesses*. National Guideline Clearinghouse.

Tolson, D., Smith, M., & Knight, P. (1999). An investigation of the components of best nursing practice in the care of acutely ill hospitalized older patients with coincidental dementia: A multi-method design. *Journal of Advanced Nursing*, 30(5), 1127-1136.

Tully, M. W., Matraskas, K. L., Muir, J., & Musallam, K. (1997). The eating behavior scale: A simple method of assessing functional ability in patients with Alzheimer's disease. *Journal of Gerontological Nursing*, 23(7), 9-15, 54-55.

Tune, L. (2001). Assessing psychiatric illness in geriatric patients. *Clinical Cornerstone*, 3(3), 23-36.

U.S Preventive Service Task Force (1996). Screening for dementia: Mental disorders and substance abuse. In *Guidelines from guide to clinical preventive services* (2 ed.), Boston: Williams & Wilkins.



U.S. Department of Health and Human Services – Agency for Healthcare Policy and Research (1999). Early Alzheimer's Disease: Patient and family guide. *Journal of Pharmaceutical Care in Pain & Symptom Control*, 7(1), 67-85.

University Health System Consortium – Department of Veterans Affairs – Federal Government Agency (U.S.) (1997). Dementia identification and assessment: Guidelines for primary care practitioners. National Guideline Clearinghouse [On-line]. Available: [www.guideline.gov/index.asp](http://www.guideline.gov/index.asp)

Van Hout, H., Teunisse, S., Derix, M., Poels, P., Kuin, Y., Dassen, M. V. et al. (2001). CAMDEX, can it be more efficient? Observational study on the contribution of four screening measures to the diagnosis of dementia by a memory clinic team. *International Journal of Geriatric Psychiatry*, 16(1), 64-69.

Van Hout, H. P. J., Vernooij-Dassen, M. J. F. J., Hoefnagels, W. H. L., Kuin, Y., Stalman, W. A. B., Moons, K. G. M., & Grol, R. P. T. M. (2002). Dementia: Predictors of diagnostic accuracy and the contribution of diagnostic recommendations. *The Journal of Family Practice* [On-line]. Available: [http://www.jfponline.com/content/2002/08/jfp\\_0802\\_00693.asp](http://www.jfponline.com/content/2002/08/jfp_0802_00693.asp)

Vertesi, A., Lever, J. A., Molloy, D. W., Sanderson, B., Tuttle, I., Pokoradi, L. et al. (2001). Standardized mini-mental state examination: Use and interpretation. *Canadian Family Physician*, 47, 2018-2023.

Wertheimer, J. (1996). Psychiatry of the elderly. *European Archive of Psychiatry and Clinical Neuroscience* 246, 329-332.

Wertheimer, J. (1997). Psychiatry of the elderly: A consensus statement. *International Journal of Geriatric Psychiatry*, 12(4), 432-435.





## Appendix A: Search Strategy for Existing Evidence

### STEP 1 – Database Search

An initial database search for existing guidelines was conducted in early 2001 by a company that specializes in searches of the literature for health related organizations, researchers and consultants. A subsequent search of the MEDLINE, CINAHL and Embase databases, for articles published from January 1, 1995 to February 28, 2001, was conducted using the following search terms and keywords: “psychogeriatric assessment”, “geriatric assessment”, “geriatric mental health”, “assessment”, “mental health assessment”, “depression”, “delirium”, “dementia(s)”, “practice guidelines”, “practice guideline”, “clinical practice guideline”, “clinical practice guidelines”, “standards”, “consensus statement(s)”, “consensus”, “evidence based guidelines” and “best practice guidelines” – to a limit of age 65+. In addition, a search of the Cochrane Library database for systematic reviews was conducted using the above search terms.



### STEP 2 – Internet Search

A metacrawler search engine (metacrawler.com), plus other available information provided by the project team, was used to create a list of 42 websites known for publishing or storing clinical practice guidelines. The following sites were searched in early 2001.

- Agency for Healthcare Research and Quality: [www.ahrq.gov](http://www.ahrq.gov)
- Alberta Clinical Practice Guidelines Program:  
[www.amda.ab.ca/general/clinical-practice-guidelines/index.html](http://www.amda.ab.ca/general/clinical-practice-guidelines/index.html)
- American Medical Association: <http://www.ama-assn.org/>
- Best Practice Network: [www.best4health.org](http://www.best4health.org)
- British Columbia Council on Clinical Practice Guidelines:  
[www.hlth.gov.bc.ca/msp/protoguide/index.html](http://www.hlth.gov.bc.ca/msp/protoguide/index.html)
- Canadian Centre for Health Evidence: [www.cche.net](http://www.cche.net)
- Canadian Institute for Health Information (CIHI): [www.cihi.ca/index.html](http://www.cihi.ca/index.html)
- Canadian Medical Association Guideline Infobase: [www.cma.ca/eng-index.htm](http://www.cma.ca/eng-index.htm)
- Canadian Task Force on Preventative Healthcare: [www.ctfphc.org/](http://www.ctfphc.org/)
- Cancer Care Ontario: [www.cancercare.on.ca](http://www.cancercare.on.ca)
- Centre for Clinical Effectiveness – Monash University, Australia:  
<http://www.med.monash.edu.au/publichealth/cce/evidence/>

- Centre for Disease Control and Prevention: [www.cdc.gov](http://www.cdc.gov)
- Centre for Evidence-Based Child Health: <http://www.ich.bpmf.ac.uk/ebm/ebm.htm>
- Centre for Evidence-Based Medicine: <http://cebmr2.ox.ac.uk/>
- Centre for Evidence-Based Mental Health: <http://www.psychiatry.ox.ac.uk/cebmr/>
- Centre for Evidence-Based Nursing: [www.york.ac.uk/depts/hstd/centres/evidence/ev-intro.htm](http://www.york.ac.uk/depts/hstd/centres/evidence/ev-intro.htm)
- Centre for Health Services Research: [www.nci.ac.uk/chsr/publicn/tools/](http://www.nci.ac.uk/chsr/publicn/tools/)
- Core Library for Evidenced-Based Practice: <http://www.shef.ac.uk/~scharr/ir/core.html>
- CREST: <http://www.n-i.nhs.uk/crest/index.htm>
- Evidence-Based Nursing: <http://www.bmjpub.com/data/ebn.htm>
- Health Canada: [www.hc-sc.gc.ca](http://www.hc-sc.gc.ca)
- Healthcare Evaluation Unit: Health Evidence Application and Linkage Network (HEALNet): <http://healnet.mcmaster.ca/nce>
- Institute for Clinical Evaluative Sciences (ICES): [www.ices.on.ca/](http://www.ices.on.ca/)
- Institute for Clinical Systems Improvement (ICSI): [www.icsi.org](http://www.icsi.org)
- Journal of Evidence-Based Medicine: <http://www.bmjpub.com/data/ebm.htm>
- McMaster University EBM site: <http://hiru.hirunet.mcmaster.ca/ebm>
- McMaster Evidence-Based Practice Centre: <http://hiru.mcmaster.ca/epc/>
- Medical Journal of Australia: <http://mja.com.au/public/guides/guides.html>
- Medscape Multispecialty: Practice Guidelines: [www.medscape.com/Home/Topics/multispecialty/directories/dir-MULT.PracticeGuide.html](http://www.medscape.com/Home/Topics/multispecialty/directories/dir-MULT.PracticeGuide.html)
- Medscape Women's Health: [www.medscape.com/Home/Topics/WomensHealth/directories/dir-WH.PracticeGuide.html](http://www.medscape.com/Home/Topics/WomensHealth/directories/dir-WH.PracticeGuide.html)
- National Guideline Clearinghouse: [www.guideline.gov/index.asp](http://www.guideline.gov/index.asp)
- National Library of Medicine: <http://text.nlm.nih.gov/ftsr/gateway>
- Netting the Evidence: A SchARR Introduction to Evidence Based Practice on the Internet: [www.shef.ac.uk/uni/academic/](http://www.shef.ac.uk/uni/academic/)
- New Zealand Guideline Group: <http://www.nzgg.org.nz/library.cfm>
- Primary Care Clinical Practice Guideline: <http://medicine.ucsf.edu/resources/guidelines/>
- Royal College of Nursing (RCN): [www.rcn.org.uk](http://www.rcn.org.uk)
- The Royal College of General Practitioners: <http://www.rcgp.org.uk/Sitelis3.asp>
- Scottish Intercollegiate Guidelines Network: [www.show.scot.nhs.uk/sign/home.htm](http://www.show.scot.nhs.uk/sign/home.htm)
- TRIP Database: [www.tripdatabase.com/publications.cfm](http://www.tripdatabase.com/publications.cfm)
- Turning Research into Practice: <http://www.gwent.nhs.gov.uk/trip/>
- University of California: [www.library.ucla.edu/libraries/biomed/cdd/clinprac.htm](http://www.library.ucla.edu/libraries/biomed/cdd/clinprac.htm)
- [www.ish.ox.au/guidelines/index.html](http://www.ish.ox.au/guidelines/index.html)

One individual searched each of these sites. The presence or absence of guidelines was noted for each site searched – at times it was indicated that the website did not house a guideline, but re-directed to another website or source for guideline retrieval. A full version of the document was retrieved for all guidelines.

### STEP 3 – Hand Search/Panel Contributions

Panel members were asked to review personal archives to identify guidelines not previously found through the above search strategy. In a rare instance, a guideline was identified by panel members and not found through the database or internet search. These were guidelines that were developed by local groups and had not been published to date.

### STEP 4 – Core Screening Criteria

The search method described above revealed twenty guidelines, several systematic reviews and numerous articles related to geriatric mental health assessment and management. The final step in determining whether the clinical practice guideline would be critically appraised was to apply the following criteria:

- 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.

Ten guidelines were deemed suitable for critical review using the Cluzeau et al. (1997) Appraisal Instrument for Clinical Guidelines.

## RESULTS OF THE SEARCH STRATEGY

The results from the search strategy and the initial screening process resulted in the critical appraisal outcome as itemized below.

### TITLE OF THE PRACTICE GUIDELINES CRITICALLY APPRAISED

American College of Emergency Physicians (1999). Clinical policy for the initial approach to patients presenting with altered mental status. *Annals of Emergency Medicine*, 3(2), 251-280.

American Psychiatric Association (1997). Practice guidelines for the treatment of patients with Alzheimer's disease and other dementias of late life. *American Journal of Psychiatry*, 154(5), 1-39.

American Psychiatric Association (1999). Practice guideline for the treatment of patients with delirium. *American Journal of Psychiatry*, 156(5), 1-20.

Bronheim, H. E., Fulop, G., Kunkel, E. J., Muskin, P. R., Schindler, B. A., Yates, W. R. et. al. (1998). Practice guidelines for psychiatric consultation in the general medical setting. *The Academy of Psychosomatic Medicine*, 39(4), S8-S30.

Costa, P. T. Jr., Williams, T. F., Somerfield, M. et al. (1996). *Recognition and initial assessment of Alzheimer's disease and related dementia. Clinical practice guideline No. 19*. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Agency for Healthcare Policy and Research.

New Zealand Guidelines Group (1998). *Guidelines for the Support and Management of People with Dementia*. New Zealand: Enigma Publishing.

New Zealand Guidelines Group (1996). Guidelines for the treatment and management of depression by primary healthcare professionals. Ministry of Health Guidelines, New Zealand [On-line]. Available: <http://www.nzgg.org.nz/library.cfm>

Rapp, C. G. & The Iowa Veterans Affairs Nursing Research Consortium (1998). *Research based protocol: Acute confusion/delirium*. Iowa City: The University of Iowa Gerontological Nursing Interventions Research Center, Research Development and Dissemination Core.

Schutte, D. L. & Titler, M. G. (1999). *Research-based protocol: Identification, referral and support of elders with genetic conditions*. Iowa City: The University of Iowa Gerontological Nursing Interventions Research Center, Research Development and Dissemination Core.

Scottish Intercollegiate Guidelines Network (1998). Interventions in the management of behavioural and psychological aspects of dementia. Scottish Intercollegiate Guidelines Network [On-line]. Available: <http://www.show.nhs.uk/sign/home/htm>



## Appendix B: Glossary of Terms

**Activities of Daily Living (ADLs):** Self-maintenance skills such as dressing, bathing, toileting, grooming, eating and ambulating.

**Affective Lability:** Rapidly changing or unstable expressions of emotion or mood.

**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.

**Akathisia:** Restlessness.

**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).

**Cognition:** The conscious faculty or process of knowing, including all aspects of awareness, perception, reasoning, thinking and remembering.

**Cognitive Disorder:** Presentations characterized by cognitive dysfunction presumed to be the direct physiological effect of a general medical condition that do not meet the criteria for any of the specific deliriums, dementias or amnesic disorders.

**Cognitive Functions:** Mental processes, including memory, language skills, attention, and judgment.

**Delirium:** A temporary disordered mental state, characterized by acute and sudden onset of cognitive impairment, disorientation, disturbances in attention, decline in level of consciousness or perceptual disturbances.

**Dementia:** A syndrome of progressive decline in multiple areas (domains) of cognitive function eventually leading to a significant inability to maintain occupational and social performance.

**Depression:** A syndrome comprised of a constellation of affective, cognitive and somatic or physiological manifestations.

**Family:** Whomever the client defines as being family. Family members may include: spouse, parents, children, siblings, neighbours and significant people in the community.

**Focused History:** A client history confined to questions designed to elicit information related to cognitive impairment or a decline in function consistent with dementia and to document the chronology of the problem.

**Focused Physical Examination:** A physical examination that seeks to identify life-threatening or rapidly progressing illness, while paying special attention to conditions that might cause delirium. The examination typically includes a brief neurological evaluation as well as assessment of mobility and of cardiac, respiratory and sensory functions.

**Informal Support:** Support and resources provided by persons associated with the individual receiving care. Persons providing informal support may include: family, friends, neighbours and/or members of the community.

**Initial Assessment (for dementia):** An evaluation conducted when the client, clinician, or someone close to the client first notices or mentions symptoms that suggest the presence of dementing disorder. This evaluation includes a focused history, focused physical examination, examination of mental status and function and consideration of confounding and comorbid conditions.

**Instrumental Activities of Daily Living (IADLs):** Complex, higher-order skills such as managing finances, using the telephone, driving a car, taking medications, planning a meal, shopping and working in an occupation.

**Interdisciplinary:** A process where healthcare professionals representing expertise from various healthcare disciplines participate in the process of supporting clients and their families in the care process.

**Nonreversible Dementias:** Term used to distinguish cognitive disorders that cannot be treated effectively to restore normal or nearly normal intellectual function from those that can.

**Polypharmacy:** The administration of many drugs together.

**Praxis:** The doing or performance of an action, movement or series of movements.

**Procedural Memory:** Memory for certain ways of doing things or for certain movements.

**Psychometric:** Relating to systematic measurement of mental processes, psychological variables such as intelligence, aptitude, personality traits and behavioural acts.

**Reversible Dementias:** Term used to distinguish cognitive disorders that can be treated effectively to restore normal or near normal intellectual function from those that cannot.

**Semantic Memory:** What is learned as knowledge; it is timeless and spaceless (e.g., the alphabet or historical data unrelated to a person's life).

**Sensitivity (of a test instrument):** Ability to identify cases of a particular medical condition (e.g., dementia) in a population that includes person who do have it. Also called diagnostic sensitivity.

**Specificity (of a test instrument):** Ability to identify those who do not have particular medical condition (e.g., dementia) in a population that includes persons who do have it. Also called diagnostic specificity.

**Vascular Dementia:** Dementia with a stepwise progression of symptoms, each with an abrupt onset, often in association with a neurologic incident. Also called multi-infarct dementia.

**Visuospatial Ability:** Capacity to produce and recognize three-dimensional or two-dimensional figures and objects.

**Word Fluency:** Ability to generate quickly a list of words that all belong to a common category or begin with a specific letter.



## Appendix C: Assessment Tool Reference Guide

Tool	Description of tool	Refer to . . .
Extensive Nursing Assessment/Mental Status Questions	<ul style="list-style-type: none"> <li>Sample questions to be used for nurse-client interview.</li> </ul>	Appendix D
Mini-Mental Status Exam (MMSE)	<ul style="list-style-type: none"> <li>Most widely used mental status assessment; a good tool to substantiate clinical observations in nursing.</li> <li>Measures: memory, orientation, language, attention, visuospatial and constructional skills.</li> </ul>	Appendix E
Clock Drawing Test	<ul style="list-style-type: none"> <li>May assist in supporting a diagnosis of dementia or in indicating to a clinician areas of difficulty experienced by a client.</li> <li>Complements other tests which focus on memory/language.</li> </ul>	Appendix F
Neecham Confusion Scale	<ul style="list-style-type: none"> <li>Measures level of confusion in processing, behaviour and physiologic control.</li> </ul>	Appendix G
Confusion Assessment Method (CAM) Instrument	<ul style="list-style-type: none"> <li>To help identify individuals who may be suffering from delirium or an acute confusional state.</li> <li>Useful for differentiating delirium and dementia.</li> </ul>	Appendix H
Establishing a Diagnosis of Depression in the Elderly [Sig: E Caps]	<ul style="list-style-type: none"> <li>If there are nervous problems or a depressed mood, use the acronym Sig: E Caps to describe.</li> </ul>	Appendix I
Cornell Scale for Depression	<ul style="list-style-type: none"> <li>Provides a quantitative rating of depression in individuals with or without dementia.</li> <li>Utilizes information from the caregiver as well as the client.</li> </ul>	Appendix J
Geriatric Depression Scale and Geriatric Depression Scale (GDS – 4 Short Form)	<ul style="list-style-type: none"> <li>May assist in supporting a diagnosis of depression (an adjunct to clinical assessment).</li> <li>Provides a quantitative rating of depression.</li> </ul>	Appendix K & L
Suicide Risk in the Older Adult	<ul style="list-style-type: none"> <li>Helps identify suicidal risk in individuals with a depressed mood.</li> </ul>	Appendix M

## Appendix D: Extensive Nursing Assessment/Mental Status Questions

### The Nurse-Client Interview: Sample General Questions

#### Presenting Problem

- Tell me the reason you are here (in treatment).

#### Present Illness

- When did you first notice the problem?
- What changes have you noticed in yourself?
- What do you think is causing the problem?
- Have you had any troubling feelings or thoughts?

#### Family History

- How would you describe your relationship with your parents?
- Did either of your parents have emotional or mental problems?
- Were either of your parents treated by a psychiatrist or therapist?
- Did their treatment include medication or electroconvulsive therapy (ECT)?
- Were they helped by their treatment?

#### Childhood/Pre-morbid History

- How did you get along with your family and friends?
- How would you describe yourself as a child?

#### Medical History

- Do you have any serious medical problems?
- How have they affected your current problem?

## Psychosocial /Psychiatric History

- Have you ever been treated for an emotional or psychiatric problem? Have you been diagnosed with a mental illness?
- Have you ever been a patient in a psychiatric hospital?
- Have you ever taken prescribed medications for an emotional problem or mental illness? Did you ever have ECT?
- If so, did the medications or ECT help your symptoms/problem?
- How frequently do your symptoms occur? (About every 6 months? Once a year? Every 5 years? First episode?)
- How long are you generally able to function well in between onset of symptoms? (Weeks? Months? Years?)
- What do you feel, if anything, may have contributed to your symptoms? (Nothing? Stopped taking medications? Began using alcohol? Street drugs?)

## Education

- How did you do in school?
- How did you feel about school?

## Legal

- Have you ever been in trouble with the law?

## Marital History

- How do you feel about your marriage? (If client is married.) How would you describe your relationship with your children? (If client has children.)
- What kinds of things do you do as a family?

## Social History

- Tell me about your friends, your social activities.
- How would you describe your relationship with your friends?

## Insight

- Do you consider yourself different now from the way you were before your problem began? In what way?
- Do you think you have an emotional problem or mental illness?
- Do you think you need help for your problem?
- What are your goals for yourself?

### Value-Belief System (Including Spiritual)

- What kinds of things give you comfort and peace of mind?
- Will those things be helpful to you now?

### Recent Stressors/Losses

- Have you had any recent stressors or losses in your life?
- What are your relationships like?
- How do you get along with people at work?

Adapted from:

Fortinash, K. M. & Holoday-Worret, P. A. (1999). *Psychiatric nursing care plans*. (3 ed.), St. Louis: Mosby.

Fortinash, K. M. (1990). Assessment of Mental States. In L. Malasanos, V. Bakauskas & K. Stoltenberg-Allen (Eds.), *Health Assessment* (4 ed.), St. Louis: Mosby.

62

## Mental Status Examination

### Appearance

- Dress, grooming, hygiene, cosmetics, apparent age, posture, facial expression

### Behaviour/Activity

- Hypoactivity or hyperactivity, rigid, relaxed, restless or agitated motor movements, gait and coordination, facial grimacing, gestures, mannerisms, passive, combative, bizarre

### Attitude

- Interactions with the interviewer: cooperative, resistive, friendly, hostile, ingratiating

### Speech

- Quantity: poverty of speech, poverty of content, voluminous
- Quality: articulate, congruent, monotonous, talkative, repetitious, spontaneous, circumlocutory, confabulations, tangential, pressured, stereotypic
- Rate: slowed, rapid

## **Mood and Affect**

- Mood (intensity, depth, duration): sad, fearful, depressed, angry, anxious, ambivalent, happy, ecstatic, grandiose
- Affect (intensity, depth, duration): appropriate, apathetic, constricted, blunted, flat, labile, euphoric, bizarre

## **Perceptions**

- Hallucinations, illusions, depersonalization, de-realization, distortions

## **Thoughts**

- Form and content: logical versus illogical, loose associations, flight of ideas, autistic, blocking, broadcasting, neologisms, word salad, obsessions, ruminations, delusions, abstract versus concrete

## **Sensorium/Cognition**

- Levels of consciousness, orientation, attention span, recent and remote memory, concentration, ability to comprehend and process information, intelligence

## **Judgment**

- Ability to assess and evaluate situations, make rational decisions, understand consequences of behaviour, and take responsibility for actions

## **Insight**

- Ability to perceive and understand the cause and nature of own and other's situations

## **Reliability**

- Interviewer's impression that individual reported information accurately and completely

Adapted from: Fortinash, K. M. & Holoday-Worret, P. A. (1999). *Psychiatric nursing care plans*. (3 ed.), St. Louis: Mosby.

## Appendix E: Mini-Mental Status Exam

### (MMSE) Sample Items

**The MMSE is a 30-point scale** designed to assess a client's cognitive performance in a clinical setting. It assesses orientation, attention, memory, and language. Below is a sample of the MMSE.

#### Orientation to Time

- “What is the date?”

#### Registration

- “Listen carefully, I am going to say three words. You say them back after I stop. Ready? Here they are . . .

HOUSE (pause),  
CAR (pause),  
LAKE (pause).

Now repeat those words back to me.” (Repeat up to 5 times, but score only the first trial.)

#### Naming

- “What is this?” (Point to a pencil or pen.)

#### Reading

- “Please read this and do what it says.” (Show examinee the words on the stimulus form.)

CLOSE YOUR EYES

Reproduced by special permission of the Publisher, Psychological Assessment Resources, Inc., 16204 North Florida Avenue, Lutz, Florida 33549, from the Mini-Mental State Examination, by Marshal Folstein and Susan Folstein, Copyright 1975, 1998, 2001 by Mini Mental LLC, Inc. Published 2001 by Psychological Assessment Resources, Inc. Further reproduction is prohibited without permission of PAR, Inc. The MMSE can be purchased from PAR, Inc. by calling (800) 331-8378 or (813) 968-3003.

## Appendix F: Clock Drawing Test

The circle below has been provided for your client to perform the Clock Drawing Test. The box has been provided for your client to write the time as it would be written on a timetable.

**Instructions:** Present the circle below to the client, explaining that it is the face of a clock.

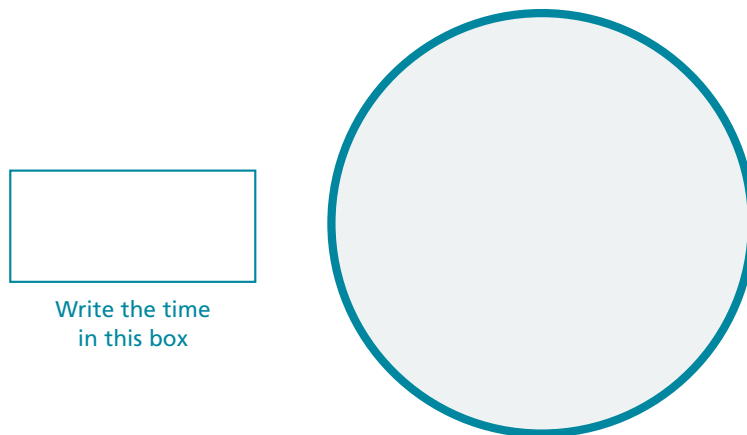
**Step One:** Ask the client to put the numbers in the correct positions.

**Step Two:** Ask the client to draw in the hands to indicate ten minutes after eleven.

**Step Three:** Ask the client to write the time in the box, as it would be written on a timetable.

If the client has written the time incorrectly in the box, investigate whether the client has understood the requested time correctly.

**NB:** There are several ways of scoring this test. There are also a variety of interpretations of the clock drawing test, both subjective and objective. The method of interpretations is determined by the individual agency or facility depending on their clinical practice.



Cockrell, R. & Folstein, M. (1988). Mini-mental state examination. *Journal of Psychiatry Research*, 24(4), 689-692.

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. *Journal of Psychiatric Research*, 12(3), 189-198.

## Appendix G: Neecham Confusion Scale

**Directions for the NEECHAM:** Complete the following form, choosing only one number in each of the three sublevels for each of the three levels. Score each level by adding points from each sublevel and obtain a total score by adding all level scores.

### LEVEL I – PROCESSING

#### PROCESSING – ATTENTION (Attention-Alertness-Responsiveness)

- 4 **Full attentiveness/alertness:** responds immediately and appropriately to calling of name or touch – eyes, head turn; fully aware of surroundings, attends to environmental events appropriately.
- 3 **Short or hyper attention/alertness:** either shortened attention to calling, touch, or environmental events or hyper alert, over-attentive to cues/objects in environment.
- 2 **Attention/alertness inconsistent or inappropriate:** slow in responding, repeated calling or touch required to elicit/maintain eye contact/attention; able to recognize objects/stimuli, but may drop into sleep between stimuli.
- 1 **Attention/Alertness disturbed:** eyes open to sound or touch; may appear fearful, unable to attend/recognize contact, or may show withdrawal/combatative behaviour.
- 0 **Arousal/responsiveness depressed:** eyes may/may not open; only minimal arousal possible with repeated stimuli; unable to recognize contact.

#### PROCESSING – COMMAND (Recognition-Interpretation-Action)

- 5 **Able to follow a complex command:** “Turn on nurse’s call light.” (Must search for object, recognize object, perform command.)
- 4 **Slowed complex command response:** requires prompting or repeated directions. Performs complex command in “slow”/over-attending manner.



- 3 **Able to follow a simple command:** “Lift your hand or foot Mr. . . .” (Only use 1 object.)
- 2 **Unable to follow a direct command:** follows command prompted by touch or visual cue – drinks from glass placed near mouth. Responds with calming affect to nursing contact and reassurance or hand holding.
- 1 **Unable to follow visually guided command:** responds with dazed or frightened facial features, and/or withdrawal/resistive response to stimuli, hyper/hypoactive behaviour; no response to nurse gripping hand lightly.
- 0 **Hypoactive, lethargic:** minimal motor/responses to environmental stimuli.

### **PROCESSING – ORIENTATION: (Orientation, Short-term Memory, Thought/Speech Content)**

- 5 **Oriented to time, place and person:** thought processes, content of conversation or questions appropriate. Short-term memory intact.
- 4 **Oriented to person and place:** minimal memory/recall disturbance, content and response to questions generally appropriate; may be repetitive, requires prompting to continue contact. Generally cooperates with requests.
- 3 **Orientation inconsistent:** oriented to self, recognizes family but time and place orientation fluctuates. Uses visual cues to orient. Thought/memory disturbance common, may have hallucinations or illusions. Passive cooperation with requests (cooperative cognitive protecting behaviours).
- 2 **Disoriented and memory/recall disturbed:** oriented to self/recognizes family. May question actions of nurse or refuse requests, procedures (resistive cognitive protecting behaviours). Conversation content/thought disturbed. Illusions and/or hallucinations common.
- 1 **Disoriented, disturbed recognition:** inconsistently recognizes familiar people, family, objects. Inappropriate speech/sounds.
- 0 **Processing of stimuli depressed:** minimal response to verbal stimuli.

## LEVEL 2 – BEHAVIOUR

### BEHAVIOUR – APPEARANCE

- 2 **Controls posture, maintains appearance, hygiene:** appropriately gowned or dressed, personally tidy, clean. Posture in bed/chair normal.
- 1 **Either posture or appearance disturbed:** some disarray of clothing/bed or personal appearance, or some loss of control of posture, position.
- 0 **Both posture and appearance abnormal:** Disarrayed, poor hygiene, unable to maintain posture in bed.

68

### BEHAVIOUR – MOTOR

- 4 **Normal motor behaviour:** appropriate movement, coordination and activity, able to rest quietly in bed. Normal hand movement.
- 3 **Motor behaviour slowed or hyperactive:** overly quiet or little spontaneous movement (hands/arms across chest or at sides) or hyperactive (up/down, “jumpy”). May show hand tremor.
- 2 **Motor movement disturbed:** restless or quick movements. Hand movements appear abnormal – picking at bed objects or bed covers, etc. May require assistance with purposeful movements.
- 1 **Inappropriate, disruptive movements:** pulling at tubes, trying to climb over rails, frequent purposeless actions.
- 0 **Motor movement depressed:** limited movement unless stimulated; resistive movements.

## BEHAVIOUR – VERBAL

- 4 **Initiates speech appropriately:** able to converse, can initiate or maintain conversation. Normal speech for diagnostic condition, normal tone.
- 3 **Limited speech initiation:** responses to verbal stimuli are brief and uncomplex. Speech clear for diagnostic condition, tone may be abnormal, rate may be slow.
- 2 **Inappropriate speech:** may talk to self or not make sense. Speech not clear for diagnostic condition.
- 1 **Speech/sound disturbed:** altered sound/tone. Mumbles, yells, swears or is inappropriately silent.
- 0 **Abnormal sounds:** groaning or other disturbed sounds. No clear speech.



## LEVEL 3 – PHYSIOLOGIC CONTROL

### PHYSIOLOGIC MEASUREMENTS

Recorded Values	Normal Ranges	
_____ Temperature	(36-37°C)	_____ Periods of apnea/hyponea? 1 = yes, 2 = no
_____ Systolic BP (SBP) _____ Diastolic BP (DBP)	(100-160) (50-90)	_____ Oxygen therapy prescribed? 0 = no, 1 = yes, but not on, 2 = yes, on now
_____ O <sub>2</sub> saturation	(93 or above)	
_____ Respiration (count 1 minute)	(14-22)	
_____ Heart Rate (HR) Regular/Irregular (Circle one)	(60-100)	

### VITAL FUNCTION STABILITY

Count abnormal SBP and/or DBP as one value; count abnormal and/or irregular HR as one; count apnea and/or abnormal respiration as one; and abnormal temperature as one.

- 2 BP, HR, TEMP, RESPIRATION within normal range with regular pulse.
- 1 Any one of the above in abnormal range.
- 0 Two or more in abnormal range.

### OXYGEN SATURATION STABILITY

- 2 O<sub>2</sub> sat in normal range (93 or above)
- 1 O<sub>2</sub> sat 90 to 92 or is receiving oxygen
- 0 O<sub>2</sub> below 90

## URINARY CONTINENCE CONTROL

- 2 Maintains bladder control.
- 1 Incontinent of urine in last 24 hrs. or has condom catheter.
- 0 Incontinent now or has indwelling or intermittent catheter or is anuric.

## SCORING

	Total Score	Indicates
<b>LEVEL 1 Score</b> _____ Processing (0-14 points)	0-19	Moderate to severe confusion
<b>LEVEL 2 Score</b> _____ Behaviour (0 -10 points)	20-24	Mild or early development of confusion
<b>LEVEL 3 Score</b> _____ Physiological Control (0-6 points)	25-26	“Not confused,” but at high risk for confusion
_____ <b>TOTAL NEECHAM</b> (0-30 points)	27-30	“Not confused,” or normal function

Reprinted with permission of Dr. Virginia Neelon.



## Appendix H: Confusion Assessment Method Instrument (CAM)

**Directions for the CAM:** Answer the following questions.

### Acute onset

1. Is there evidence of an acute change in mental status from the client's baseline?

### Inattention

(The questions listed under this topic are repeated for each topic where applicable.)

2 a) Did the client have difficulty focusing attention, for example, being easily distractible, or having difficulty keeping track of what was being said?

- Not present at any time during interview
- Present at some time during interview, but in mild form
- Present at some time during interview, in marked form
- Uncertain

b) (If present or abnormal) Did this behaviour fluctuate during the interview, that is, tend to come and go or increase and decrease in severity?

- Yes
- No
- Uncertain
- Not applicable

c) (If present or abnormal) Please describe this behaviour.

### Disorganized thinking

3. Was the client's thinking disorganized or incoherent, such as rambling or irrelevant conversation, unclear or illogical flow of ideas, or unpredictable switching from subject to subject?

### **Altered level of consciousness**

4. Overall, how would you rate this client's level of consciousness?

- Alert (normal)
- Vigilant (hyperalert, overly sensitive to environmental stimuli, startled very easily)
- Lethargic (drowsy, easily aroused)
- Stupor (difficult to arouse)
- Coma (unarousable)
- Uncertain

### **Disorientation**

5. Was the client disoriented at any time during the interview, such as thinking that he or she was somewhere other than the hospital, using the wrong bed, or misjudging the time of day?

73

### **Memory impairment**

6. Did the client demonstrate any memory problems during the interview, such as inability to remember events in the hospital or difficulty remembering instructions?

### **Perceptual disturbances**

7. Did the client have any evidence of perceptual disturbances, for example, hallucinations, illusions, or misinterpretations (such as thinking something was moving when it was not)?

### **Psychomotor agitation**

8. Part 1

At any time during the interview, did the client have an unusually increased level of motor activity, such as restlessness, picking at bedclothes, tapping fingers, or making frequent sudden changes in position?

### **Psychomotor retardation**

8. Part 2

At any time during the interview, did the client have an unusually decreased level of motor activity, such as sluggishness, staring into space, staying in one position for a long time, or moving very slowly?

### Altered sleep-wake cycle

9. Did the client have evidence of disturbance of the sleep-wake cycle, such as excessive daytime sleepiness with insomnia at night?

### SCORING

To have a positive CAM result, the client must have:

1. Presence of acute onset and fluctuating course

AND

2. Inattention

AND EITHER

3. Disorganized thinking

OR

4. Altered level of consciousness

Reprinted with permission.

Inouye, S. K., van Dyck, C. H., Alessi, C. A., Balkin, S., Siegel, A. P., & Horwitz, R. I. (1990). Clarifying confusion: The confusion assessment method. A new method for detection of delirium. *Annals of Internal Medicine*, 113(12), 941-948.





## *Appendix I: Establishing a Diagnosis of Depression in the Elderly*

**Rivard (1999) suggests that** one of the best screening tools for depression in old age, reflecting DSM-IV criteria, is a mnemonic known as “Sig: E Caps” (“a prescription for energy capsules”) which stands for:

- S** Sleep disturbance, usually early morning or frequent awakenings, and unrestful sleep leaving the impression that one hasn’t slept.
- I** Loss of interest in activities that were previously enjoyed.
- G** Feelings of guilt or excessive preoccupation with regrets about the past.
- E** Low energy and excessive fatigue not due to coexisting medical problems.
- C** Concentration and cognitive difficulties; older adults tend to experience more profound cognitive dysfunction during depression than younger adults; this may lead to a misdiagnosis of dementia.
- A** Appetite disturbance; usually loss of appetite, often accompanied by weight loss and complaints of poor digestion or constipation.
- P** Psychomotor changes; either retardation (slowing) or agitation and complaints about “having bad nerves” which may be incorrectly attributed to an anxiety disorder.
- S** Suicidal ideation is a common sign; suicide rates are especially high in older men.

The daily presence of five or more of the above symptoms, lasting at least two weeks, indicates that the patient is suffering from a major depression, and likely requires pharmacotherapy as a part of treatment (Rivard, 1999).

Reprinted from: Rivard M-F. Late-life depression: Diagnosis, Part I. *Parkhurst Exchange*, July 1999.  
With permission from Parkhurst Publishing.  
Reference: Jenike, M. A. (1989). *Geriatric Psychiatry and Psychopharmacology: A Clinical Approach*.  
Yearbook Medical Publishers.

## Appendix J: Cornell Scale for Depression

Client Name: \_\_\_\_\_ Date: \_\_\_\_\_

Administered at (check one): Assessment \_\_\_\_\_ By: \_\_\_\_\_ Discharge: \_\_\_\_\_

### Mood-related Signs

1. Anxiety  
anxious expression, ruminations, worrying
2. Sadness  
sad expression, sad voice, tearfulness
3. Lack of reactivity to pleasant events
4. Irritability  
easily annoyed, short tempered

### Behavioural Disturbance

5. Agitation  
restlessness, handwringing, hairpulling
6. Retardation  
slow movements, slow speech, slow reactions
7. Multiple physical complaints  
(score 0 if GI symptoms only)
8. Loss of interest  
less involved in usual activities  
(score only if change occurred acutely,  
e.g., less than 1 month)

### Physical Signs

9. Appetite loss  
eating less than usual
10. Weight loss  
(score 2 if greater than 5 lbs. in 1 month)
11. Lack of energy  
fatigues easily, unable to sustain activities  
(score only if change occurred acutely,  
e.g., in less than 1 month)

### Cyclic Functions

12. Diurnal variation of mood symptoms  
worse in the morning
13. Difficulty falling asleep  
later than usual for this client
14. Multiple awakenings during sleep
15. Early morning awakening  
earlier than usual for this client

### Ideational Disturbance

16. Suicide  
feels life is not worth living, has suicidal  
wishes, or makes suicide attempt
17. Poor self-esteem  
self-blame, self-depreciation, feelings  
of failure
18. Pessimism  
anticipation of the worst
19. Mood-congruent delusions  
delusions of poverty, illness, or loss

### Scoring System

Ratings should be based on symptoms and signs occurring during the week prior to interview. No score should be given if symptoms result from physical disability or illness.

0 = absent  
1 = mild or intermittent  
2 = severe  
N/A = unable to evaluate

## Appendix K: Geriatric Depression Scale

### Ask the following questions

- |   |                          |  |                          |
|---|--------------------------|--|--------------------------|
| Q1. Do you feel pretty worthless the way you are now?                         | <input type="checkbox"/> | Q9. Do you feel happy most of the time?                                  | <input type="checkbox"/> |
| Q2. Do you often get bored?   | <input type="checkbox"/> | Q10. Do you feel full of energy?   | <input type="checkbox"/> |
| Q3. Do you often feel helpless?   | <input type="checkbox"/> | Q11. Do you think it is wonderful to be alive now?                       | <input type="checkbox"/> |
| Q4. Are you basically satisfied with your life?                               | <input type="checkbox"/> | Q12. Do you feel that your situation is hopeless?                        | <input type="checkbox"/> |
| Q5. Do you prefer to stay at home rather than going out and doing new things? | <input type="checkbox"/> | Q13. Have you dropped many of your activities and interests?             | <input type="checkbox"/> |
| Q6. Are you in good spirits most of the time?                                 | <input type="checkbox"/> | Q14. Do you think that most people are better off than you are?          | <input type="checkbox"/> |
| Q7. Are you afraid that something bad is going to happen to you?              | <input type="checkbox"/> | Q15. Do you feel that you have more problems with your memory than most? | <input type="checkbox"/> |
| Q8. Do you feel that your life is empty?                                      | <input type="checkbox"/> |  |                          |

### GLOSSARY: Geriatric Depression Scale Scorecard

**4 or less:** Indicates absence of significant depression

**5-7:** Indicates borderline depression

**7 or more:** Indicates probable depression

#### Is Depression Present?

- No:** Low GDS and no clinical signs
- Possible:** High GDS, no clinical signs  
Low GDS, with clinical signs  
Intermediate GDS score with or without clinical signs  
Other subjective or objective indicators of depression
- Probable:** High GDS with clinical signs
- Definite Yes:** Previous history of depression with current clinical signs present  
Recent medical diagnosis of depression
- Clinical Signs:** Adapted from DSM III Diagnostic Criteria For Major Depressive Disorder

#### Onset – Date

**Course:** Progression of illness      **Plan:** Any treatment already initiated

#### Predisposing Factors May Include:

- |  |  |
|--|--|
| <b>1. Biological:</b> Family history, prior episode  | <b>2. Physical:</b> Chronic or other medical conditions – especially those that result in pain or loss of function e.g., arthritis, CVA, CHF, etc.<br>Exposure to drugs e.g., hypnotics, analgesics and antihypertensives<br>Sensory deprivation |
| <b>3. Psychological:</b> Unresolved conflicts e.g., anger or guilt. Memory loss or dementia<br>Personality disorders | <b>4. Social:</b> Losses of family and friends (bereavement)<br>Isolation<br>Loss of job/income  |

**Additional Comments:** Overall impression or other related comments

Reprinted with permission. The Haworth Press Inc. 10 Alice St., Binghamton NY 13904.

Brink, T. L., YeSavage, J.A., Lumo, H. A. M., & Rose, T.L. (1982). Screening test for geriatric depression. *Clinical Gerontologist*, 1(1), 37-43.

## Appendix L: Geriatric Depression Scale (GDS-4: Short Form)

Ask the following 4 questions:

- |  |                              |                             |
|--|------------------------------|-----------------------------|
| Q1. Are you basically satisfied with your life?                  | <input type="checkbox"/> Yes | <input type="checkbox"/> NO |
| Q2. Do you feel that your life is empty?                         | <input type="checkbox"/> YES | <input type="checkbox"/> No |
| Q3. Are you afraid that something bad is going to happen to you? | <input type="checkbox"/> YES | <input type="checkbox"/> No |
| Q4. Do you feel happy most of the time?                          | <input type="checkbox"/> Yes | <input type="checkbox"/> NO |

Answers in capitals score 1.

For GDS-4 a score of 1 or more indicates possible depression.

Reprinted with permission. The Haworth Press Inc. 10 Alice St., Binghamton NY 13904.

Isella, V., Villa, M. L., & Appollonio, I. M. (2001). Screening and quantification of depression in mild-to-moderate dementia through the GDS short forms. *Clinical Gerontologist*, 24(3/4), 115-125.



## Appendix M: Suicide Risk in the Older Adult

**Predicting suicide risk in an individual is difficult.** There are certain factors that have been associated with a greater potential for suicide. These factors are listed in the table below along with the behavioral cues.

### ASSESSING SUICIDAL BEHAVIOUR

#### I. Suicidal Intent

- Verbalizes suicidal thoughts
- Can outline a concrete realistic plan
- Physical ability to carry out threat
- Describes suicidal intent
- Methods are available

#### II. Behaviour

- Gives guarded answers to questions
- Increasing withdrawal
- Resolving depression
- Gives away possessions
- Drug/alcohol abuse
- Diverts interviewer off topic
- Depressed affect
- Sudden interest/disinterest in religion
- Puts affairs in order

#### III. Risk Factors

- Male
- Low self-esteem
- Supports systems: decreased or non-existent
- Decline in cognitive status
- History of suicide attempts or violence
- Substance abuse
- White
- Family history of suicide
- Decline in physical status
- Impulsivity
- Recent loss or change in life

Reproduced with permission from *Practical Psychiatry in the Long-Term Care Facility* by Conn, ISBN 0-88937-222-5, 2001, p.113.

© 2001 by Hogrefe & Huber Publishers • Seattle • Toronto • Göttingen • Bern

## Appendix N: Medications That May Cause Cognitive Impairments

### Legend:

[a] = This table provides examples only as of the release date of 1996.

New medications appear regularly.

[b] = These compounds contain aspirin.

[c] = These compounds may contain other active ingredients.

Type of medication	Generic name	Common trade name(s)
Anticholinergic agents	scopolamine	Transderm Scop, Isopto-Hyoscine
	orphenadrine	Norflex, Norgesic [b], Norgesic Forte [b]
	atropine	various, Lomotil [c]
	trihexyphenidyl	Artane
	benztropine	Cogentin
	meclizine	Antivert, Bonine
	homatropine	Isopto-Homatropine, Hycodan [c]
Antidepressants	amitriptyline	Elavil, Endep, Etrafon [c], Triavil [c], Limbitrol [c]
	imipramine	Tofranil
	desipramine	Norpramin
	doxepin	Sinequan
	trazodone	Desyrel
	fluoxetine	Prozac
Antimanic agents	lithium	Eskalith, Lithobid, Lithotabs
Antipsychotic (neuroleptic) agents	thioridazine	Mellaril
	chlorpromazine	Thorazine
	fluphenazine	Prolixin
	prochlorperazine	Compazine
	trifluoperazine	Stelazine
	perphenazine	Trilafon, Etrafon [c], Triavil [c]
	haloperidol	Haldol
Antiarrhythmic agents (oral)	quinidine	Quinidex, Quinaglute
	disopyramide	Norpace
	tocainide	Tonocard

## Medications That May Cause Cognitive Impairments (con't)

Antifungal agents	amphotericin B	Fungizone
	ketoconazole	Nizoral
<b>Sedative/hypnotic agents</b>		
Benzodiazepine derivatives	diazepam	Valium, Valrelease
	chlordiazepoxide	Librium, Libritabs, Librax [c]
	lorazepam	Ativan
	oxazepam	Dalmane
	triazolam	Halcion
	alprazolam	Xanax
Barbiturate acid derivatives	phenobarbital	various, Donnatal [c]
	butabarbital	Butisol
	butalbital	Fiorinal [b][c], Fioricet [c], Esgic [c]
	pentobarbital	Nembutal
Chloral & carbamate derivatives	chloral hydrate	Noctec, Aquachloral
	meprobamate	Miltown, Equanil, Equagesic [b]
<b>Antihypertensive agents</b>		
Beta adrenergic antagonist	propranolol	Inderal, Inderide [c]
	metoprolol	Lopressor
	atenolol	Tenormin
	timolol	Timoptic
Alpha-2 agonists	methyldopa	Aldomet, Aldoril [c]
	clonidine	Catapres, Catapres-TTS, Combipres c]
Alpha-1 antagonists	prazosin	Minipress
Calcium channel blockers	verapamil	Calan, Isoptin
	nifedipine	Procardia, Adalat
	diltiazem	Cardizem, Cardizem CD
Inotropic (cardiotonic) agents	digoxin	Lanoxin, Lanoxicaps
Corticosteroids	hydrocortisone	Cortef, Cortisporin [c], Neo-Cortef [c], Cortaid
prednisone	Deltasone, Prednisone Intensol	
methylprednisone	Medrol, Solu-Medrol	
dexamethasone	Decadron, Neo-decadron [c]	

## Medications That May Cause Cognitive Impairments (con't)

Type of medication	Generic name	Common trade name(s)
Nonsteroidal anti-inflammatory agents	ibuprofen	Motrin, Rufen, Advil, Nuprin, Medipren
	naproxen	Naprosyn, Anaprox, Aleve
	indomethacin	Indocin
	sulindac	Clinoril
	diflunisal	Dolobid
	choline magnesium trisalicylate	Trilisate, Tricosal
	aspirin	various
Narcotic analgesics	codeine	Tylenol with Codeine [c], Robitussin AC [c], Brontex [c], other codeine cough preparations
	hydrocodone	Lortab [c], Lorcet [c], Vicodin [c], Hycodan [c], Hycomine [c], Tussionex [c]
	oxycodone	Percodan [b], Percocet [c], Tylox [c], Roxicet [c]
	meperidine	Demerol, Mepergan [c]
	propoxyphene	Darvon, Darvon-N, Darvocet-N [c], Wygesic [c], Darvon Compound [b]
Antibiotics	metronidazole	Flagyl, Metrogel
	ciprofloxacin	Cipro
	norfloxacin	Noroxin
	ofloxacin	Floxin
	cefuroxime	Zinacef, Ceftin
	cephalexin	Keflex
	cephalothin	Keflin
Radiocontrast media	metrizamide	Amipaque
	iothalamate	Conray
	diatrizoate	Hypaque, Renovist
	iohexol	Omnipaque
H[2] receptor antagonists	cimetidine	Tagamet, Tagamet HD
	ranitidine	Zantac
	famotidine	Pepcid
	nizatidine	Axid
Immunosuppressive agents	cyclosporine	Sandimmune
	interferon	Intron A, Roferon A, Actimmune



## Medications That May Cause Cognitive Impairments (con't)

Type of medication	Generic name	Common trade name(s)
Antineoplastic agents	chlorambucil	Leukeran
	cytarabine	Cytosar-U
	interleukin-2	
	spirohydantoin mustard	Spiromustine
Anticonvulsants	phenytoin	Dilantin
	valproic acid	Depakene, Depakote
	carbamazepine	Tegretol
Anti-Parkinsonian agents (see also anticholinergic agents)	levodopa levodopa/carbidopa bromocryptine pergolide	Larodopa Sinemet Parlodel Permax
Antiemetics	prochlorperazine	Compazine
	metoclopramide	Reglan
	hydroxyzine	Atarax, Vistaril
	promethazine	Phenergan
	trimethobenzamide	Tigan
	diphenhydramine	Benadryl, Dramamine
	meclazine	Antivert
Skeletal muscle relaxants	cyclobenzaprine	Flexaril
	methocarbimol	Robaxin
	carisoprodol	Soma, Soma Compound [b]
	baclofen	Lioresal
	chlorzoxazone	Parafon Forte, Paraflex
Antihistamines/decongestants	diphenhydramine	Benadryl, Tylenol PM [c], Sominex, other OTC cough/cold preparations
	chlorpheniramine	Chlor-Trimeton, Deconamine [c], Contac [c], Tylenol Cold [c], Hycomine [c], other OTC cough/cold preparations [c]
	brompheniramine	Dimetane, Dimetapp[c], Drixoral[c], other OTC cough/cold preparations[c]
	pseudoephedrine	Sudafed[c], Actifed [c], Robitussin PE [c], Dimetapp [c], Entex [c], Drixoral [c], Tylenol Cold [c], Claritin-D [c], other OTC cough/cold preparations [c]
	phenylpropanolamine	Ornade [c], Triaminic [c], Poly-Histine [c], Hycomine [c], other OTC suppressant preparations [c]

Reprinted with permission.

Source: Costa, P. T. Jr., Williams, T. F., Somerfield, M., et al. Recognition and Initial Assessment of Alzheimer's Disease and Related Dementias. Clinical Practice Guideline No. 19. Rockville, MD: U. S. Department of Health and Human Services, Agency for Healthcare Policy and Research. AHCPR Publication No. 97-0702. November 1996.

## Appendix O: List of Available Resources

### PI.E.C.E.S

[www.pieces.cabhru.com](http://www.pieces.cabhru.com)

“Putting the P.I.E.C.E.S. Together” stands for Physical, Intellectual, Emotional, Capabilities, Environment and Social, and are the cornerstones of the philosophy and care of the P.I.E.C.E.S. learning initiative. The PIECES website has a resource centre that provides ongoing learning resources such as videos and learning packages on how to administer and score the Mini Mental Status Examination and how to use the Cornell Scale for Depression in Dementia.

### Regional Geriatric Programs

<http://www.rgps.on.ca>

Regional Geriatric Programs (RGPs) provide a comprehensive network of specialized geriatric services which assess and treat functional, medical and psychosocial aspects of illness and disability in older adults who have multiple and complex needs. Their website provides clinical and learning resources on topics such as delirium, dementia and depression.



## *Appendix P: Description of the Toolkit*

### **Toolkit: Implementation of 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. RNAO, through a panel of nurses, researchers and administrators has developed a “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:

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).









November 2003

## *Screening for Delirium, Dementia and Depression in Older Adults*



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

ISBN 0-920166-40-7



9 780920 166406

