NATIONAL GUIDELINES
FOR SENIORS’ MENTAL HEALTH

The Assessment and Treatment
of Mental Health Issues in
Long Term Care Homes
(Focus on Mood and Behaviour Symptoms)
The CCSMH gratefully acknowledges support from:

POPULATION HEALTH FUND, PUBLIC HEALTH AGENCY OF CANADA*

*The opinions expressed in this publication are those of the authors/researchers and do not necessarily reflect the official views of the Public Health Agency of Canada

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Foreword

About the Canadian Coalition for Seniors’ Mental Health

The Canadian Coalition for Seniors’ Mental Health (CCSMH) was established in 2002 following a two-day symposium on “Gaps in Mental Health Services for Seniors’ in Long-Term Care Settings” hosted by the Canadian Academy of Geriatric Psychiatry (CAGP). In 2002, Dr. David Conn and Dr. Ken Le Clair (CCSMH co-chairs) took on leadership responsibilities for partnering with key national organizations, creating a mission and establishing goals for the organization. The mission of the CCSMH is to promote the mental health of seniors by connecting people, ideas, and resources.

The CCSMH has a volunteer Steering Committee that provides ongoing strategic advice, leadership and direction. In addition, the CCSMH is composed of organizations and individuals representing seniors, family members and caregivers, health care professionals, frontline workers, researchers, and policy makers. There are currently over 750 individual members and 85 organizational members from across Canada. These stakeholders are representatives of local, provincial, territorial and federal organizations.

Aim of Guidelines

Clinical practice guidelines are defined as “systematically developed statements of recommendation for patient management to assist practitioner and patient decisions about appropriate health care for specific situations” (Lohr & Field, 1992).

The CCSMH is proud to have been able to facilitate the development of these clinical guidelines. These are the first interdisciplinary, national best practices guidelines to specifically address key areas in seniors’ mental health. These guidelines were written by and for interdisciplinary teams of health care professionals from across Canada.

The aim of these guidelines is to improve the assessment, treatment, management and prevention of key mental health issues for seniors, through the provision of evidence-based recommendations. The recommendations given in these guidelines are based on the best available evidence at the time of publication and when necessary, supplemented by the consensus opinion of the guideline development group.
Acknowledgements

Funding for the CCSMH Guideline Initiative was provided by the Public Health Agency of Canada, Population Health Fund. The CCSMH gratefully acknowledges the Public Health Agency of Canada for its ongoing support and continued commitment to the area of seniors’ mental health.

In addition, special thanks to the Co-leads and Guideline Development Group members who dedicated countless number of hours and engaged in the creation of the guidelines and recommendations. Your energy, enthusiasm, insight, knowledge, and commitment were truly remarkable and inspiring.

The CCSMH would like to thank all those who participated in the guideline workshops at the National Best Practices Conference: Focus on Seniors’ Mental Health 2005 (Ottawa, September 2005) for their feedback and advice.

We would also like to thank Mr. Howard Winkler and Aird & Berlis LLP for their in-kind support in reviewing the guideline documents and providing legal perspective and advice to the CCSMH.

Finally, the CCSMH would like to acknowledge the continued dedication of its Steering Committee members.

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Overview of Guideline Project

Background Context

The mission of the CCSMH is to promote the mental health of seniors by connecting people, ideas and resources. The primary goals of the CCSMH include:

• To ensure that Seniors’ Mental Health is recognized as a key Canadian health and wellness issue
• To facilitate initiatives related to enhancing and promoting seniors’ mental health resources
• To ensure growth and sustainability of the CCSMH

In order to meet the mission and goals, a number of strategic initiatives are facilitated by the CCSMH with the focus on the following areas:

• Advocacy and Public Awareness
• Research
• Education
• Human Resources
• Promoting Best Practices in Assessment and Treatment
• Family Caregivers

In January 2005, the CCSMH was awarded funding by the Public Health Agency of Canada, Population Health Fund, to lead and facilitate the development of evidence-based recommendations for best-practice National Guidelines in a number of key areas for seniors’ mental health. The four identified key areas for guideline development were:

1. Assessment and Treatment of Delirium
2. Assessment and Treatment of Depression
3. Assessment and Treatment of Mental Health Issues in Long-Term Care Homes (focus on mood and behavioural symptoms)
4. Assessment of Suicide Risk and Prevention of Suicide

Between April 2005 and February 2006, workgroups were established for the four identified areas. The workgroups evaluated existing guidelines, reviewed primary literature and formulated documents that included recommendations and supporting text.

Necessity for the Guidelines

The proportion of Canadians who are seniors is expected to increase dramatically. By 2021, older adults (i.e., those age 65+) will account for almost 18% of our country’s population (Health Canada, 1999). Currently, 20% of those aged 65 and older are living with a mental illness (MacCourt, 2005). Although this figure is consistent with the prevalence of mental illness in other age groups, it does not capture the high prevalence rates seen within health and social institutions. For example, it has been reported that 80%-90% of nursing home residents live with some form of mental illness and/or cognitive impairment (Rovner et al., 1990; Drance, 2005).

Previously, there were no interdisciplinary national guidelines on the prevention, assessment, treatment and management of the major mental health issues facing older Canadians although there are recommendations from a Consensus Conference on the assessment and management of dementia (Patterson et al., 1999; updated version to be published shortly). Given the projected growth of the seniors’ population, the lack of an accepted national standard to guide their care is a serious problem.

There is an immediate need to identify, collaborate and share knowledge on effective mental health assessment and treatment practices relevant to seniors. As such, the CCSMH National Guideline Project was created to support the development of evidence-based recommendations in the four key areas of seniors’ mental health identified above.

Objectives

The overall project goal was to develop evidence-based recommendations for best practice guidelines in four key areas of seniors’ mental health.

Project Objectives:

1. To identify existing best-practice guidelines in the area of seniors’ mental health both within Canada and internationally.
2. To facilitate the collaboration of key healthcare leaders within the realm of seniors’ mental health in order to review existing guidelines and the literature relevant to seniors’ mental health.
3. To facilitate a process of partnership where key leaders and identified stakeholders create a set of recommendations and/or guidelines for identified areas within seniors’ mental health.
4. To disseminate the draft recommendations and/or guidelines to stakeholders at the CCSMH Best Practices Conference 2005 in order to create an opportunity for review and analysis before moving forward with the final recommendations and/or guidelines.
5. To disseminate completed guidelines to health care professionals and stakeholders across the country.
Principles and Scope

Guiding principles included the following:

- Evidence-based
- Broad in scope
- Reflective of the continuum of settings for care
- Clear, concise, readable
- Practical

Scope

- Must be multi-disciplinary in nature
- Will focus on older adults only
- Must include all health care settings across the continuum
- Should acknowledge the variation (i.e., in services, definitions, access issues, etc.) that exists between facilities, agencies, communities, regions and provinces across the country
- Must deal explicitly with areas of overlap between the four National Guidelines for seniors' mental health
- While four independent documents will be created, there will be cross-referencing between documents as need arises
- Gaps in knowledge will be identified and included in the guideline documents
- Research, education and service delivery issues should be included in the guidelines. For example, the guidelines may address "optimal services", "organizational aspects", "research", and "education."

In addition, each Guideline Development Group identified scope issues specific to their topic.

Target Audience

There are multiple target audiences for these guidelines. They include multidisciplinary care teams, health care professionals, administrators, and policy makers whose work focuses on the senior population. In addition, these guidelines may serve useful in the planning and evaluation of health care service delivery models, human resource plans, accreditation standards, training and education requirements, research needs and funding decisions.

Guideline Development Process

Creation of the Guideline Development Group

An interdisciplinary group of experts on seniors’ mental health issues were brought together under the auspices of the CCSMH to become members of one of the four CCSMH Guideline Development Groups. Co-leads for the Guideline Development Groups were chosen by members of the CCSMH Steering Committee after soliciting recommendations from organizations and individuals. Once the Co-leads were selected, Guideline Development Group members and consultants were chosen using a similar process, including suggestions from the Co-leads. One of the goals in selecting group members was to attempt to create an inter-disciplinary workgroup with diverse provincial representation from across the country.

Creation of the Guidelines

In May 2005, the Guideline Development Groups convened in Toronto, Ontario for a two-day workshop. Through large and small group discussions, the workshop resulted in a consensus on the scope of each practice guideline, the guideline template, the identification of relevant resources for moving forward, and the development of timelines and accountability plans.

A number of mechanisms were established to minimize the potential for biased recommendations being made due to conflicts of interest. All Guideline Development Group members were asked to complete a conflict of interest form, which was assessed by the project team. This was completed twice throughout the process. The completed forms are available on request from the CCSMH. As well, the guidelines were comprehensively reviewed by external stakeholders from related fields on multiple occasions.

The four individual Guideline Development Groups met at monthly meetings via teleconference with frequent informal contact through email and phone calls between workgroup members. As sections of the guidelines were assigned to group members based on their area of expertise and interest, meetings among these subgroups were arranged. As well, monthly meetings were scheduled among the Co-leads. The CCSMH project director and manager were responsible for facilitating the process from beginning to end.
Phase I: Group Administration & Preparation for Draft Documents (April/June 2005)

- Identification of Co-leads and Guideline Development Group Members
- Meetings with Co-leads and individual Guideline Development Groups
- Establish terms of reference, guiding principles, scope of individual guidelines
- Development of timelines and accountability plans
- Creation of guideline framework template
- Comprehensive literature and guideline review
- Identification of guideline and literature review tools and grading of evidence tools

Phase II: Creation of Draft Guideline Documents (May/Sept. 2005)

- Meetings with co-leads & individual workgroups
- Shortlist, review & rating of literature and guidelines
- Summarized evidence, gaps & recommendations
- Creation of draft guideline documents
- Review and revisions of draft documents


The dissemination of the draft guidelines to external stakeholders for review and consultation occurred in the following three stages:

**Stage 1: Dissemination to guideline group members (May/December 2005)**

Revised versions of the guidelines were disseminated to Guideline Development Group members on an ongoing basis.

**Stage 2: Dissemination to CCSMH Best Practices Conference participants (Sept. 2005)**

In order to address issues around awareness, education, assessment and treatment practices, a national conference was hosted on September 26th and 27th 2005 entitled “National Best Practices Conference: Focus on Seniors’ Mental Health”. Those attending the conference had the opportunity to engage in the process of providing stakeholder input into the development of one of the four national guidelines. The full-day workshops focused on appraising and advising on the draft national guidelines and on dissemination strategies.

The workshop session was broken down into the following activities:

- Review of process, literature and existing guidelines
- Review of working drafts of the guidelines
- Comprehensive small and large group appraisal and analysis of draft guidelines
- Systematic creation of suggested amendments to draft guidelines by both the small and large groups
- Discussion of the next steps in revising and then disseminating the guidelines. This included discussion on opportunities for further participation

**Stage 3: Dissemination to guideline consultants and additional stakeholders. (October 2005/January 2006)**

External stakeholders were requested to provide overall feedback and impressions and to respond to specific questions. Feedback was reviewed and discussed by the Guideline Development Groups. This material was subsequently incorporated into further revisions of the draft guideline.

Additional stakeholders included: identified project consultants; Public Health Agency of Canada, Federal/Provincial/Territorial government groups; CCSMH members and participating organizations; CCSMH National Best Practices Conference workshop participants; Canadian Academy of Geriatric Psychiatry; and others.


- Feedback from the Best Practices Conference Workshops was brought back to the Guideline Development Groups for further analysis and discussion
- Feedback from external stakeholders was reviewed and discussed
- Consensus within each guideline group regarding recommendations and text was reached
- Final revisions to draft guideline documents


- Final revisions to draft guideline documents by Guideline Development Groups
- Completion of final guidelines and recommendations document
- Final guidelines and recommendations presented to the Public Health Agency of Canada

Phase VI: Dissemination of Guidelines (Jan. 2006 - onwards)

- Identification of stakeholders for dissemination
- Translation, designing and printing of documents
- Dissemination of the documents to stakeholders through electronic and paper form
- Marketing of guidelines through newsletters, conference presentations, journal papers, etc.

See Appendix A for the detailed Process Flow Diagram outlining the development of the guidelines.
A strategic and comprehensive review of the existing research literature on the assessment and management of mood and behaviour symptoms in LTC homes was completed.

**Search Strategy for Existing Evidence**

A computerized search for relevant evidence-based summaries, including guidelines, meta-analyses, and literature reviews, and research literature not contained in these source documents, was conducted by librarian consultants to the Guidelines Project and by the CCSMH. The search strategy was guided by the following inclusion criteria:

- English language references only
- References specifically addressed depressive and/or behaviour symptoms in LTC homes
- Guidelines, meta-analyses and reviews were dated January 1995 to May 2005
- Research articles were dated January 2000 to June 2005

**Guideline, Meta-analyses and Literature Reviews Search**

The initial search for existing evidence-based summaries (e.g., guidelines, protocols) examined several major databases, specifically, Medline, EMBASE, PsycInfo, CINAHL, AgeLine, and the Cochrane Library. The following search terms were used: “long term care”, “residential care institutions”, “nursing homes”, “homes for the aged”, “agitation”, “wandering”, “agitated behavior”, “bipolar disorder”, “depression”, “mood disorders”, “affective disorders”, “social behavior disorders”, “behavioral symptoms”, “dementia”, “delirium”, “disruptive behavior”, “elderly”, “older adult(s)”, “aged”, “geriatric”, “guideline(s)”, “practice guideline(s)”, “practice guideline(s) older adults”, “protocol(s)”, “best practice guideline(s)”, and “clinical guide-line(s)”.

In addition, a list of websites was compiled based on known evidence-based practice websites, known guideline developers, and recommendations from Guideline Development Group members. The search results and dates were noted. The following websites were examined:

- American Medical Association: http://www.ama-assn.org/
- American Psychiatric Association: http://www.psych.org/
- American Psychological Association: http://www.apa.org/
- Annals of Internal Medicine: http://www.annals.org/
- Association for Gerontology in Higher Education: http://www.aghe.org/site/aghewebsite/
- Canadian Mental Health Association: http://www.cmha.ca/bins/index.asp
- Canadian Psychological Association: http://www.cpa.ca/
- National Institute for Health and Clinical Excellence: http://www.nice.org.uk/
- National Institute of Mental Health: http://www.nimh.nih.gov/
- Ontario Medical Association: http://www.oma.org/
- Registered Nurses Association of Ontario: http://www.rnao.org/
- Royal Australian and New Zealand College of Psychiatrists: http://www.ranzcp.org/
- Royal College of General Practitioners: http://www.rcgp.org.uk/
- Royal College of Nursing: http://www.rcn.org.uk/
- Royal College of Psychiatrists: http://www.rcpsych.ac.uk/
- World Health Organization: http://www.who.int/en/

This search yielded 26 potentially relevant guidelines. These were further considered by the Guideline Development Group Co-leads as to whether they specifically addressed the guideline topic and were accessible either on-line, in the literature, or through contact with the developers. Through this process, 10 guidelines were selected and obtained for inclusion in the literature base for the project. These 10 guidelines were:

The Guideline Development Group used the Appraisal of Guidelines for Research and Evaluation Instrument (AGREE) (AGREE Collaboration, 2001) to appraise the most directly relevant previously published guideline: AGS/AAGP (2003). This process served both to confirm our confidence in reliance on this source, and enhance awareness of the factors to be taken into consideration in relying on evidence and recommendations from other source guidelines in the development of our contribution to this literature.

In addition, the search yielded several relevant Cochrane Library reviews, and a number of key review articles. The reference lists for these articles were hand searched by members of the Guideline Development Group for relevant research articles and 35 of these were obtained in full text as a component of the initial search strategy.

**Supplemental Research Literature Search**

The timeframe (2000-2005) for the supplemental research literature search was selected in consideration of the publication dates of the relevant guidelines, as it was assumed that these guidelines, collectively, could be relied on as acceptable sources of the prior literature.

Searches were conducted separately for each database (Medline, EMBASE, PsycInfo, CINAHL, AgeLine, the Cochrane Library), with necessary variance in controlled vocabulary (i.e., minor differences in search terms as prescribed by each database). The core search strategy for all databases was to limit it to papers dealing with humans, written in English, and published between 2000 and 2005.

Each search also included terms to encompass location (i.e. exploded terms: long term care, nursing home, residential care institutions), age (aged) and symptoms/disorders (i.e. affective disorders, behaviour disorders, mood disorders, psychotic disorders, cognitive disorders, depression, dementia, delirium, amnesic, senile dementia, behavioural symptoms, inappropriate sexual behaviour, disruptive behaviour, social behavioural disorders, mental disorders, obsessive-compulsive disorder, psychophysiological disorders).

As expected, search term combinations yielded low rates for relevant citations. For example, in Medline, a search for five of the disorders noted above (i.e., social behavioural disorders or mental disorders or etc.) yielded 97951 hits. However, when search terms "long term care" (exploded) and "aged" were added to the search, the yield dropped to 95 citations. In order to further focus the search, the 95 abstracts were audited on-line, resulting in the identification of 12 studies that were relevant and applicable to this project.

The librarian and project Co-lead followed a similar process (database search followed by on-line audit) for various search combinations. Through this process, 56 potentially relevant articles, not previously identified through the search for evidence-based summaries (i.e. guidelines, meta-analyses and literature reviews), were found. Abstracts were circulated to members, and 32 recent research articles were selected. Full text articles were obtained to add to the literature base. As the development of the guideline document progressed, additional literature (i.e. summaries and research articles) was identified through targeted searches and expert knowledge contributions on the part of the Guideline Development Group. The resultant reference base includes over 200 citations.
Formulation of Recommendations

The selected literature was appraised with the intent of developing evidence-based, clinically sound recommendations. Based on relevant expertise and interest, the Guideline Development Group was divided into subgroups and completed the drafting of recommendations for their particular section. The process generated several drafts that were amalgamated into a single document with a set of recommendations confirmed by consensus. Thus, the recommendations are based on research evidence, informed by expert opinion.

The strength of each recommendation was assessed using Shekelle and colleagues’ (1999) Categories of Evidence and Strength of Recommendations. Prior to the CCSMH Best Practices Conference, the Guideline Development Group Co-leads reviewed the draft documents and approved the recommendations. After the conference, each Guideline Development Group reviewed their recommendations and discussed gaps and controversies. Areas of disagreement were discussed and recommendations were endorsed. A criterion of 80% consensus in support of a recommendation among Guideline Development Group members was required for the inclusion of a recommendation in the final document. In reality, consensus on the final set of recommendations was unanimous.

The evidence and recommendations were interpreted using the two-tier system created by Shekelle and colleagues (1999). The individual studies are categorized from I to IV. The category is given alongside the references and has been formatted as (reference).1

### Categories of evidence for causal relationships and treatment

<table>
<thead>
<tr>
<th>Evidence from meta-analysis of randomized controlled trials</th>
<th>Ia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evidence from at least one randomized controlled trial</td>
<td>Ib</td>
</tr>
<tr>
<td>Evidence from at least one controlled study without randomization</td>
<td>IIa</td>
</tr>
<tr>
<td>Evidence from at least one other type of quasi-experimental study</td>
<td>IIb</td>
</tr>
<tr>
<td>Evidence from non-experimental descriptive studies, such as comparative studies, correlation studies and case-control studies</td>
<td>III</td>
</tr>
<tr>
<td>Evidence from expert committees reports or opinions and/or clinical experience of respected authorities</td>
<td>IV</td>
</tr>
</tbody>
</table>

(Shekelle et al., 1999)

The strength of the recommendations, ranging from A to D (see below), is based on the entire body of evidence (i.e., all studies relevant to the issue) and the expert opinion of the Guideline Development Group regarding the available evidence. For example, a strength level of D has been given to evidence extrapolated from literature on younger population groups or is considered a good practice point by the Guideline Development Group.

Given the difficulties (e.g., pragmatic, ethical and conceptual) in conducting randomized controlled trials with older persons in LTC homes, it was important for the Guideline Development Group to assess and use the evidence of those trials that incorporated quasi-experimental designs (Tilly & Reed, 2004).

**It is important to interpret ratings for the strength of recommendation (A to D) as a synthesis of all the underlying evidence and not as a strict indication of the relevant importance of the recommendation for clinical practice or quality of care. Some recommendations with little empirical support, resulting in a lower rating for strength on this scale, are in fact critical components of service delivery in the LTC setting. Level of risk has also been considered when assigning strength of recommendation.**

### Strength of recommendation

<table>
<thead>
<tr>
<th>Directly based on category I evidence</th>
<th>A</th>
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<tbody>
<tr>
<td>Directly based on category II evidence or extrapolated recommendation from category I evidence</td>
<td>B</td>
</tr>
<tr>
<td>Directly based on category III evidence or extrapolated recommendation from category I or II evidence</td>
<td>C</td>
</tr>
<tr>
<td>Directly based on category IV evidence or extrapolated recommendation from category I, II, or III evidence</td>
<td>D</td>
</tr>
</tbody>
</table>

(Shekelle et al., 1999)
Following a discussion of Background Information (Part 1), recommendations are presented and discussed in the subsequent sections of this Guideline.

In Part 2: General Care, we provide recommendations for the delivery of care to all LTC residents, in the interest of mental health promotion.

In Part 3: Assessment of Mental Health Problems and Mental Health Disorders, we provide recommendations for the assessment of depressive and behavioural symptoms in LTC residents. In the assessment section, depressive and behavioural symptoms are considered together, except for where the literature is specific to one or the other symptom pattern.

In contrast, in Part 4: Treatment of Depressive Symptoms and Disorders, and Part 5: Treatment of Behavioural Symptoms, symptoms are discussed separately, for a number of reasons. For example, there is empirical support for specific psychotherapies (e.g., cognitive-behavioural therapy) for treatment of depressive symptoms, but not for behavioural symptoms. While activity therapy and social contact interventions have been suggested for both symptom presentations, the types of activities and social contact interventions that have been empirically supported differ. For example, social contact intervention for depression includes peer volunteers, while one-to-one interactions, pet-therapy and simulated interactions have been investigated for behavioural symptoms. In addition, pharmacological treatment of these symptoms/syndromes includes different medications and must take into account the underlying diagnosis. Importantly, while psychosocial and pharmacological interventions are discussed sequentially for clarity within each symptom set (depressive versus behavioural), it is acknowledged that interventions often are, and should be integrated in practice (Cohen-Mansfield, 2001).

In Part 6: Organizational and System Issues, we provide recommendations that apply to the broader context of care delivery, at the facility and system level.

**Key Concepts and Definitions**

**Assessment:** is understood to be a comprehensive, ongoing process, that includes: (1) screening to detect depressive and behavioural symptoms; (2) structured, goal-directed investigation to identify factors precipitating, maintaining and exacerbating identified symptoms, which leads to client-centered, evidence-based interpretation of assessment findings, including formal diagnosis where appropriate; and (3) ongoing evaluation of clinical outcomes and treatment effectiveness to determine the need for reassessment and re-conceptualization of contributing factors.

**Assessment Protocol:** is understood to refer to a problem-oriented framework that guides thinking about an issue. An assessment protocol structures the decision-making process so that the assessment process is efficient, yet comprehensive enough to lead to an appropriate care plan for an individual resident. The interRAI suite of tools (including the Minimum Data Set) provides an example of a research-based, standardized approach to the development of assessment protocols (www.interRAI.org, 2006; Morris et al., 1995). Assessment protocols and processes should be supported with specific timelines and staff accountabilities (expertise and scope of practice) for optimal effectiveness.

**Behavioural Symptoms:** are understood to include observable behaviours that are: (1) inappropriate or excessive within the context of the situation/setting; and (2) disturbing, disruptive or potentially harmful to the resident and/or others.

**Depressive Symptoms:** are understood to include those symptoms that constitute a diagnosis of Major Depressive Disorder or the proposed diagnosis of Minor Depressive Disorder, or other mood disorders, according to the Diagnostic and Statistical Manual of Mental Disorders Fourth Edition Text Revision (DSM-IV-TR) criteria (American Psychiatry Association (APA), 2000a). It is acknowledged that depressive symptom presentation in older adults may be atypical, subsyndromal or difficult to distinguish from other comorbid conditions.

**Interdisciplinary Team:** is understood to include a variety of disciplines, representing both facility based staff and external consultants. It is acknowledged that there is no consensus on the optimal mix of expertise and scopes of practice, and within any given facility, clinical resources may differ. However, a key concept underlying these Guidelines is that effective mental health promotion and management of mental health problems,
including mental disorders, requires an interdisciplinary team effort. It is beyond the scope of these Guidelines to propose criteria for interdisciplinary team composition within LTC homes, or to address the challenges of resource availability. However, the centrality of this issue for the implementation of these best practice recommendations is acknowledged. In this document, care providers refer to members of interdisciplinary teams and staff.

**Long Term Care Homes:** For the purpose of these Guidelines, the term long term care homes (LTC) is used generically. This term is used to refer to any congregate living residence, created for older adults and others with chronic illnesses, disabilities, and/or deficits in activities of daily living (ADL) or instrumental activities of daily living (IADL) that necessitate skilled nursing care on a daily basis. This would include, for example, facilities known as nursing homes and complex care facilities. It is acknowledged that there is wide variability in how LTC homes are defined, funded and structured in different provinces and territories. It is also recognized that there is variation of services within and across retirement homes and assisted living facilities. Recommendations from these Guidelines may serve useful to these alternative settings for care as well.

**Management:** is understood to include interventions intended to modify the milieu (social and/or physical environment) to prevent the potential for depressive or behavioural symptoms (e.g., changes in the facility dining room to promote increased or appropriate opportunities for interaction), and interventions intended to address existing depressive or behavioural symptoms experienced by a resident. Thus, management includes, but is broader than, formal assessment and treatment.

**Mental Disorders:** are understood to include those conditions defined in the DSM-IV-TR, a multiaxial classification system (APA, 2000a). The five axes are: 1) Clinical Disorders, Other Conditions that may be a focus of Clinical Attention; 2) Personality Disorders, Mental Retardation; 3) General Medical Conditions; 4) Psychosocial and Environmental Problems; and 5) Global Assessment of Functioning.

**Mental Health:** is understood as “the capacity of the individual, the group and the environment to interact with one another in ways that promote subjective well-being, the optimal development and use of mental abilities (cognitive, affective and relational), the achievement of individual and collective goals consistent with justice and the attainment and preservation of fundamental equality” (Health and Welfare Canada, 1988). Although mental health is conceptualized as an individual resource, it is affected by the social context in which the individual lives. Key aspects of mental health for older adults include autonomy, self-esteem, relationships, and social supports (Waters, 1995). Mental health is a broad concept, and mental health care, like health care in general, can be viewed along a continuum from promotion of good mental health to treatment of serious mental illness (American Association for Retired People (AARP), 1994).

**Mental Health Problems:** are understood to reflect internal causes (e.g., physical or mental illness, inadequate coping skills) and/or external causes (e.g., interactions with the social and/or physical environment; relationship dynamics) (Health and Welfare Canada, 1988). Both bio-medical and non-biomedical factors that can affect mental health must therefore be taken into account when identifying or addressing seniors’ mental health problems. Mental health problems include discrete mental disorders. Mental health problems in late life often occur in the context of medical illness, disability, and psychosocial impoverishment.

**Mental Health Promotion:** is understood as the process of enhancing the capacity of residents to take control over their lives and improve their mental health. For example, by working to increase self-esteem, coping skills, social support and well-being in all individuals, mental health promotion empowers residents to interact within their social and physical environment in ways that enhance emotional and spiritual strength. Mental health promotion serves to foster individual resilience and promote a socially supportive milieu within the LTC facility. Mental health promotion includes challenging discrimination and stigma against those with mental health problems.

**Resident:** For the purpose of these Guidelines, the term resident is used to refer to older adults who live in LTC homes. A key concept is that each resident is an individual, who deserves an individualized approach to care delivery. It is acknowledged that the target population encompasses a heterogeneous group of individuals, widely varied not only in chronological age (65 to plus 100 years of age), but also in culture, ethnicity, race and sexual orientation. Given the state of knowledge, no attempt is made to refine recommendations as a function of population subgroups, although the significance of respect for cultural diversity and need for further research in this area is acknowledged. It is further acknowledged that younger adults may also reside in LTC homes, for example, individuals with acquired brain injuries or developmental delays. The content of these Guidelines may be relevant to these residents as well. However, the focus of this literature review and subsequent development of guidelines has been on older adults.

**Treatment:** is understood to include specific therapeutic interventions (i.e., psychological and social, as well as pharmacological) for an identified problem at the level of the individual resident (i.e., in this context, depressive and/or behavioural symptoms that warrant intervention). Treatment should follow an individualized assessment, and treatment effectiveness should be monitored and evaluated.
Abbreviations

There are a number of abbreviations utilized within this guideline. In alphabetical order, these are as follows:

AAGP: American Association for Geriatric Psychiatry
AAI: Abilities Assessment Instrument
AARP: American Association of Retired Persons
ABC: Antecedents-Behaviour-Consequences
AD: Alzheimer’s Disease
ADL: Activities of Daily Living
AGS: American Geriatrics Society
AMDA: American Medical Directors Association
APA: American Psychiatric Association
APN: Advanced Practice Nurse
BARS: Brief Agitation Rating Scale
BEHAVE-AD: Behaviour Pathology in Alzheimer’s Disease Rating Scale
BLT: Bright Light Therapy
BMT: Behaviour Management Training
BPSD: Behavioural and Psychological Symptoms of Dementia
BSDD: Behavioural Symptoms Scale for Dementia
CANMAT: Canadian Network for Mood and Anxiety Treatments
CES-D: Centre for Epidemiological Studies of Depression Scale
CMAI: Cohen-Mansfield Agitation Inventory
CPA: Canadian Psychiatric Association
CSDD: Cornell Scale for Depression in Dementia
DLB: Dementia with Lewy Bodies
DSM-IV-TR: Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition Text Revision
ECT: Electroconvulsive Therapy
FAI: Feeding Abilities Assessment
GDS: Geriatric Depression Scale
HPRD: Hours Per Resident per Day
IADL: Instrumental Activities of Daily Living
KU: Knowledge Utilization
LTC: Long Term Care
MDS: Minimum Data Set
MMSE: Mini-Mental Status Examination
NPI: Neuropsychiatric Inventory
PAS: Pittsburgh Agitation Scale
POA: Powers of Attorney
PRN: Pro Re Nata (as needed)
PST: Problem-Solving Therapy
RCT: Randomized Controlled Trial
RNAO: Registered Nurses Association of Ontario
SCN: Suprachiasmatic Nuclei
SSRI: Selective Serotonin Reuptake Inhibitors
TCA: Tricyclic Antidepressant
Summary of Recommendations

All recommendations are presented together at the beginning of this document for easy reference. Subsequently, in each section we present the recommendation followed by a discussion of the relevant literature. We strongly encourage readers to refer to the supplemental text discussion, rather than only using the summary of recommendations. The page numbers for the corresponding text are given with the recommendations below.

**Recommendations: General Care**

<table>
<thead>
<tr>
<th>Recommendation: General Care – Family Involvement (p. 17)</th>
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<tbody>
<tr>
<td>Encourage and support the involvement and education of the family in the institutional life of the older resident, including decision-making processes, as appropriate. [C]</td>
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<table>
<thead>
<tr>
<th>Recommendation: General Care – Care Plan (p. 18)</th>
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<tbody>
<tr>
<td>Individualize care plans, with due consideration to best practice guidelines and recommendations. [D]</td>
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<tr>
<th>Recommendation: General Care – Communication (p. 18)</th>
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</thead>
<tbody>
<tr>
<td>Implement strategies to promote communication between care providers and residents. [B]</td>
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<tr>
<th>Recommendation: General Care – Dressing (p. 19)</th>
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<tbody>
<tr>
<td>Develop an individualized approach when assisting the resident with dressing. [B]</td>
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<thead>
<tr>
<th>Recommendation: General Care – Bathing (p. 20)</th>
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<tbody>
<tr>
<td>Develop an individualized protocol for each resident that minimizes negative affect and promotes a sense of well being during bathing. [A]</td>
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<thead>
<tr>
<th>Recommendation: General Care – Activities (p. 20)</th>
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<tbody>
<tr>
<td>Consider the need to pace activities that residents are involved in throughout the day. [B]</td>
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<tr>
<th>Recommendation: General Care – Mealtime (p. 20)</th>
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<tbody>
<tr>
<td>Consider the need to develop mealtime care-giving activities to enhance nutrition and prevent behaviours that interfere with nutritional and social needs. [D]</td>
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</table>

**Recommendations: Assessment of Mental Health Problems and Mental Disorders**

<table>
<thead>
<tr>
<th>Recommendations: Assessment – Screening (p. 22 -23)</th>
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<tbody>
<tr>
<td>The facility’s assessment protocol should specify that screening for depressive and behavioural symptoms will occur both in the early post-admission phase and subsequently, at regular intervals, as well as in response to significant change. [C]</td>
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</table>

A variety of screening tools that are appropriate to the setting and resident population should be available to facilitate the screening process. [D]

Tool selection should be determined by the characteristics of the situation (e.g., resident capacity for self-report, nature of the presenting problem). [D]
Screening should trigger detailed investigation of depressive and behavioural symptoms under defined circumstances. [D]

**Recommendations: Assessment – Detailed Investigation (p. 23 – 25)**

Core elements of a detailed investigation should include history and physical exam, with follow up laboratory and psychological investigations, investigations of the social and physical environment, and diagnostic tests as indicated by the results of the history and physical exam, and treatment history and response. [C]

It is important to consider all contributing factors. Investigation of potentially contributing factors (e.g., delirium, chronic pain) should refer to clinical practice guidelines for these conditions where available. [D]

Diagnosis and differential diagnosis should be an assessment objective where appropriate. [D]

The end point of a detailed investigation should be the determination of the need for, type, and intensity of treatment. [D]

**Recommendations: Assessment – Ongoing Evaluation (p. 25)**

The treatment plan should specify the timeline and procedure for ongoing evaluation of clinical outcomes and treatment effectiveness. [D]

Ongoing evaluation should include history and assessment of change in the target symptoms. [D]

Assessment of change should include quantification, preferably with the same tool that was used pre-intervention. [D]

Unexpected clinical outcomes and treatment effects should trigger re-assessment and potentially re-conceptualization of the factors precipitating, maintaining and exacerbating depressive and behavioural symptoms. Potential adverse reactions to treatment should be evaluated. [D]

**Recommendations: Treatment of Depressive Symptoms and Disorders**

**Recommendation: Depressive Symptoms: General Treatment Planning (p. 26)**

Consider type and severity of depression in developing a treatment plan. [B]

**Recommendation: Depressive Symptoms: Psychological and Social Interventions (p. 27 – 28)**

Social contact interventions, including interventions that promote one’s sense of meaning, should be considered where the goal is to reduce depressive symptoms. [C]

Structured recreational activities should be considered where the goal is to engage the resident. [C]

Psychotherapies should be considered where the goal is to reduce depressive symptoms. [B]

Self-affirming interventions (e.g. validation and reminiscence therapies) should be considered where the goal is to increase sense of self-worth and overall well-being. [C]

**Recommendation: Depressive Symptoms: Psychological and Social Interventions (p. 29)**

Consider the impact of comorbid dementia in developing a treatment plan. [C]

**Recommendation: Depressive Symptoms: Pharmacological Interventions (p. 30 – 31)**

First line treatment for residents who meet criteria for major depression should include an antidepressant. [A]
Appropriate first line antidepressants for LTC home residents include selective serotonin reuptake inhibitors (e.g., citalopram and sertraline), venlafaxine, mirtazapine, buproprion. [B]

For residents with major depression with psychotic features, a combination of antidepressant and antipsychotic medications is appropriate. [B]

Residents with a first episode of major depression responding well to antidepressant treatment should continue on full dose treatment for at least 12 months. Residents who have had at least one previous episode of depression should continue with treatment for at least two years. [A]

The treatment of depressed residents with a history of bipolar mood disorder should include a mood stabilizer such as lithium carbonate, divalproex sodium or carbamazepine. [B]

Residents with severe depression not responding to medications should be considered for a trial of electroconvulsive therapy (ECT). (These residents will likely require transfer to a psychiatric facility). [B]

Psychostimulants (e.g., methylphenidate) may have a role in treating certain symptoms which are commonly associated with depression (e.g., apathy, decreased energy). [C]

### Recommendations: Treatment of Behavioural Symptoms


Social contact interventions should always be considered, especially where the goal is to minimize sensory deprivation and social isolation, provide distraction and physical contact, and induce relaxation. [C]

Sensory/relaxation interventions (e.g., music, snoezelen, aromatherapy, bright light) should be considered where the goal is to reduce behavioural symptoms, stimulate the senses and enhance relaxation. [B/D]

Structured recreational activities should be considered where the goal is to engage the resident. [C]

Individualized behaviour therapy should be considered where the goal is to manage behaviour symptoms (e.g., contextually inappropriate, disturbing, disruptive or potentially harmful behaviours). [C]

**Recommendation: Behavioural Symptoms: Pharmacological Interventions (p. 36 – 38)**

Carefully weigh the potential benefits of pharmacological intervention versus the potential for harm. [A]

Appropriate first line pharmacological treatment of residents with severe behavioural symptoms with psychotic features includes atypical antipsychotics. [B] Atypical antipsychotics should only be used if there is marked risk, disability or suffering associated with the symptoms. [C]

Appropriate first line pharmacological treatment of residents with severe behavioural symptoms without psychotic features can include: a) atypical antipsychotics; b) antidepressants such as trazodone or selective serotonin reuptake inhibitors (e.g., citalopram or sertraline). Antipsychotics [B]; Antidepressants [C]

Pharmacological treatment of residents with severe behavioural symptoms can also include: a) anticonvulsants such as carbamazepine; b) short or intermediate acting benzodiazepines. Carbamazepine [B]; Benzodiazepines. [C]

Appropriate pharmacological treatment of residents with severe sexual disinhibition can include: a) hormone therapy (e.g., medroxyprogesterone, cyproterone, leuprolide); b) selective serotonin reuptake inhibitors; or c) atypical antipsychotics. [D]

Appropriate pharmacological treatment of behavioural symptoms associated with frontotemporal dementia can include trazodone or selective serotonin reuptake inhibitors. [B]
Appropriate pharmacological treatment of residents with behavioural symptoms or psychosis associated with Parkinson’s disease or dementia with Lewy bodies includes: a) cholinesterase inhibitors; or as a last resort b) an atypical antipsychotic with less risk of exacerbating extrapyramidal symptoms, (e.g., quetiapine). Cholinesterase inhibitors [B]; Quetiapine. [C]

Pharmacological treatments for behavioural symptoms or psychosis associated with dementia should be evaluated for tapering or discontinuation on a regular basis (e.g., every 3-6 months). Ongoing monitoring for adverse effects should be under taken. [A]

**Recommendations: Organizational and System Issues**

**Recommendation: Organizational Issues (p. 39 – 41)**

LTC homes should develop the physical and social environment as a therapeutic milieu through the intentional use of design principles. [D]

LTC homes should have a written protocol in place related to staffing needs specific to the care of older residents with mood and/or behavioural symptoms. [C]

LTC homes should have an education and training program for staff related to the needs of residents with depression and/or behavioural concerns. Ideally dedicated internal staff would be available to provide leadership in this area, including the development and delivery of best practices. [C]

LTC homes should have a written protocol in place related to the administration of medication by para-professional staff. [D]

LTC homes should have a written policy in place regarding the use of restraints. [D]

**Recommendation: System Issues (p. 41 – 42)**

LTC homes should obtain mental health services from local practitioners or multidisciplinary teams, with interest and expertise in geriatric mental health issues. [D]

Administrators and managers within LTC homes should be prepared to advocate with local, provincial, and national policy makers and funding agencies to promote the health and well being of older residents. [D]

LTC homes should have a process in place that ensures adherence to the ethical and legislative rights of the older resident. [D]

LTC homes should ensure adequate planning, allocation of required resources and organizational and administrative support for the implementation of best practice guidelines. [D]

LTC homes should monitor and evaluate the implementation of best practice recommendations. [D]
Part 1: Background Information

1.1 Scope of Guidelines

These Guidelines are intended to promote mental health and address mental health problems (including mental disorders) in older residents of LTC homes. The specific focus is on depressive and behavioural symptoms. We include recommendations that address general care and system issues, as well as recommendations for the assessment and treatment of depressive and behavioural symptoms presented by individual residents.

1.2 Target Population: Older Adults who Reside in Long Term Care Homes

In recent decades as the elderly population in modern industrial countries has rapidly increased, the number of seniors receiving care in LTC homes has also increased dramatically. In Canada the actual number has risen from 203,000 in 1986 to 240,000 in 1996 (National Advisory Council on Aging, 1999) and this number is continuing to increase. By 2021, seniors will account for 18% of the population for a total of 6.7 million people (Health Canada, 1999). Projections for 2031 suggest that the number of LTC beds will triple or even quadruple. In recent decades as the elderly population in modern industrial countries has rapidly increased, the number of LTC beds will triple or even quadruple. Important worldwide trends in nursing home care include: a) a growth in the physical size of homes; b) an increase in the availability of higher levels of care; c) a significantly greater percentage of residents with dementia and severe cognitive impairment; d) more residents with psychiatric and behavioural disorders; e) the development of national standards and legislation in some countries; and f) attempts to humanize LTC homes by optimizing the physical and social environment.

There is evidence that the majority of elderly residents of nursing homes are somewhat disabled and require a considerable degree of care and assistance. In the 1995 U.S. National Nursing Home Survey, 96.9% of residents required assistance with at least one activity of daily living, including: 96% requiring assistance with bathing, 86% with dressing, 58% with toileting and 45% with eating (U.S. National Center for Heath Statistics, 1997). In addition, there is evidence that one’s inability to perform the activities of daily living contribute significantly to the final decision regarding admission to a nursing home.

1.3 Prevalence of Mental Health Problems and Mental Health Disorders in Long Term Care Residents

The literature suggests that there is an extremely high prevalence of mental disorders among nursing home residents. Recent studies using sophisticated methods report prevalence rates of between 80% and 90%. For example, one of the most rigorous studies was carried out by Rovner and colleagues (1990), who reported the prevalence of specific psychiatric disorders in 454 consecutive nursing home admissions. More than two thirds of the residents had some form of dementia, 10% suffered from affective disorders and 2.4% were diagnosed as having schizophrenia or another psychiatric illness. Forty percent of the residents suffering from dementia had psychiatric complications such as depression, delusions or delirium.

Depression is extremely common in the nursing home setting. Studies suggest that between 15% and 25% of nursing home residents have symptoms of Major Depression and another 25% have depressive symptoms of lesser severity (Ames, 1990; Katz et al., 1989). The incidence of newly diagnosed depression has been estimated to be 12-14% per year, with about half of all new cases meeting criteria for major depression. In addition, follow-up studies of residents with mild depression have shown that many are likely to become more significantly depressed over time. It can be difficult to confirm a diagnosis of depression, particularly in patients with co-existing dementia and/or chronic medical illness. There is evidence to suggest that depression can contribute significantly to a general deterioration of health in seniors. Decreased food and fluid intake may lead to under-nutrition, dehydration, weight loss and impaired resistance to infection. Studies also suggest that depression is associated with increased mortality rates in LTC with a relative risk of between 1.5 and 3, as compared to non-depressed patients (Borson & Fletcher, 1996).

The prevalence of psychosis in nursing home residents appears to range from 12-21% depending on how psychotic symptoms are measured. One study reported that 21% of newly admitted nursing home residents had delusions (Morris et al., 1990). The differential diagnosis of psychosis in the elderly includes many disorders, ranging from schizophrenia to delusional disorder, mood disorders and delirium. Although there are a relatively low number of residents with schizophrenia, this is
a particularly difficult group to treat in the LTC setting. Some seniors who have suffered from schizophrenia for most of their lives have been transferred from psychiatric institutions to LTC homes, which generally have limited mental health workers available.

Individuals with dementia suffer from cognitive impairment, usually consisting of memory impairment and difficulty in at least one other cognitive area. In addition to memory disturbance, many residents with dementia also have behavioural symptoms, which include agitation, aggression, wandering, repetitive or bizarre behaviours, shouting, disinhibited behaviours and sexually inappropriate behaviour. Agitation has been defined as “inappropriate verbal, vocal or motor activity unexplained by apparent needs or confusion” (Cohen-Mansfield & Billig, 1986). Agitated behaviours can be categorized as disruptive, but non-aggressive, socially inappropriate or aggressive. Aggression can be defined as hostile actions directed towards others, the self or objects, and can be categorized further as physical, verbal or sexual. A review of the literature regarding the prevalence of the behavioural and psychological symptoms of dementia reported median figures of 44% for global agitation, 24% for verbal aggression and 14% for physical aggression (Tariot & Blazina, 1994). Individuals who demonstrate signs of acute confusion may be suffering from delirium, which is generally a reversible condition precipitated by a physical illness or medications. Patients suffering from delirium may be extremely agitated or alternatively may become withdrawn and drowsy to the point of stupor. For more information on delirium, please refer to the companion National Guidelines for Seniors’ Mental Health: The Assessment and Treatment of Delirium (CCSMH, 2006).

Despite the high prevalence of mental disorders, studies have demonstrated limited availability of psychiatric and mental health services for residents living in Canadian LTC homes (Conn & Silver, 1998; Conn et al, 1992).

1.4 Principles and Assumptions Guiding the Care of Residents in LTC Homes

The recommendations in these Guidelines are based on principles and assumptions that should guide the care received by all residents in LTC homes. These principles and assumptions are over-arching and will promote and support the mental health of all residents, whether or not they have mental health problems (including mental disorders).

Principles

The following principles should underpin the care-giving milieu in LTC homes. They are consistent with other sets of principles developed through reiterative consultation with older adults, family caregivers, volunteers, geriatric specialists in psychiatry, health care professionals, and organizations interested in elderly persons or those at risk of mental health problems (AGS/AAGP, 2003; British Columbia Ministry of Health, 2002; RNAO, 2004).

- Residents should receive care that is individualized, person-centred, and, to the extent desired and possible, self-directed.
- Families should be respected as part of the resident’s ongoing social support system and integrated within the LTC setting in mutually acceptable and supportive roles.
- Care should reflect an integrated consideration of biological, psychological and social needs. A biopsychosocial model expands the focus from individual pathology to a consideration of the whole person, including both strengths and limitations, within the context of their social and physical environment.
- A culture of caring that includes principles of psychosocial rehabilitation to maximize quality of life should be established. Psychosocial rehabilitation emphasizes the importance of involvement in developing and realizing one’s own personal care and life goals. The need for health promotion and treatment services that assist residents to manage their symptoms and build on their strengths is integral to this approach.
- An increasingly supportive and assistive social and physical environment, responsive to residents’ changing needs, should be created to maintain function and compensate for functional decline (e.g., in individuals with dementia). This includes shifting the primary focus from tasks to relationships.
- Preventative interventions, including strategies for maintaining wellness, and early interventions for mental health problems and disorders, should be developed, implemented and incorporated into specific training programs for both informal and formal caregivers.
- All staff, regardless of their discipline or role, should be supported in maintaining the knowledge and skills necessary to provide informed and competent care.

Assumptions

Facilities that provide LTC for seniors vary widely in size, appearance, resources and service models. What they have in common, however, is that they house combined accommodation and health care services for individuals who are unable to manage in a less supportive physical and social environment. The following are assumptions about facility-based LTC that underpin these Guidelines.

Focus of Care: The main focus of care for persons in LTC homes should be on overall well-being and quality of life, which includes addressing the needs of the individual, even when those needs are not articulated as may be the case in dementia and some mental disorders.
Thus, a core assumption of these Guidelines is that there is a need to focus on both mental health and mental illness in the care of older adults who reside in LTC homes.

Diversity: Each resident is an individual, who deserves an individualized approach to care delivery. It is acknowledged that the target population encompasses a heterogeneous group of individuals, widely varied not only in chronological age (65 to plus 100 years of age), but also in culture, ethnicity, race and sexual orientation. Given the state of knowledge, no attempt is made to refine recommendations as a function of population subgroups. While these specific issues are not discussed herein, it is assumed that care providers will identify special needs and make appropriate adaptations to the Guidelines where required.

Resources: Service delivery differs across the country based on differences in provincial/territorial legislation, and differences in access to resources (e.g., northern versus southern geography, urban versus rural communities). Therefore, the availability of health care professionals and how they perform their work, of secondary and tertiary resources, and access to specialists varies. A core assumption underlying these Guidelines is that effective mental health promotion and management of mental health problems, including mental disorders, requires an interdisciplinary team effort. It is beyond the scope of these Guidelines to propose criteria for interdisciplinary team composition within LTC homes, or to address the challenges of available resources. However, the centrality of this issue for the implementation of these best practice recommendations is acknowledged.

Relationships: Many residents have ongoing relationships with family members and significant others. These relationships are critical in meeting the mental health needs of residents and should be supported by interactions with facility personnel who communicate respect and visitor friendly policies (e.g., appropriate visiting hours, availability of beverages policy, etc.).

Family members and significant others should be supported in finding mutually acceptable and beneficial ways to participate in the care of their loved one. Participation can occur at different levels. For example, some family members may choose to be involved in hands on care (e.g., assisting at mealtime), while others may choose to participate in Family Councils which provide feedback to the facility from a family perspective regarding care and services.

Some family members and others will require emotional support from staff. Acknowledgement of the individual’s personal knowledge of a family member/significant other, and consulting and sharing information (as appropriate) communicates respect. More formal assistance and referrals for support should be made available when necessary.

In addition, the interactions between residents and staff are of crucial importance in meeting the mental health needs of residents. For many residents, the care providers are their primary source for social and emotional contact. Interactions that are based on knowledge of each resident’s individuality, that communicate respect, warmth, and care, will promote mental health.

Milieu: The LTC facility is a closed community, housing a unique population. A core assumption of these Guidelines is that the milieu (social and physical environment) is an important determinant in psychosocial and health outcomes for residents in LTC homes, and can promote or undermine mental health.
Part 2: General Care

2.1 Introduction

In these Guidelines, we consider care for residents living in LTC homes within two broad categories: 1) aspects of activities of daily living (ADL); and 2) symptom and disease management. This section will focus on research related to providing care to residents in the context of ADLs, such as physiological needs (i.e., eating, drinking, toileting and sleep), and hygiene. Subsequent sections address assessment and interventions focused on symptom management (depressive and behavioural symptoms).

Respect for culture, equity, social justice, relationships and personal dignity is essential for promoting mental health in LTC facilities (Government of Canada, 2005). Relationships, service-delivery models, management of the physical and social environment, and effective care-giving strategies are primary vehicles for mental health promotion for seniors who reside in LTC homes.

In order to create a culture that supports interventions and care that is truly effective, the following tenets must be realized in practice: relating effectively, knowing the person, recognizing retained abilities, and manipulating the social and physical environment (McGilton et al., 2006; RNAO, 2004).

Relating effectively to residents entails that the care provider remain with the resident during the care episode, alter the pace of care by recognizing the person's rhythm and adapting to it, and focus care beyond the task (Brown, 1995; McGilton, 2004).

Excellence in care can be achieved when knowing the person and their individual preferences, and constantly evaluating and adapting to the person's response, guides all interactions/ interventions.

Knowing the person involves becoming familiar with the individual and gaining knowledge of their life. At times this may involve partnering with families to gain this knowledge. A persons' unique identity will influence what activities/interventions are personally appealing or pleasant. As well, to know the person involves understanding his/her culture, and how that person views and responds to the world.

Care must also focus on recognizing the person's retained abilities in self-care and the social, interactional and interpretative domains. Recognition of retained abilities creates a basis for the prevention of excess disability and enhancing the success of the care intervention (Dawson et al., 1993). An assessment of a resident's retained abilities will influence the amount of care the care provider must deliver to compensate for functional losses. The physical environment is an important consideration in this assessment as some settings are designed to compensate for waning abilities, while others exacerbate the challenges (Teresi et al., 2000).

Although most research regarding provision of care in LTC homes has focused on those with dementia, we believe that the same tenets can/should be taken into consideration where physical and mental illnesses are the primary diagnoses that underlie the need for facility-based LTC.

Residents with physical and mental illnesses experience a variable constellation of symptoms, which include memory loss, disorientation, reduced ability to perform activities of daily living such as eating, bathing and dressing, as well as psychiatric and behavioural symptoms such as agitation, depression and psychosis (Qizilbash et al., 2002; Tilly & Reed, 2004).

Often non-verbal behaviours, such as agitation, restlessness, aggression and combativeness, are an expression of unmet needs (e.g., hunger, thirst, pain, or toileting need). Care providers should try to identify when this is the case and address the unmet needs. The general care recommendations presented herein focus on preventing and minimizing behavioural symptoms that are a reflection of unmet needs. These recommendations are offered with the caveat that careful attention to assessing and understanding the factors contributing to behavioural presentations, (e.g., mental health problems and disorders, as well as other physical disorders and illnesses) is paramount.

The non-pharmacological care strategies included in this section have been found to reduce behavioural symptoms in residents. Successful implementation of these recommendations involves a careful assessment of remaining abilities and knowledge of the persons' preferences. The way in which the care provider relates to the resident when implementing the recommendations and the care provider's ability to manipulate the social and physical environment as required, will enhance the possibility of achieving the desired outcomes.

2.2 General Care: Discussion and Recommendations

This first recommendation provides an essential underpinning to all those that follow.

Recommendation: General Care – Family Involvement

Encourage and support the involvement and education of the family in the institutional life of the older resident, including decision-making processes, as appropriate. [C]
Families have been involved in the caregiving process throughout history but it is only recently that practitioners have begun to recognize and formalize the role of the family in the context of healthcare (Byers, 1997). Family members often struggle with their change of roles after admission of a relative. An evidence-based protocol for creating partnerships with family members has been created by Kelley and colleagues (1999). Family involvement in care for persons in LTC homes includes a program for families and caregivers in partnership with healthcare providers (Kelley et al., 1999). The ultimate goals of the protocol are to provide quality care for persons with dementia and to assist family members through support, education, and collaboration, to enact meaningful and satisfactory care-giving roles regardless of setting.

Although most networks are comprised of family, friends and neighbours also provide support. Further research is required to elicit definitive patterns of interaction, expand nurses’ understanding of client-family caregiver-nurse collaboration, and to facilitate optimal outcomes for residents (Dalton, 2003).

Best practice guidelines and recommendations, such as those herein, provide a generic framework for developing care plans that address a resident’s needs. We stress, however, the importance of the individual, client centered care, respect for diversity, involvement of families, and the centrality of care providers training and skill. Best practice recommendations should be implemented in light of personal information provided by residents so that staff can develop and refine approaches to care based on an understanding of the resident’s usual life rhythms, lifestyle, culture, and preferences. Such approaches are important in preventing behavioural symptoms that may result from fear, frustration or disruption of continuity and familiarity. Pre-admission information that includes medical history, social history, personal likes/dislikes, what is important to the resident, and history of behavioural symptoms and approaches used, should be available to LTC staff to optimize individualized care.

Staff should establish a relationship with an older resident that reflects the older individual’s physiological, psychosocial, developmental, and spiritual needs. Staff, when presented with a social history (as compared to only medical history), are able to maintain more neutral, appropriate attitudes towards challenging LTC facility residents (Hillman et al., 2001). This information is also helpful in understanding the genesis of problem behaviours and developing alternative activities for residents with dementia (Sloane & Gleason, 1999).

Anderson and colleagues (1998), in an examination of the interventions used by aides working with aggressive residents with dementia, noted that effective approaches were based on the following four factors: the aides’ interpersonal experiences and values; attitudes; team work; and knowing the residents. Based on these factors, the aides were able to connect and provide individualized caring interventions that maintained safety, dignity and support.

### Recommendation: General Care – Care Plan

| Individualize care plans, with due consideration to best practice guidelines and recommendations. [D] |

To determine the need for strategies to promote communication between care providers and residents:

- Use the tools provided by the Hartford Institute for Geriatric Nursing to assess language abilities (i.e. receptive and expressive abilities) (Frazier-Rios & Zembrzuski, 2004).
- Use the Interactional Abilities Assessment Guide by Dawson and colleagues (1993) to assess the resident’s communication abilities.
- Assess normal aging processing, such as hearing and vision loss, that affect residents’ ability to communicate effectively.
- Assess the resident’s language abilities and communication patterns with assistance from family members or significant others.

Care providers may use the following communication strategies. Consideration should be given to an individual’s disease progression & retained abilities, as discussed.

- Care providers should identify themselves at each interaction.
- Residents may use personalized memory books consisting of biographical, orientation cues and daily schedule information. Books may contain pictures, instructions on bathing, and pages targeting behaviour problems (Burgio et al., 2001).
- Care providers should use the following communication tips: short simple sentences; speak slowly; ask one question or give one instruction at a time; approach the resident slowly and from the front; establish and maintain eye contact; eliminate distractions (TV, radio); avoid interrupting the resident and allow the resident plenty of time to respond; use “yes/no” rather than open ended questions; encourage circumlocution (ask resident to “talk around” or search the word he/she is looking for); repeat messages using the same wording; and paraphrase repeated messages (Small et al., 2003).
- Supplement verbal communication with gestures or cues when possible.
- Listen to residents’ experiences and acknowledge their emotions, while providing understanding and non-judgement of their choices.
• Use enhanced instruction, rehearsal and cueing when residents are unable to follow 3 step commands (Cohen-Mansfield, 2005).
• When verbally communicating with a resident, remember that how you relate to the resident, that is, with a calm tone and respect, will also influence the success of the interaction (McGilton, 2004).
• When communication barriers exist, take responsibility for developing a communication plan that makes the resident an informed partner in the provision of care. The plan can include verbal and non-verbal approaches.
• Interpreters can be very helpful in situations where a language barrier exits. When using interpreters to communicate with residents, care providers need to be sensitive to the issues surrounding interpretation (i.e., the need for the interpreter to treat obtained information as confidential and the need for the interpreter to repeat everything the resident and the care provider say, without omissions).

Cognitive and behavioural impairments in persons with dementia affect their ability to communicate. The above interventions aim to match care provider and resident conversation to the resident’s comprehension level (Hall & Buckwalter, 1991). Burgener and colleagues (1992) identified care providers’ behaviours associated with dysfunctional elderly behaviour. There was a relationship between care providers who were relaxed and smiled and seniors with calm and functional behaviours. Use of memory books by persons with dementia has been found to increase informativeness and accuracy of their conversations, and decrease ambiguity and restlessness (Bourgeois & Mason, 1996). Use of communication aids can compensate for cognitive declines and decrease disruptive behaviour and agitation. Communication training for care providers improves communication behaviours and is sustainable over time when combined with a staff motivational system (Burgio et al., 2004).

It is not hard to understand why residents who are not getting their basic needs met might express their discomfort through behavioural symptoms. Priorities for future research should include exploring methods of helping residents improve their eating, drinking, dressing, bathing, toileting and sleeping patterns (Tilley & Reed, 2004). What is known in these areas is addressed below.

Researchers also need to focus on the process of implementing best evidence into practice. There is an absence of research that conveys the processes of knowledge exchange and utilization within the specific context of LTC homes. It would be premature to apply the findings of studies conducted in acute care settings with unregulated care providers until it has been established that such translations are empirically sound.

To determine what abilities are retained and which will need support for each resident:
• Assess all residents who have a diagnosis or suspected diagnosis of dementia.
• Assess residents’ retained abilities using a scale such as the Abilities Assessment Instrument (AAI) (Dawson et al., 1998). The AAI assesses self-care, social, interactional, and interpretive abilities of the resident, which will influence their ability to participate in dressing.

Self care abilities threatened in the presence of dementia and that will interfere with dressing include: voluntary movement of the fingers and arms; spatial orientation, finding one’s way; initiation and follow-through related to object cues; and purposeful movements. Furthermore, abilities that are threatened in the presence of dementia have been presented by Dawson and colleagues (1993) and relate to self-care, social, interaction and interpretive domains.

Specific dressing assistance interventions will depend on the retained abilities and may include:
• Provision of appropriate cues, such as left/right verbal cues. For example, while dressing, ask the client to place his/her right foot in the shoe.
• Presenting clothing in sequential order enhances residents’ independence (Day et al., 2000).
• Avoid stimulation of primitive reflexes, for example, the grasp reflex.
• When assisting with dressing, offer one-step instructions.
• If possible, stand the person to prosthetically use gravitational force to extend the residents’ fingers in order to ease putting on shirts, dresses, or jackets.
• Use task simplification to focus on abilities and assist with performance of ADLs (Beck et al., 1997; Wells & Dawson, 2000).

An effective intervention to increase active participation in ADLs and decrease disruptive behaviours in severely cognitively impaired and functionally disabled LTC facility residents has been demonstrated (Rogers et al., 1999). The approach was based on knowledge of the resident and on detailed professional, functional and communication assessments. It was successful in reducing disruptive behaviours (in spite of demanding increased performance) because only realistic performance demands were made and communicated in the mode each particular resident could understand.

An abilities focused approach to care-giving may prevent excess disability from arising, thus preserving residents’

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quality of life (Dawson et al., 1993). Residents receiving morning care from care providers using an abilities focused approach demonstrated increased interaction behaviours with care providers, decreased levels of agitation, and a higher level of function (Wells & Dawson, 2000).

Recommendation: General Care – Bathing

Develop an individualized protocol for each resident that minimizes negative affect and promotes a sense of well being during bathing. [A]

All individuals residing in LTC homes can benefit from a bathing intervention. To reduce agitation, irritability, and anxiety, consider the following interventions while bathing residents:

- Cover the resident with a towel to maintain warmth and privacy (Sloane et al., 2004).
- Provide the resident with choices.
- Use products recommended by family.
- Use no rinse soap (Sloane et al., 2004).
- Modify the shower spray.
- Provide the resident with information before and during the bath (Mickus et al., 2002).
- Reassure the resident that he/she is safe and not alone (Mickus et al., 2002).
- Begin bathing the least sensitive area first and save washing hair for last.
- Use distraction techniques (e.g., calming music, singing, talking, food or sweets).
- Follow bathing with a light massage with lotion.
- Document bathing practices accepted by the resident in the care plan so other care providers will follow the same routine.
- Frequency of behaviours may be reduced during bathing when residents listen to their favorite music (Clark et al., 1998).

Bathing care using a person-centered approach is associated with a decrease in agitation and other behavioural responses (Sloane et al., 2004). The potential for bathing to be a calming and relaxing intervention with the ability to derive a feeling of well being, in addition to personal hygiene and infection control, is supported in the literature (Sloane at al., 2004). Bathing also involves multiple stressors to which agitation and other behavioural symptoms are normal responses (Schindel Martin, 1998 as cited in Thiru-Chelvam, 2004). Reactions occur because of perceived threat, unfamiliar activities, recall of previous trauma, unpleasant sensations (hot/cold), feeling confused, misinterpretation of staff as being harmful or not helpful, unwanted touch or invasion of personal space, frustration from declining abilities, and/or lack of attention to personal needs (Thiru-Chelvam, 2004). Using a bathing technique guided by privacy, reassurance, information, distraction, and evaluation reduces irritability and anxiety (Mickus et al., 2002).

To determine which residents are likely to benefit from activity pacing:

- Assess cognitive dysfunction with a validated tool such as the mini-mental status examination (MMSE) (Kovach et al., 2004). Pacing of care-giving activities is effective with persons who have mild to moderate dementia, as determined by the MMSE (Kovach et al., 2004).
- Measure arousal and agitation every 15 minutes from 8:00 am to 8:00 pm on one day (Kovach et al., 2004).
- Measurement should not be collected on a day when potentially confounding events occur. For example bath days, monthly doctor visit days, and days in which a test or exam is scheduled.
- Residents are considered to have an arousal imbalance if the daily activity schedule involves an awake arousal state that is sustained for longer then 1.5 hours. This definition is based on two pilot studies, one based in a LTC setting and one in an acute care setting (Kovach & Schidt, 2001; Kovach & Wells, 2002).
- Substantial arousal imbalance involves arousal states of 2.5 hours or more.

Once a resident is recognized as having periods of arousal imbalance, specific periods of imbalance between sensor-stimulating and sensory-calming activities can be identified. Interventions may include arranging a new daily activity schedule that:

- Contains fewer periods of arousal imbalance (ideally none). This may involve the need to add or delete some activities from the resident’s schedule.
- Is feasible considering the resident’s needs and preferences.

After implementing the new activity schedule, the resident’s arousal and agitation state should be assessed every 15 minutes for 12 hours.

Pacing activities decreases agitation and supports sensoris-tasis (an optimal level of sensory variation) in persons with dementia (Kovach et al, 2004), and has the potential to reduce agitation and other behaviours in all LTC residents. An overwhelming influx of external stimuli and lack of physical and social environmental stimuli are both risk factors for agitation in persons with Alzheimer’s Disease and Related Disorders (McGonigal-Kenney & Schutte, 2004).
To determine which residents are likely to benefit from mealtime care-giving activities:

- Assess residents’ ability to initiate sequence and follow through with complex or simple actions and the ability to use tools.
- These abilities can be reliably assessed using the Feeding Abilities Assessment (FAI) (LeClerc et al., 2004).
- Administer the FAI during the resident’s usual meal-time and location.
- Assess vision, hearing and oral health.
- Assess changes in medications that may alter taste.
- Assess for adequate pain management.

Interventions may include:

- Keeping dining area quiet and small, with activity at a minimum.
- Keep lighting high without glare.
- Food presentation is important. Food needs to be appealing, easily identified, look and smell good. Do not serve pureed food to residents who can manage finger foods (Wells & Dawson, 2000).
- Open cartons, unwrap food, and remove bones.
- Dishes should be of contrasting colors and stand out from the table/tablecloth.
- Cut food prior to serving.
- Cue resident manually (Roberts & Durnbaugh, 2002).
- Space residents away from others.
- Cue and re-cue resident to pace eating, and to chew food (Roberts & Durnbaugh, 2002).
- Remove nonfood items.
- Promoting social stimulation at meal times, including familiar tablemates (Roberts & Durnbaugh, 2002).
- Check toileting needs before bringing resident to dining room or feeding.
- Offer alternatives.
- Alter diet consistency.
- Use calming music.

Feeding interventions increase the potential that residents will be as independent as possible, move towards goals that reduce excess disability, and enhance resident abilities (Roberts & Durnbaugh, 2002). Malnutrition is a common challenge for LTC residents. Those with cognitive impairment are at the highest risk. In residents with Alzheimer’s disease, challenging mealtime behaviour can interfere with successful self-feeding (Roberts & Durnbaugh, 2002). Appropriate mealtime assessment and correct, consistent staff intervention can address the success of the individual resident’s ability to eat independently, thus enhancing quality of life (Roberts & Durnbaugh, 2002). A common correlation exists between malnutrition and dementia (Watson, 1989). Inadequate pain management may contribute to agitation, inability to concentrate on the task, and not wanting to eat.
Part 3: Assessment of Mental Health Problems and Mental Disorders

3.1 Introduction:

This section of the Guidelines provides recommendations for the assessment of depressive and behavioural symptoms that represent mental health problems and mental disorders. The clinical activities of formal assessment and treatment should occur within the context of the principles, assumptions, and general care-giving recommendations described in Part 1: Background Information and Part 2: General Care.

For the purpose of this guideline, assessment is understood as a comprehensive, ongoing process that includes: (1) screening to detect depressive and behavioural symptoms; (2) structured, goal-directed investigation to identify factors precipitating, maintaining and exacerbating identified symptoms; (3) interpretation of assessment findings, including formal diagnosis where appropriate; and (4) ongoing evaluation of clinical outcomes and treatment effectiveness to determine the need for reassessment and re-conceptualization of contributing factors.

Assessment protocols are understood as problem-oriented frameworks that guide thinking about an issue. Protocols structure the decision-making process so that the assessment process is efficient, yet comprehensive enough to lead to an appropriate care plan for an individual resident. The interRAI suite of tools (including the Minimum Data Set [MDS]) provides an example of a research-based, standardized approach to the development of an assessment protocol (Morris et al., 1995).

In this section, it is assumed that a facility adheres to an overarching assessment protocol or model, as opposed to allowing assessment activities to occur on an ad hoc, inconsistent basis. The recommendations speak to the recommended components of the assessment protocol. It is recognized that implementation of an assessment protocol in any given instance should be client-centred and clinically sound. It is also recognized that the assessment protocol must be integrated with both site-specific policies and statutory requirements. Levels of staffing, skill mix and credentials necessary to implement an effective assessment protocol are beyond the scope of these recommendations. However, their importance is acknowledged herein, as in other guidelines (AGS/AAGP, 2003; RNAO, 2003).

These recommendations specifically refer to assessment of behavioural and depressive symptoms in the context of LTC homes. The reader is also referred to the companion guidelines, National Guidelines for Seniors’ Mental Health: Assessment and Treatment of Depression, Assessment and Treatment of Delirium, and The Assessment of Suicide Risk and Prevention of Suicide (CCSMH, 2006).

3.2 Assessment: Discussion and Recommendations

Recommendation: Assessment – Screening

The facility’s assessment protocol should specify that screening for depressive and behavioural symptoms will occur both in the early post-admission phase and subsequently, at regular intervals, as well as in response to significant change. [C]

The purpose of screening is to detect symptoms that warrant further detailed investigation, as well as to further prevention efforts.

The relative cost/benefits of different timelines for initial and repeat screening activities have not been established empirically. However, there is an emerging consensus in the clinical practice literature on the importance of both initial screening in the early post-admission phase and subsequently, repeat screening at regular intervals, as well as in response to significant change. The American Medical Directors Association (AMDA) (2003) depression guidelines recommend formal screening on admission and subsequently in response to significant change. The American Geriatrics Society and American Association of Geriatric Psychiatry (AGS/AAGP) (2003) guidelines on depressive and behavioural symptoms, recommend that residents should be screened for depressive symptoms in the first four to six weeks post admission to a LTC facility, and subsequently at least every six months. The MDS protocol, which includes depressive and behavioural symptoms, prescribes initial screening during the first two weeks post admission, quarterly reassessment, and ad hoc screening in response to significant change (Morris et al., 1995).

We believe that assessments for residents in LTC homes should occur as soon as possible after admission. Furthermore, serial assessments of cognitive symptoms over time are recommended as they may indicate the efficacy of interventions, or changing medical conditions (APA, 2000a; McCusker et al., 2003; Rapp, 1998). Continuous monitoring and evaluation of interventions will enable the team to respond appropriately to the changing needs of the resident, and to adjust interventions accordingly.

Screening Tools and Scales

Recommendation: Assessment – Screening

A variety of screening tools that are appropriate to the setting and resident population should be available to facilitate the screening process. [D]
LTC homes should make available a selection of symptom rating scales that are appropriately matched to the characteristics of the residents, setting characteristics, and the facility’s resources.

Screening tools to detect depressive symptoms include:
- **Geriatric Depression Scale** (GDS) (Yesavage et al., 1982-3)
- **Cornell Scale for Depression in Dementia** (CSDD) (Alexopoulos et al., 1988)
- **Centre for Epidemiological Studies of Depression Scale** (CES-D) (Radloff, 1977)
- **Minimum Data Set** (MDS) (Morris et al., 1995).

The GDS and CES-D are self-report scales, while the CSDD and MDS rely on proxy report. Differences in both administration (self- versus proxy-report) and the constructs measured by each scale may contribute to different findings obtained with various scales. For example, a recent comparison between the GDS and MDS among nursing home residents found these scales were uncorrelated, however each measure demonstrated adequate internal consistency and reliability (Koehler et al., 2005). More research is needed on the profiles of depression in LTC residents, and which aspects of depression are best measured by which scales.

Standardized scales for the screening of behavioural symptoms in residents within LTC homes include:
- **Brief Agitation Rating Scale** (BARS) (Finkel et al., 1993)
- **Cohen-Mansfield Agitation Inventory** (CMAI) (Cohen-Mansfield and Billig, 1986)
- **Minimum Data Set** (MDS) (Morris et al., 1995).

As well, numerous behavioural rating scales have been designed specifically for use with residents who have dementia (for recent reviews, see Hemels et al., 2001; Hyer et al., 2005): These include, for example:
- **Behaviour Pathology in Alzheimer’s Disease Rating Scale** (BEHAVE-AD) (Reisberg et al., 1987).
- **Behavioural Symptoms Scale for Dementia** (BSSD) (Devand et al., 1992)
- **Neuropsychiatric Inventory** (NPI) (Cummings et al., 1994)
- **Pittsburgh Agitation Scale** (PAS) (Rosen et al., 1994).

Behavioural scales, like scales to measure depressive symptoms, also include different combinations of behaviours and use different metrics to quantify frequency, duration and severity. Many require trained raters and as of yet, there is no “gold standard” (Teri et al., 2005).

Screening tools should be selected on the basis of clinical utility. It may not be appropriate to attempt to use a self-report tool with a resident who is confused or non-verbal. Conversely, it is not appropriate to omit self-report for reasons of expediency.

**Clinical situations may require, in addition to or in place of standardized scales, the use of customized behavioural observation techniques to adequately screen for atypical or complex behaviours.** It is beyond the scope of these Guidelines to review the extensive field of behaviour observation and analysis (often referred to “ABC” for Antecedents-Behaviour-Consequences) in detail. However, it is acknowledged that this is a well-established approach to behaviour assessment in a variety of settings, including LTC homes that should be within the armamentarium of the interdisciplinary team (for example see, Gibson et al., 1999; Lundervold & Lewin, 1992; Rewilak, 2001).

The screening protocol should endorse use of more than one measure (e.g., self-report and proxy-report, as well as behavioural observation) where this information would be helpful in meeting the purpose of the screening assessment (i.e., to detect symptoms that warrant further detailed investigation, as well as to further prevention efforts).

**Recommendation: Assessment – Screening**

Screening should trigger detailed investigation of depressive and behavioural symptoms under defined circumstances. [D]

Screening should trigger implementation of a structured, goal-directed detailed investigation of depressive and behavioural symptoms under defined circumstances. Triggering algorithms are empirically grounded in the case of protocols such as the MDS (Morris et al., 1995). The AMDA (2003) depression guidelines describe a clinical-decision making process based on risk assessment for determining when symptom monitoring versus active investigation is indicated. The assessment protocol should include a triggering/decision-making algorithm to guide clinicians in determining when further detailed investigation is required.

**Recommendation: Assessment – Detailed Investigation**

Core elements of a detailed investigation should include history and physical exam, with follow up laboratory and psychological investigations, investigations of the social and physical environment, and diagnostic tests as indicated by the results of the history and physical exam, and treatment history and response. [C]

The purpose of the detailed investigation is to identify factors, including diagnosable conditions, that precipi-
tate, maintain and exacerbate identified symptoms, in the interests of symptom management, disease control, enhanced quality of life, and/or problem prevention.

The detailed investigation should be premised on an understanding that symptoms may reflect a variety of underlying biopsychosocial conditions and social and physical environmental issues, and should take into account strengths and protective factors as well as problems. There is no definitive research literature on how best to structure the detailed investigation of behavioural and depressive symptoms in the LTC setting as a cost-effective, integrated, interdisciplinary, goal-directed activity (Hyer et al., 2005).

Clinical practice guidelines identify several of the factors that can contribute to the onset or worsening of depressive or behavioural symptoms, and as such the following should be included as core elements in the investigation protocol (AGS/AAGP, 2003; AMDA 2003):[10]

• History (including a formal ABC analysis of the antecedents and consequences of target behaviours where appropriate)
• Physical exam
• Follow up investigations as indicated by the findings of the history and physical exam
• Follow up investigations may include laboratory tests, psychological assessments, investigations of the social and/or physical environment and diagnostic tests
• Treatment history and response

Other factors hypothesized to contribute to the observed symptoms should also be included in the investigation. Flexibility and clinical judgment are required as these factors will vary on a case-by-case basis. Behavioural observations, self-report data, concerns expressed by others and psychometric data should direct the assessment focus. However, a high index of suspicion should be maintained to ensure less obvious factors or diagnoses that are contributing to the precipitation, maintenance and exacerbation of depressive and behavioural symptoms are not missed. Among the medical and psychological conditions and disorders that may need to be included in the detailed investigation are (AGS/AAGP, 2003):

• Pain
• Constipation or fecal impaction
• Infections
• Injury
• Dehydration
• Nutritional problems
• Delirium
• Dementia
• Psychosis
• Depression/Mania
• Suicide Risk (refer to the National Guidelines for Seniors’ Mental Health: The Assessment of Suicide Risk and Prevention of Suicide, CCSMH 2006)

• Anxiety disorders
• Sleep disorders
• Substance or medication abuse or withdrawal
• Hearing and vision problems
• Worsening of chronic medical conditions
• Recent onset of new medical condition
• Medications that have the potential to alter cognition or mood

Social factors and features of the physical environment that may need to be assessed include:

• Changes in social or family situation
• New stressors or situational factors such as changes in staff
• Availability of social and meaningful activities
• Availability of positive (reinforcing) experiences
• Deviations from normal life patterns, preferences, and autonomy
• Factors in the physical environment, such as a change in room

**Recommendation: Assessment – Detailed Investigation**

It is important to consider all contributing factors. Investigation of potentially contributing factors (e.g., delirium, chronic pain) should refer to clinical practice guidelines for these conditions where available. [D]

Where available, investigation of potentially-contributing factors should refer to clinical practice guidelines for specific conditions. For example, where pain is suspected as a contributing factor, clinical practice guidelines on pain assessment should guide assessment (e.g., AGS, 2002; AMDA, 1999). If delirium is suspected refer to the National Guidelines for Seniors’ Mental Health: The Assessment and Treatment of Delirium (CCSMH 2006).

**Recommendation: Assessment – Detailed Investigation**

Diagnosis and differential diagnosis should be an assessment objective where appropriate. [D]

Diagnosis and differential diagnosis should be an assessment objective where appropriate (AMDA, 2003).[iv] Depressive and behavioural symptoms may reflect psychiatric diagnoses commonly seen in residents of LTC homes (e.g., dementia, delirium, depression, mania, dysthymia, insomnia, anxiety, schizophrenia, personality disorders) and/or medical diagnoses that are also common in this population (e.g., diabetes, respiratory diseases, arthritic and rheumatic diseases, cardiac disorders, stroke, chronic pain disorders). Assessment should be guided by awareness and understanding of relevant diagnostic criteria (for example, the DSM IV-TR criteria differentiates major depressive disorder, adjustment disorder with depressed mood, or mood disorder due to a general medical condition; APA, 2000a).
It is acknowledged that depressive symptom presentation in older adults may be atypical, subsyndromal or difficult to distinguish from other comorbid conditions. It is important to realize that it may be difficult to determine the exact cause of depressive and behavioural symptoms, especially in situations involving complex comorbidity or atypical presentations (Lo & Bhanji, 2005). Behavioural analysis (ABC) can be particularly useful as an assessment tool leading to case conceptualization (rather than formal diagnosis) in these complex situations.

**Recommendation: Assessment – Detailed Investigation**

The end point of a detailed investigation should be the determination of the need for, type, and intensity of treatment. [D]

The end point of a detailed investigation is the determination of the need for, type, and intensity of treatment. The assessment protocol should explicitly include expectations for data synthesis and interpretation. It is not beneficial to overemphasize the measurement aspects of the assessment process, while short-changing data analysis, synthesis and interpretation (AGS/AAGP, 2003). The need for, type, and intensity of treatment is determined on the basis of consideration of all relevant assessment information. This includes medical and physical findings, psychosocial findings, ratings on validated scales, behavioural analysis, risk assessment, formal diagnosis where appropriate, and the perspectives and wishes of individual residents and their families.

**As a component of determining the need for treatment, it is important that all residents with significant depressive symptoms are assessed for suicide risk (refer to The National Guidelines for Seniors’ Mental Health: The Assessment of Suicide Risk and Prevention of Suicide, CCSMH 2006).**

It is beyond the scope of these Guidelines to propose criteria for interdisciplinary team composition within LTC homes that will ensure the appropriate skill set for comprehensive assessment, or to address the challenges of resource availability. However, the centrality of this issue for implementation of these best practice recommendations is acknowledged.

**Recommendation: Assessment – Ongoing Evaluation**

The treatment plan should specify the timeline and procedure for ongoing evaluation of clinical outcomes and treatment effectiveness. [D]

The treatment plan should mandate ongoing evaluation of clinical outcomes and treatment effectiveness. Ongoing evaluation is essential in the LTC setting, given the frailty of the population, high prevalence of comorbid conditions, and potential for rapid decline when symptoms escalate. As well, ongoing evaluation is essential to ensure intervention objectives stay current with client-centred goals.

**Recommendation: Assessment – Ongoing Evaluation**

Assessment of change should include quantification, preferably with the same tool that was used pre-intervention. [D]

Assessment of the effectiveness of pharmacological and nonpharmacological treatment for depressive and behavioural symptoms should include history and assessment of change in the target symptoms (AGS/AAGP, 2003). [D]

**Recommendation: Assessment – Ongoing Evaluation**

Unexpected clinical outcomes and treatment effects should trigger re-assessment and potentially re-conceptualization of the factors precipitating, maintaining and exacerbating depressive and behavioural symptoms. Potential adverse reactions to treatment should be evaluated. [D]

We believe that unexpected clinical outcomes, including potential adverse reactions to treatment, and treatment effects that are less than expected should trigger re-assessment and potentially re-conceptualization of the factors precipitating, maintaining and exacerbating depressive and behavioural symptoms.

There is a need for more clinical research on depressive and behavioural symptoms in LTC settings, and to identify various profiles and symptom constellations that warrant different intervention and prevention efforts (AGS/AAGP, 2003). Research on the expected trajectories of change, where different combinations of factors contribute to different symptom profiles and where different treatments are implemented, would advance our ability to match residents to interventions in the LTC setting.
Part 4: Treatment of Depressive Symptoms and Disorders

4.1 Introduction

We emphasize that we are aware that LTC homes differ in their resources, and that residents differ in the extent to which family and friends are available and willing to be involved in care. This section takes an aspirational approach to the task of identifying psychological and social interventions that can contribute to the treatment of depressive symptoms of residents in LTC homes, recognizing that the reality of what is available may differ. It is always important to consider the potential benefit of both nonpharmacological and pharmacological interventions.

4.2 General Treatment Planning: Discussion and Recommendations

The reader is directed to the companion National Guidelines for Seniors’ Mental Health: The Assessment and Treatment of Depression (CCSMH 2006), as a supplement to this section.

Recommendation: Depressive Symptoms: General Treatment Planning

Consider type and severity of depression in developing a treatment plan. [B]

Guideline developers have identified several factors that should guide treatment decisions: severity, persistence of symptoms, previous history, patient/family preferences, and coexisting medical conditions (AGS/AAGP, 2003; AMDA, 2003; APA, 2000b; Baldwin & Wild, 2004; National Advisory Committee on Health and Disability, 1996; RNAO, 2004, 2003). Treatment decisions are made both in the development of the treatment plan and on an ongoing basis as a component of response monitoring.

The AGS/AAGP (2003) guidelines indicate that agreement has not been reached regarding the use of pharmacological or nonpharmacological treatment alone for residents with major depression. As a result, their recommendation was that both modalities should be employed simultaneously as the first-line treatment. Other guidelines state that in addition to this combined approach, either treatment modality can be used alone to treat mild nonpsychotic major depression (Alexopoulos et al., 2001; AMDA, 2003). Thus, the AMDA (2003) guidelines suggest that for less severe forms of major depression, a single treatment modality can be a treatment of choice. The AMDA (2003) guidelines also indicate when the combined approach might be desirable. For example, it is suggested that patients with low self-esteem may benefit more from the combined approach than from a single treatment modality (AMDA, 2003). Concerning more severe major depression, use of pharmacological treatment concurrently with psychotherapy seems to be a preferred treatment choice (Reynolds et al., 1999; Thompson et al., 2001).

In all cases, it is important to obtain a history of bipolar illness as the treatment of bipolar depression will likely require the use of a mood stabilizer (see Section 4.4, Pharmacological Interventions). Psychotic symptoms associated with depression rarely respond to antidepressant medication alone and usually require the addition of an antipsychotic medication.

Key recommendations from other guidelines that have informed the present process are summarized below with respect to treatment of major and minor depressive disorder, as defined by DSM IV-TR (APA, 2000a).

For residents who have a MINOR depressive disorder:
• Observation of the residents for up to 2 months without specific treatment may be appropriate (AGS/AAGP, 2003).iv
• The length of the observational period may range from 2 weeks to 2 months, but not more than 2 months (AGS/AAGP, 2003; AMDA, 2003).iv (Note: We believe that psychosocial interventions to promote quality of life should continued to be provided during the monitoring period)
• Alternatives for treatment include psychosocial interventions (e.g., education, participating in social events), psychotherapy, and pharmacological interventions (AGS/AAGP, 2003; AMDA, 2003).iv
• Treatment choice depends upon factors such as severity, previous history, persistence of symptoms, and patient or family preference (AGS/AAGP, 2003).iv
• First-line treatment for residents with minor depression includes psychosocial interventions and psychotherapy (AGS/AAGP, 2003; Alexopoulos et al., 2001).iv

For residents who have a MAJOR depressive disorder:
• Psychosocial interventions, psychotherapy, pharmacological interventions with or without psychotherapy are effective in treatment of mild nonpsychotic major depression (AGS/AAGP, 2003; AMDA, 2003; RNAO, 2004).iv
• Pharmacological interventions plus psychotherapy, ECT and pharmacological interventions are treatment modalities for severe nonpsychotic major depression (AMDA, 2003).

4.3 Psychological and Social Interventions: Discussion and Recommendations

The psychosocial and social interventions described in this section are grouped based on the effects or goals
they hope to achieve. This approach reflects recent understanding that “common factors” underlie various interventions, and a focus on these might be the best strategy for further development in this field (Niederehe, 2005). Given the complexity and uniqueness of LTC settings, we have included interventions that would be delivered by mental health clinicians, as well as other care providers, family, and volunteers.

This review is not limited to those studies that had some elements of randomization. It is encouraging to see that there have been some recent, methodologically more sophisticated studies indicating efficacy of psychosocial and social interventions. However, the number of studies is still very small with non-cumulative findings, which, in turn, impacted our ratings of the recommendations.

Interventions are often multifaceted and integrate several different strategies. For example, an active treatment group might have received a treatment consisting of socialization, individualized activity, and participation in pleasant events. Consequently, it is difficult to determine the treatment’s active ingredients. On the other hand, Teri and colleagues (2005) have argued that interventions in LTC settings should be multimodal in order to address the progressive deterioration of function and complexity of problems in LTC residents.

Recently, there have been several attempts to develop multimodal and manual-based treatments for depression and dementia in LTC settings. For example, Carpenter and colleagues (2002) reported a small sample, pilot study in which they tested a new model for brief individual psychotherapy with the goals to restore, empower and mobilize depressed LTC residents with mild to moderate dementia. Their approach integrated the elements of humanistic and cognitive therapies with a consideration of the role that the LTC milieu can play in the onset of depression. Hyer and colleagues (2005) have noted that this might be a direction in which the development of psychosocial and social interventions will proceed in the future.

### Recommendation: Depressive Symptoms: Psychological and Social Interventions

Social contact interventions, including interventions that promote one’s sense of meaning, should be considered where the goal is to engage the resident. [C]

Social contact interventions are interventions that expose LTC residents to elements in the social environment, including family, paraprofessionals, and staff. The purpose of the intervention is to improve mood in persons with depression by providing an increased sense of mastery over the social and physical environment and decreasing social isolation (Kasl-Godley & Gatz, 2000).

Interactions can be in-vivo and simulated. For example, weekly visits (for 24 weeks) by a volunteer and a nurse were associated with a significant decrease in depression (McCurren et al., 1999).c Playing a family member’s recording of the resident’s best-loved memories over the telephone was associated with significantly increased interest in people and activities and decrease in sad moods (Camberg et al., 1999).c In addition, providing support by facilitating affective expression, helping patients to feel understood, offering empathy and success experiences, and imparting optimism may be effective in treating depressed LTC residents (Alexopoulos et al., 2003; AMDA, 2003).v

The following social contact interventions can be used in the treatment of depression:

- **Provision of meaningful activities**, such as sheltered workshops, volunteering, spiritual care, or activities that maintain residents’ past roles (AGS/AAGP, 2003: Minor depressionvb; Major depressionv)
- **Supervised peer volunteer programs** (AGS/AAGP, 2003: Minor depression; Major depression)
- **Simulated presence** (Camberg et al., 1999)vb
- **Supportive therapy** (Alexopoulos et al., 2003; AMDA, 2003)v

A variety of recreational activities, with care providers’ participation or supervision, appear to be associated with a decrease in depression and an increase in activity levels.

Engaging LTC residents in individualized, recreational activities can have positive short-term effects. Long term effects are less clear at this point. Interventions are usually multimodal and combine either the recreational and socialization components (Buettner & Fitzsimmons, 2002; Rosen et al., 1997) or recreational and skill training elements (Teri et al., 2003).vb If these activities are to be implemented by family members or other care providers, it is important that they receive skill training in behavioural strategies that would target potential problem behaviours that might arise with increased activity (Teri et al., 2005).v Studies showing positive results had interventions in place for at least three months, with care providers delivering or supporting interventions on a daily basis.

The following activities have been suggested:

- **Intensive two-week wheelchair-biking in tandem** (Buettner & Fitzsimmons, 2002; Fitzsimmons 2001; University of Iowa Gerontological Nursing Interventions Research Center, 2003)v
There is some evidence for the effectiveness of the following psychotherapies as a component of treatment of depressive symptoms in LTC residents:

- Behavioural therapy (Lichtenberg, 1998)
- Group cognitive-behaviour therapy (AGS/ AAGP, 2003; Hyer et al., 2002)
- Individual cognitive-behaviour therapy (AGS/ AAGP, 2003)
- Interpersonal therapy (Hinrichsen, 1999)
- Problem-solving therapy (Alexopoulos et al., 2003; Hussain & Lawrence, 1981)
- Brief dynamic psychotherapy

There is some evidence for the effectiveness of the following psychotherapies as a component of treatment of depressive symptoms in LTC residents:

- Addressing deficits in communication
- Addressing interpersonal sensitivity
- Exposure to positive events
- Teaching skills for improving ability to deal with specific everyday problems and life crises
- Addressing deficits in communication

Validation and reminiscence therapies are examples of self-affirming interventions. These two interventions can potentially affect one's sense of identity and general well-being in addition to remediating mood and behavioural problems.

Reminiscence therapy involves the discussion of past activities, events and/or experiences usually with the aid of prompts such as photographs, music, and other familiar items from the past. There is some evidence that reminiscence is effective in reducing depressive symptoms in older people (Bohlmeijer et al., 2003). There are several forms of this therapy including, life review and general reminiscence. Life review involves evaluation of personal memories with the support of a therapeutic listener, usually on a one-one basis. General reminiscence aims at enhancing positive, enjoyable interactions, usually in a group context (Woods et al., 2005). There is some empirical support for the following interventions:

There is some evidence for the effectiveness of the following psychotherapies as a component of treatment of depressive symptoms in LTC residents:

- Behavioural therapy (Lichtenberg, 1998)
- Group cognitive-behaviour therapy (AGS/ AAGP, 2003; Hyer et al., 2002)
- Individual cognitive-behaviour therapy (AGS/ AAGP, 2003)
- Interpersonal therapy (Hinrichsen, 1999)
- Problem-solving therapy (Alexopoulos et al., 2003; Hussain & Lawrence, 1981)
- Brief dynamic psychotherapy

Currently, there is very little data to guide clinicians in their treatment decisions. One study demonstrated that problem-solving therapy (PST) might be a suitable therapy for depressed older adults with impairment in executive functions (i.e., lack of interest in activities, psychomotor retardation, reduced insight, suspiciousness, and significant behavioural disability; Alexopoulos et al., 2003). It has been noted that impairment in executive functions can increase the risk of a poor and unstable response in older adults to a variety of antidepressants for major depression (e.g., Alexopoulos et al., 2000). It is encouraging that PST therapy can reduce depressive symptoms in this patient population. Further research is needed to replicate Alexopoulos and colleagues’ (2000) finding. In this study, PST had several therapeutic ingredients:

- Self-affirming interventions (e.g. validation and reminiscence therapies) should be considered where the goal is to increase sense of self-worth and overall well-being [C]

Validation therapy is based on the general principle of validation (i.e., the acceptance of the reality and personal truth of another's experience). Evidence regarding the efficacy of validation therapy is inconclusive. Various observational studies have reported some positive effects of validation (e.g., increase in amount and duration of interactions during validation groups) (Babins et al., 1998; Bleathman & Morton, 1996), whereas others reported null findings (Scanland & Emershaw, 1993). In a recent meta-analytic review, it was noted that there was insufficient evidence from randomized trials to draw any conclusions regarding validation therapy (Neal & Briggs, 2003). Some potential benefits that have been noted by the proponents of this approach may be due to the extra attention given to individuals and/or participation in structured activities (Neal & Briggs, 2003). Future research in this area should evaluate a wider range of outcomes, such as well being, quality of life, and its potential beneficial effects for care providers utilizing this approach.

Reminiscence therapy involves the discussion of past activities, events and/or experiences usually with the aid of prompts such as photographs, music, and other familiar items from the past. There is some evidence that reminiscence is effective in reducing depressive symptoms in older people (Bohlmeijer et al., 2003). There are several forms of this therapy including, life review and general reminiscence. Life review involves evaluation of personal memories with the support of a therapeutic listener, usually on a one-one basis. General reminiscence aims at enhancing positive, enjoyable interactions, usually in a group context (Woods et al., 2005). There is some empirical support for the following interventions:
• Group reminiscence (Goldwasser et al. 1987)b (Jones, 2003)ib
• Individual reminiscence (Haight et al., 1998)b (Wang, 2004)ib

Comparisons across several studies conducted in LTC settings are difficult, partly because they explored various treatment modalities. The results are mainly encouraging and suggest that a more structured approach (e.g., individualized life review) may be more effective than open-ended recollection (Hyer et al., 2005).

### 4.3.1 Comorbid Dementia

**Recommendation: Depressive Symptoms: Psychological and Social Interventions**

Consider the impact of comorbid dementia in developing a treatment plan. [C]

Given the high prevalence of comorbid dementia in the LTC population, the issue of treating depression in this context warrants special consideration. We recommend that explicit consideration be given to the impact of comorbid dementia in the implementation of psychological and social interventions for the treatment of depressive symptoms in LTC residents. The resident's capacity to understand and willingly engage in the intervention should be carefully considered in order to avoid unintended outcomes such as increased agitation or distress.

Professionals involved in the treatment of depressed LTC residents who also have dementia, must adapt their approaches to fit the older person's specific characteristics and living context (American Psychological Association, 2004). The progressive nature of dementia requires a flexible approach to the treatment of depression (Teri et al., 2005). For example, what works at a certain point for a particular resident might cease to be effective as cognitive deterioration continues.

To effectively use non-pharmacological interventions with people who have dementia, cognitive status, previous experience with therapists, and the availability of therapists have to be taken into consideration (AMDA, 2003). Pre-existing rapport between a health-care provider and a resident can be crucial in determining the efficacy of these interventions (AMDA, 2003).

In this section, we restricted our review to those studies with a primary focus on depression in residents who also have dementia. Commonalities across these various interventions are: individualization of strategies, one-on-one treatment modality (with the exception of group cognitive-behaviour therapy), multi-component character, and teaching care providers to provide treatment to LTC residents (Teri et al., 2005).

The following non-pharmacological interventions may be appropriate for treatment of depression for residents with dementia. We stress that the appropriateness and effectiveness of different interventions will vary for different stages in the progression of dementia and individualized assessment is essential. The reader is also referred to the best practices literature on dementia for a more extensive consideration of psychological and social interventions (e.g., Doody et al., 2001).

- **Social Contact Interventions**
  - Supportive therapy (AMDA, 2003)
  - Simulated presence (Camberg et al., 1999)
- **Structured Recreational Activities**
  - Recreational biking (Buettner & Fitzsimmons, 2002)
- **Specialized Therapies**
  - Group cognitive-behavioural psychotherapy (AGS/AAGP, 2003)
  - Individual cognitive-behavioural psychotherapy (AGS/AAGP, 2003; Scholey & Woods, 2003)v
- **Behavioural Intervention**
  - Care provider training in behavioural management (AMDA, 2003; Beck et al., 2002; Proctor et al., 1999)
  - Care provider training in effective verbal and nonverbal communication (McCallion et al., 1999)
- **Self-Affirming Interventions**
  - Reminiscence (Woods et al, 2005; Brooker & Duce, 2000)

Koder and colleagues (1996) indicated that an adapted version of cognitive-behaviour therapy for persons with depression and dementia should include the following components:

- Challenge the assumption “I am too old to change”
- Greater emphasis on activities, behaviours and less on cognitive restructuring
- Provision of printed handouts, slower pace and a greater reworking of issues
- Group work
- Attention to common themes of aging (e.g., low self-esteem and anxiety about future)
- Life-review and reminiscence
- Involvement of significant others
- Gradual termination and follow-up sessions

Schloley and Woods (2003) added other factors to the list, such as an awareness of real social, economic and physical limitations, a more flexible approach to session timing, a more active role from the therapist, and consideration of ageism in therapy.

Woods and colleagues’ (2005) review of randomized trials indicated some potential benefits of reminiscence therapy in dementia, such as improvement in cognition and mood. The reviewers encouraged its further development and evaluation. Further studies might focus on determining clearer treatment protocols, and exploring a potential interaction between severity of depression and different treatment modalities (group versus individual versus with caregiver).
A methodological limitation of many studies conducted in this area is sampling strategy. Frequently, participants were not selected according to a specific clinical pattern of depression, but based on their scores on various rating scales. Thus, less is known about the efficacy of psychosocial interventions in treating clearly defined psychiatric syndromes. Many studies did not include follow-up assessments leaving the question of long term effects unanswered. Also, it is less clear whether and how these interventions influence other outcomes such as functional dependence or compliance with self-care (Hyer et al., 2005).

### 4.4 Pharmacological Interventions: Discussion and Recommendations

As noted above, a full set of recommendations can be found in the National Guidelines for Seniors’ Mental Health: Assessment and Treatment of Depression (CCSMH 2006). Some basic recommendations are provided below.

**Recommendation: Depressive Symptoms: Pharmacological Interventions**

First line treatment for residents who meet criteria for major depression should include an antidepressant. [A]

Although the AGS/AAGP (2003) consensus statement endorses the above recommendation it also supports the belief that for major depression, cognitive behavioural psychotherapy can also be effective. A 2003 literature review found 7 studies regarding antidepressants in LTC homes (Snowden et al., 2003). There were 2 placebo-controlled trials - one found nortriptyline to have greater efficacy than the placebo and the other found no difference between sertraline and the placebo (Katz et al., 1990; Magai et al., 2000). Since that review, 4 clinical trials have been published including a comparison of sertraline and venlafaxine, a placebo controlled trial of paroxetine (negative result) and open label trials of mirtazapine (orally disintegrating tablets) and high dose sertraline (Burrows et al., 2002; Oslin et al., 2003; Roose et al., 2003; Weintraub et al., 2003). The AGS/AAGP (2003) consensus statement also includes antidepressants as an option for treating minor depression (in addition to non-pharmacological interventions) depending on factors such as severity, previous history and resident/family preference.

**Note:** It is important to combine psychosocial interventions with antidepressants whenever possible to obtain optimal outcomes.

The companion National Guidelines for Seniors’ Mental Health: The Assessment and Treatment of Depression (CCSMH 2006) recommend the following with respect to antidepressants:

- Clinicians should start at half of the dose recommended for younger adults and ensure that therapeutic doses are reached as quickly as possible.
- Dosage should be increased every 5-7 days if tolerated, until there is clinical improvement or the average therapeutic dose has been reached. This will usually take less than one month.
- Dosage should be increased beyond average therapeutic dose if there is no clinical improvement after 3-6 weeks of treatment and there are no limiting side effects.
- In the absence of clinical response, an adequate antidepressant trial usually consists of a 4 to 8 weeks trial at maximum tolerated dose or maximum recommended dose.

Visits to monitor antidepressant response should include, at a minimum, supportive psychosocial interventions and monitoring for worsening of depression and suicide risk. The companion National Guidelines for Seniors’ Mental Health: The Assessment and Treatment of Depression (CCSMH, 2006) provides detailed recommendations regarding side effects, titration, augmentation and switching antidepressants.

**Recommendation: Depressive Symptoms: Pharmacological Interventions**

Appropriate first line antidepressants for LTC home residents include selective serotonin reuptake inhibitors (e.g., citalopram and sertraline), venlafaxine, mirtazapine, bupropion. [B]

Selection of an appropriate antidepressant medication for LTC home residents should be based on: a) previous history and experience of the resident; b) other medical comorbidities; c) side effect profiles of the antidepressants; d) potential drug-drug interactions. The recommendation above was endorsed by the AMDA guideline (2003).

Residents who start on serotonergic antidepressants (e.g., SSRIs or venlafaxine) should be monitored for common side effects such as nausea and diarrhea, as well as less common ones, such as hyponatremia (leading to fatigue, malaise, delirium) or serotonin syndrome (with agitation, tachycardia, tremor, hypertreflexia). Venlafaxine can cause increased blood pressure. There is an increased risk of seizures with higher dosages of bupropion and weight gain is more common with mirtazapine.

There is some evidence supporting the use of mirtazapine as a first line agent, although this antidepressant is not commonly used in Canada. Mirtazapine is available as a rapidly dissolving wafer (Remeron-RD) which may be useful for residents with swallowing problems. Escitalopram (the S-enantiomer of citalopram) has recently become available in Canada and may be a useful SSRI in seniors.
Tricyclic antidepressants (TCAs) may be used as second line agents on occasion. Nortriptyline and desipramine may be better tolerated than other tricyclics. Blood levels of these agents may be helpful and should be used before concluding that the drug is not effective (AMDA, 2003). TCAs should not be used in residents with significant cardiac conduction abnormalities. Clinicians should monitor for postural hypotension, cardiac symptoms and anticholinergic side effects.

Recommendation: Depressive Symptoms: Pharmacological Interventions

For residents with major depression with psychotic features, a combination of antidepressant and antipsychotic medications is appropriate. [B]

The AGS/AAGP (2003) consensus statement endorsed the above recommendation. Older adults with psychotic depression who fail to respond to medication may respond to a course of ECT (Flint and Rifat, 1998).[B]

Recommendation: Depressive Symptoms: Pharmacological Interventions

Residents with a first episode of major depression responding well to antidepressant treatment should continue on full dose treatment for at least 12 months. Residents who have had at least one previous episode of depression should continue with treatment for at least two years. [A]

There is some debate regarding the minimum recommended period for continuation therapy with antidepressants. The CPA/CANMAT guidelines (2001) suggest a minimum of 2 years in older persons. Alexopoulos and colleagues’ (2001) Expert Consensus Guidelines on pharmacotherapy of depression endorse a minimum of 12 months. For recurrent depression, we recommend a minimum of 2 years treatment and in some cases with multiple serious recurrences lifelong treatment is recommended.

Recommendation: Depressive Symptoms: Pharmacological Interventions

The treatment of depressed residents with a history of bipolar mood disorder should include a mood stabilizer such as lithium carbonate, divalproex sodium or carbamazepine. [B]

Antidepressants can precipitate a manic or hypomanic episode in residents with a history of Bipolar Mood Disorder. This is less likely to occur if they are on a mood stabilizer. Detailed recommendations regarding the use of lithium carbonate can be found in the National Guidelines for Seniors’ Mental Health: The Assessment and Treatment of Depression (CCSMH 2006).

Recommendation: Depressive Symptoms: Pharmacological Interventions

Residents with severe depression not responding to medications should be considered for a trial of electroconvulsive therapy (ECT). (These residents will likely require transfer to a psychiatric facility) [B]

A review of issues related to ECT in the LTC setting was written by Espinoza (2004).[B] The author reported that on their ECT service almost 70% of patients admitted from LTC homes had a moderate or marked response to ECT. The barriers to treatment were also highlighted including a lack of psychiatric consultants and limited access to inpatient units where ECT is provided.

Recommendation: Depressive Symptoms: Pharmacological Interventions

Psychostimulants (e.g., methylphenidate) may have a role in treating certain symptoms which are commonly associated with depression (e.g., apathy, decreased energy). [C]

There is some literature suggesting benefits from psychostimulants for individuals with depression and apathy states following stroke and other neurological disorders (Grade et al., 1998).[B]

Depression frequently occurs in residents with coexisting dementia. Antidepressants are recommended in this population when the depression is persisting. Some good evidence for the efficacy of antidepressants comes from placebo-controlled trials of Citalopram (Nyth et al., 1992)[B] and Moclobemide (Roth et al., 1996) although not all participants in these trials suffered from dementia.

A Cochrane Review (Bains et al., 2002) concluded that available evidence offers only weak support for the contention that antidepressants are an effective treatment for older adults with depression and dementia. The authors also state: “it is not that antidepressants are necessarily ineffective but there is not much evidence to support their efficacy either” (Bains et al., 2002). However for persisting depression associated with dementia we believe that treatment should include an antidepressant.
Part 5: Treatment of Behavioural Symptoms

5.1 Introduction

As in Part 4: Treatment of Depressive Symptoms and Disorders, we emphasize that we are aware that LTC homes differ in their resources, and residents differ in the extent to which family and friends are available and willing to be involved in care. This section takes an aspirational approach to the task of identifying psychological and social interventions that can contribute to the treatment of behavioural symptoms of residents in LTC homes, recognizing that the reality of what is available may differ.

Psychological and social interventions should generally be utilized before initiating pharmacological treatment, however in urgent situations, or when symptoms are severe it is appropriate to initiate pharmacological and nonpharmacological interventions together. Residents with moderately severe symptoms may also benefit from medication. It is worth noting that there is very limited research evaluating the effectiveness of combined interventions. However, there is some evidence that individualized treatments that combine pharmacological and non-pharmacological interventions (e.g., providing structure, scheduling events to adjust for individual residents’ needs, involving relatives in the treatment planning) can lead to a significant reduction in agitation (Hincliffe et al., 1995; Rogers et al., 1999; Matthews et al., 1996). A randomized controlled trial to test the hypothesis that individually tailored psychosocial, nursing and medical interventions would reduce the frequency and severity of behavioural symptoms in nursing home residents with dementia found improvement in target behaviours in both groups. However, benefits were greater in the intervention group (Opie et al., 2002).

Brodaty and colleagues (2003a) provided a useful 7-tiered model of behavioural and psychological symptoms of dementia (BPSD). They suggested that about 50% of individuals with dementia would have mild or moderate BPSD with approximately 10% having severe BPSD and less than 1% very severe symptoms. Cases of extreme violence are fortunately rare. The model is intended to provide the basis for comprehensive planning of service delivery.

5.2 Psychological and Social Interventions: Discussion and Recommendations

Social contact interventions are interventions that purposely expose the resident to elements in the social environment, including family, friends, staff, and pets. The goal is to promote interaction and/or stimulation. Interventions may be in vivo, virtual, active, passive, video, audio, personally relevant or generic. There is some research support for one-to-one interactions, simulated interactions (e.g., family generated videotapes and audiotapes and generic videotapes) and pet therapy (e.g., real and artificial).

One-to-one interactions may be effective in preventing and managing agitated behaviours (McGonigal-Kenney & Schutte, 2004). One-to-one interactions may include activities such as talking, singing, hands-on activities, exercising, touch, food, and theme bags (McGonigal-Kenney & Schutte, 2004). Providing direct stimulation for approximately 30 minutes appears to have some beneficial effects (Cohen-Mansfield & Werner, 1997). Additionally, it has been suggested that one-to-one interactions may be more effective for those who are verbally agitated, and less cognitively and functionally impaired (Cohen-Mansfield & Werner, 1997).

Simulated interaction interventions involve using video and/or audio equipment to simulate interactions with significant others. Family generated videos characterized by expressions of love and respect with a focus on past events appear to produce more favorable effects compared to generic videos aimed at inducing relaxation and reminiscence (Hall & Hare, 1997; Werner et al., 2000). Cognitively impaired females with verbally agitated behaviours tend to benefit most from watching family generated videos (Werner et al., 2000). Structured guidelines on how to prepare family videos are needed. Werner and colleagues (2000) noted that the relatives involved in preparation of family videos felt overwhelmed at times. Further research can identify the reasons behind these reactions, which, in turn, can help in the preparation of videos.

There is anecdotal evidence supporting the use of companion animals to enhance well being in residents with dementia. For example, Churchill and colleagues (1999) concluded that the presence of a dog enhanced socialization (as evidenced by increased verbalization, smiling and looking), and decreased the amount of agitated behaviour in residents with dementia. Libin and Cohen-Mansfield (2004) reported that interacting with both a robotic pet and a plush toy cat can decrease agitation, and increase pleasure and interest in elderly persons with dementia. Further studies regarding potential benefits of robotherapy (i.e., artificial companions) are needed. It is difficult to make generalizations based on a single pilot study in this area.
It remains unclear what are the active ingredients of social contact interventions. An important issue to consider is whether and how much these interventions satisfy social needs of LTC residents as opposed to their needs for stimulation or distraction.

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<tr>
<th>Recommendation: Behavioural Symptoms: Psychological and Social Interventions</th>
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<tr>
<td>Sensory/relaxation interventions (e.g., music, snoezelen, aromatherapy, bright light) should be considered where the goal is to reduce behavioural symptoms, stimulate the senses and enhance relaxation. [B/D]</td>
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**Sensory/Relaxation interventions** encompass a wide range of interventions with varying levels of evidence. Interventions and their accompanying strengths of recommendations are as follows:

**Music [B]**
Different forms of music have been proposed as interventions for agitated behaviours (e.g., active versus receptive; individualized versus standard classical relaxation music; music during bathing or meals versus individual relaxation sessions). In a recent review of randomized controlled trials, the authors concluded that there was no substantial evidence to either support or discourage the use of music therapy for treatment of aggression, agitation, and wandering in older people with dementia (Vink et al., 2003). However, other reviewers who did not limit themselves to randomized trials commented that individualized music could have beneficial, short-term effects on agitation (Cohen-Mansfield, 2001; Snowden et al., 2003).

It has been suggested that each music session should last approximately 30 minutes and occur prior to the resident’s usual peak level of agitation (e.g., Gerdner, 2000). Additionally, it is important to monitor all residents closely, particularly those with comorbid psychological or medical problems and impaired hearing. More refined studies regarding the effects of music therapy for people with dementia are needed (Vink et al., 2003). In particular, studies are needed on the medium and long term effects of this therapy.

**Snoezelen [B]**
Snoezelen, an intervention that combines soft music, aromatherapy, textured objects, favorite food, and colored lighting in a designated space (usually a room within the facility), is intended to promote a failure-free, relaxing and enabling physical environment (Chitsey et al., 2002). In a review of randomized controlled trials, it was noted that snoezelen could have positive immediate effects on apathy, restless and repetitive behaviours (Chung & Lai, 2002). However, the effects seem to be confined to the snoezelen sessions or the period immediately after the sessions.

Some short-term beneficial effects of snoezelen on mood and agitation have been noted. However, there is considerable variation between individuals in their reactions to snoezelen (Baillon et al., 2004). A number of research questions regarding snoezelen need to be addressed. It is still unclear how frequent and how long snoezelen sessions should be, at what stage of dementia residents can benefit most, and whether there are long term effects. An important question to consider is whether snoezelen promotes a therapeutic relationship between residents and staff (Chung & Lai, 2002).

**Aromatherapy [C]**
Aromatherapy, either alone or in combination with other sensory stimulating activities, has been proposed as another sensory intervention. It was observed that a topical application of Melissa officinalis to the residents’ face and both arms twice a day led to a reduction in agitation and increase in overall well-being as indicated by a decrease in social withdrawal and increase in time engaged in constructive activities (Ballard et al., 2002). Lavender oil administered in an aroma stream produced a modest reduction in agitated behaviours in residents with severe dementia (Brooker et al., 1997; Holmes et al., 2002).

In studies exploring the efficacy of aromatherapy, aromatherapy was used in conjunction with prescribed psychotropic medications. Examining whether aromatherapy alone can be a viable treatment alternative would be a next step. It is interesting to note that people with dementia with Lewy bodies (DLB) showed no evidence of improvement while being treated with aroma streams of lavender oil (Holmes et al., 2002). Larger studies, with different forms of dementia and with different administration techniques are needed.

**Bright Light Therapy [D]**
Degenerative changes in the suprachiasmatic nuclei (SCN) of the hypothalamus appear to be associated with circadian disturbances in the elderly, particularly in those with dementia (Forbes et al., 2004). A number of studies explored whether these changes may be reversed by stimulation of the SCN with light. In a meta-analytic review of randomized trials, it was concluded that there was insufficient evidence to support the efficacy of bright light therapy (BLT) in managing sleep, agitation, cognition and mood in dementia, and that further studies were warranted (Forbes et al., 2004).

Similarly, in her review of both observational and randomized studies, Cohen-Mansfield (2001) noted that the results were inconclusive as some studies reported no effects; some reported significant decreases whereas some reported trends. Given the mixed results, the heterogeneity of participants within and across the studies, and a lack of consensus regarding the timing of BLT, further studies regarding the efficacy of BLT are needed. In...
many studies, participants were not homogenous in terms of their diagnoses and severity of dementia. As Forbes and colleagues (2004) indicated, responses to BLT may depend on the area of the brain that has been affected by pathological changes. Additionally, Ancoli-Israel and colleagues (2003) suggested that persons with mild to moderate Alzheimer’s disease may benefit from BLT more than those with severe Alzheimer’s disease. Further studies that address the intensity and frequency of BLT are needed, as well as studies that explore the timing and length of BLT interventions.

In the meantime, BLT should be administered cautiously in older adults with dementia, particularly when agitation increases or delusions develop during BLT (Schindler et al., 2002). It has been suggested that blurred vision (e.g., due to cataracts) should be ruled out because it could contribute to misjudgments while administering BLT (Schindler et al., 2002).BLT can be administered using the following protocols:

- "Brite-Lite" boxes (2,500 to 10,000 lux) placed one meter from the person. Light can be administered for approximately 2 hours in the morning (e.g., Ancoli-Israel et al., 2003; Lovell et al., 1995).
- Increase the light intensity used during meal times to enhance visual stimulation (Koss & Gilmore, 1998).

**White Noise [D]**
Exposure to any low intensity, slow, continuous, rhythmic, monotonous sound (i.e., white noise) has been proposed as an auditory intervention for agitated behaviours. Evidence for its efficacy is still inadequate. White noise might have potential to reduce verbal aggression (Burgio et al., 1996)....

**Massage and Touch Interventions [D]**
Studies exploring the effects of massage and touch interventions produced mixed findings. A ten-minute therapeutic touch administered during a three-day treatment period led to a significant decrease in vocalization and pacing with a sustained treatment effect over 1 to 1.5 days (Woods & Dimond, 2002). This intervention involved directing attention inward on the part of the provider, and performing gentle movements as described in the “Ten-minute therapeutic touch protocol” (Quinn, 1984). However, Snyder and colleagues (1995) reported no consistent effects using a similar ten-minute therapeutic touch protocol and a five-minute hand massage protocol. On the other hand, Kim and Bushmann (1999) reported a significant decrease in agitation during a five-minute hand massage treatment. A combination of music and massage therapy did not seem to be related to a decrease in agitation (Snyder & Olsen, 1996).

**Recommendation: Behavioural Symptoms:**

**Structured recreational activities should be considered where the goal is to engage the resident. [C]**

**Structured activities** with individuals or groups may involve manipulation, exercise, outdoor walks, multisensory stimulation, pet therapy, and one-to-one supervised gardening. Engaging residents during idle times can reduce agitation (Aronstein et al., 1996). Outdoor walks can be designed to meet physical and social needs and reduce wandering. Physical exercise appears to be related to a reduction in repetitive, and disruptive activities (Beck et al., 1992). Structured activities include:

**Recreational Activities [C]**
- Sorting (e.g., puzzles, cards, clothing).
- Sewing (e.g., fabric squares, lacing tiles).
- Sound and music programs.
- Manipulative activities (e.g., bead mazes, flexible cubes).
- Cooking program, herb garden program, horticultural activities (Cohen-Mansfield, 2005).
- Montessori-based activities (Schneider & Camp, 2002)
- Activity aprons (e.g., aprons that have buttons, zippers and other articles sewn on) (Cohen-Mansfield, 2005).
- Outdoor gardening with one-to-one supervision (Cohen-Mansfield & Werner, 1998; McGonigal-Kenney & Schutte, 2004).

**Walking Activities [C]**
- Walking programs, outdoor walks, and group walks through public areas of the LTC facility (Cohen-Mansfield, 2005).
- Residents in walking groups could walk significantly longer compared to baseline performance (Tappan et al., 2000).

**Physical Activities [C]**
- Physical group activity programs designed to improve strength and flexibility.
- Both high and low level mobility residents can benefit from mobility programs comprising of warm up/stretching, walking, lower body strengthening, upper body strengthening, balance, and cool down/stretching (Lazowski et al., 1999).
- See McGonigal-Kenney and Schutte’s (2004) guidelines for specific protocols regarding two physical exercise programs.

Recreational interventions and other structured activity programs may be helpful in the management of agitated behaviours in residents with Alzheimer’s disease (AD) and other dementias (Aronstein et al., 1996). Agitated behaviours decreased when residents were involved in activities and not restrained (Cohen-Mansfield & Werner,
A physical training program improves mobility, flexibility and static balance in residents with dementia who are also at risk for falls (Toulotte et al., 2003).\(^\text{viii}\) Holmberg (1997)\(^\text{vii}\) found a 30\% reduction in aggressive events in LTC homes on days when residents were taken for group walks compared to days without walks. Structured activities are an important component of psychosocial rehabilitation, which, as related to seniors’ mental health, promotes optimal performance in areas of cognition, interpersonal skills, self-care, leisure, and utilization of community resources.

### Recommendation: Behavioural Symptoms: Psychological and Social Interventions

Individualized behaviour therapy should be considered where the goal is to manage behaviour symptoms (e.g., contextually inappropriate, disturbing, disruptive or potentially harmful behaviours). [C]

**Behaviour therapy**, grounded in a belief that all behaviour has meaning, focuses on intra-individual (i.e., biopsychosocial) and extra-individual factors (e.g., contextual, social) in assessment and management. This approach (which emphasizes least restrictive and least intrusive interventions and individualized care planning) has been found useful in reducing both incidences of resident injuries and stress among staff (Gibson & Bol, 1996).

**The selection of specific behavioural interventions should be based on a solid behaviour analysis (ABC).** Moreover, it is important to note that the process of behaviour analysis (i.e., describing the relationships among antecedents, behaviours and consequences) can in itself have beneficial effects, often through the changes in staff behaviour that follow from increased understanding (Rewilak, 2001).

Support regarding the efficacy of behavioural interventions comes mainly from case-reports and observational studies (Cohen-Mansfield, 2001; Landreville et al., 1998; McGonigal-Kenney & Schutte, 2004; Snowden et al., 2003).\(^\text{iv}\) These studies targeted a variety of problematic behaviours (such as noisemaking, wandering, ADL, bathing, inappropriate toileting, sexual behaviour, verbal and physical aggression). Behavioural interventions in many studies were individualized and led to a reduction in targeted, problematic behaviours. The following interventions were supported:

**Differential reinforcement**

- Reinforce either quiet behaviour or behaviour that is incompatible with the inappropriate behaviour.
- Compliments, soothing speech, praise, and food may serve as rewards.
- The principle of successive approximation toward the desired behaviour can be employed (i.e., reinforce small steps towards the desired behaviour).

Differential reinforcement appears to be an effective intervention for both aggressive and verbally agitated behaviours (Landreville et al., 1998).\(^\text{v}\)

**Stimulus control**

- Establish an association between a stimulus and a particular behaviour (e.g., a large stop sign with stopping and walking away).
- Verbal and/or physical prompts can be used to help residents attend to various stimuli (e.g., Hussian, 1988).\(^\text{iii}\)
- Making antecedents more salient or making associations between various consequences and antecedents more salient seems to be effective with residents exhibiting physically nonaggressive behaviours such as wandering (Cohen-Mansfield, 2001; Landreville et al., 1998).\(^\text{iv}\)

Several case and small-sample studies reported that extinction (i.e., attention given in the absence of undesirable behaviours) might not be an effective strategy in itself (Bourgeois & Vézina, 1998; Heard & Watson, 1999; Hussian, 1983).\(^\text{iv}\) It has been suggested that instruction in positive self-statements, in addition to extinction, might produce desirable effects (Cohen-Mansfield, 2001).\(^\text{iv}\)

Two recent randomized controlled trials produced some equivocal results regarding the effectiveness of behavioural management techniques (Gormley et al., 2001; Teri et al., 2000). These studies evaluated the programs within which family caregivers used behavioural techniques to manage aggressive and agitated behaviours in older adults with dementia. Gormley and colleagues (2001)\(^\text{vii}\) reported a trend toward a reduction in aggression for participants in a behaviour management training group (BMT). BMT training in this study consisted of avoidance or modification of precipitating and maintaining factors, use of appropriate communication (e.g., calm approach, simple one-step commands), validation (e.g., acceptance of false statements) and distraction. Teri and colleagues (2000)\(^\text{vii}\) demonstrated a comparable modest reduction in agitation in older adults with AD receiving haloperidol, trazodone, BMT, and placebo. BMT consisted of structured sessions that provided information about AD to care providers, strategies for decreasing agitated behaviours, in-session and out-of-session assignments, and watching a video training program. However, the treatment protocols were not individualized and did not target specific needs and problems of the participants.

Behavioural programs typically are multimodal. For example, DeYoung and colleagues (2002) evaluated the impact of a behaviour management program for care providers of persons with dementia on aggression, agitation, and disruptive behaviour. In a 28-hour education program, staff learned how to utilize behavioural strategies and strategies for making the social and physical

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(C) National Guidelines for Seniors’ Mental Health - The Assessment and Treatment of Mental Health Issues in Long Term Care Homes
environment more responsive to residents’ needs. They were also taught the importance of knowing the resident as a unique individual and of consulting with other staff to help with care. Participation in the program was associated with a reduction in aggression, agitation, and other disruptive behaviours. The interventions that were effective in reducing the behaviours included verbal distraction, time out, activity diversion, getting to know the person well, and managing the social and physical environment.

Ledoux and colleagues (2000) created an aggressive and disruptive behaviour management program which integrated clinical, health, and workplace safety considerations. The authors concluded that an individualized diversionary strategy, utilizing historical and procedural memories, combined with modifications to the physical and social environment, was effective in reducing aggressive and disruptive behaviour during basic care. A diversion was created by drawing attention to something that was significant to the resident to prevent him/her from focusing on the care. A second diversion strategy involved triggering an automatic gesture to prevent the resident from becoming agitated (e.g., asking the resident to wash his/her hands while the nurse washes the genital region).

There is a need for a greater number of randomized trials that would address the efficacy of behavioural interventions. Studies addressing what benefits specific BMT components add above and beyond the benefits that regular contacts, support and encouragement provide are needed. Additionally, studies that address longer follow-up periods are warranted.

5.3 Pharmacological Interventions: Discussion and Recommendations

Before pharmacological treatment is considered it is important to attempt to use nonpharmacological interventions. However, in some urgent situations it may be necessary to introduce pharmacological and nonpharmacological interventions simultaneously. Two recent comprehensive reviews provide details of the evidence regarding the efficacy of pharmacological treatments of behavioural symptoms associated with the dementias (Sink et al., 2005; Weintraub & Katz, 2005).

It is important to be aware that certain behaviours are unlikely to respond to medications (e.g. wandering, exit-seeking behaviour, and excessive noisiness).

The best evidence from placebo-controlled trials in LTC homes would support the use of atypical antipsychotics (Brodaty et al., 2003; De Deyn et al., 2004, 1999; Katz et al., 1999; Street et al., 2000). The AGS/AAGP (2003) consensus statement endorsed the above recommendation. The studies above compared olanzapine or risperidone to placebo. A recent Cochrane review of the effectiveness of atypical antipsychotics for the treatment of aggression and psychosis in Alzheimer's disease examined 16 placebo controlled trials and included 9 in the meta-analysis (Ballard & Waite, 2006). The review concluded that risperidone and olanzapine are useful in reducing aggression, and risperidone reduces psychosis. Despite the modest efficacy, the significant increase in adverse events suggested that neither risperidone nor olanzapine should be used routinely to treat residents with aggression or psychosis unless there is marked risk or severe distress. Three other recent reviews provide useful perspectives (Carson et al., 2006; Lee et al., 2004; van Iersel et al., 2005).

Clinicians should carefully evaluate risks versus benefits in each resident and obtain informed consent. There is some evidence from placebo-controlled trials of an increased mortality rate among subjects receiving atypical antipsychotics versus placebos (1.5-1.7 fold increase in mortality rate; Schneider et al., 2005; U.S. Food and Drug Administration, 2005). There is also evidence of an increased risk of cerebrovascular events. Possible side effects also include extrapyramidal symptoms, gait disturbance, sedation, widening of the QTC interval, anticholinergic effects (including delirium), and metabolic disturbances such as an increased risk of developing diabetes.
In view of the above warnings many experts in the field believe that the use of antipsychotics in individuals with dementia should be reserved for residents with severe agitation or psychosis, where severity is evaluated on the basis of the degree of danger, suffering or excess disability (Weintraub & Katz, 2005). Clinicians should aim for the lowest possible effective dosage.

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<th>Recommendation: Behavioural Symptoms: Pharmacological Interventions</th>
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<tr>
<td>Appropriate first line pharmacological treatment of residents with severe behavioural symptoms can include: a) atypical antipsychotics; b) antidepressants such as trazodone or selective serotonin reuptake inhibitors (e.g., citalopram or sertraline). Antipsychotics [B]; Antidepressants [C]</td>
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There is limited evidence for the effectiveness of antidepressants in the treatment of behavioural symptoms. In one placebo-controlled randomized controlled trial (RCT) citalopram was significantly superior to placebo and appeared to outperform perphenazine (Pollock et al., 2002). However, a recent review of placebo controlled studies noted that 4 other trials of serotonergic antidepressants reported negative results (Sink et al., 2005). A study comparing trazodone to haloperidol reported equal improvement in agitation (Sultzer et al., 1997).

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<th>Recommendation: Behavioural Symptoms: Pharmacological Interventions</th>
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<td>There is some evidence from a placebo-controlled RCT that carbamazepine improves agitation (Tariot et al., 1998) although Olin and colleagues (2001) found limited benefit in their study. Potential adverse effects of carbamazepine include hepatic toxicity and blood dyscrasias. Placebo-controlled RCTs of divalproex sodium found no benefit (Porsteinsson et al., 2001; Tariot et al., 2005).</td>
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Pharmacological treatment of residents with severe behavioural symptoms can also include: a) anticonvulsants such as carbamazepine; b) short or intermediate acting benzodiazepines. Carbamazepine [B]; Benzodiazepines [C]

There is very limited evidence, primarily case reports, in support of pharmacological treatment for inappropriate sexual behaviour, (Cooper 1987; Levitsky & Owens, 1999). Hormone therapies are generally used with men in severe situations when other interventions have failed. Common side effects include weight gain, breast pain, depression and oedema. There may be an increased risk of thromboembolism. Black and colleagues (2005) recently carried out a review of these behaviours and available treatments.

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<th>Recommendation: Behavioural Symptoms: Pharmacological Interventions</th>
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<tr>
<td>Appropriate pharmacological treatment of residents with severe sexual disinhibition can include: a) hormone therapy (e.g., medroxyprogesterone, cyproterone, leuproide); b) selective serotonin reuptake inhibitors; or c) atypical antipsychotics. [D]</td>
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Combination pharmacological therapy for residents with severe behavioural symptoms may be necessary if monotherapy of sufficient dose and duration is unsuccessful.

In emergency situations when the resident or others are in danger of physical harm pharmacological options include: haloperidol IM, loxapine IM or olanzapine IM. Oral rapidly dissolving tablets (e.g., olanzapine [Zyprexa Zydis] or risperidone [Risperidal M-tab]) may also be useful when the resident is somewhat cooperative. Benzodiazepines (e.g., lorazepam) may also be useful. Meehan and colleagues (2002) found that IM olanzapine and IM lorazepam were effective in treating agitation associated with dementia (after 2 hours). After 24 hours, subjects receiving olanzapine maintained superiority over placebo, whereas those who received lorazepam did not.

Note: It is rarely necessary to use IM medications in LTC homes. If necessary, it is important to use much lower dosages in the elderly (e.g., dosages of haloperidol should start at 0.5 – 1.0 mg. IM). The risk of extrapyramidal side effects (e.g., acute dystonia) is greater with conventional antipsychotics (e.g., haloperidol).
**Recommendation: Behavioural Symptoms: Pharmacological Interventions**

Appropriate pharmacological treatment of behavioural symptoms associated with frontotemporal dementia can include trazodone or selective serotonin reuptake inhibitors. [B]

This recommendation is primarily based on two small RCTs (Lebert et al., 2004; Moretti et al., 2003). Lebert and colleagues (2004) compared trazodone to placebo and reported some benefits particularly with irritability, agitation, depressive symptoms and eating disorders. Moretti and colleagues (2003) reported some behavioural benefits with paroxetine in a 14-month randomized, controlled open label study.

**Recommendation: Behavioural Symptoms: Pharmacological Interventions**

Appropriate pharmacological treatment of residents with behavioural symptoms or psychosis associated with Parkinson’s disease or dementia with Lewy bodies includes: a) cholinesterase inhibitors; or as a last resort b) an atypical antipsychotic with less risk of exacerbating extrapyramidal symptoms, (e.g., quetiapine). Cholinesterase inhibitors [B]; Quetiapine [C]

One placebo-controlled RCT of rivastigmine (a cholinesterase inhibitor) in Dementia with Lewy Bodies (DLB) found benefits in behavioural symptoms including hallucinations (McKeith et al., 2000). Antipsychotics should generally be avoided in residents with DLB as they may develop severe adverse effects. Evidence regarding the use of atypical antipsychotics in DLB is limited to case series. If an antipsychotic is absolutely necessary in residents with Parkinson’s disease, quetiapine may be less likely than other atypicals to exacerbate the motor symptoms (Friedman & Factor, 2000). If there is no response to a cholinesterase inhibitor or quetiapine, there is some evidence to support the use of clozapine for psychosis associated with Parkinson’s disease, with appropriate monitoring for agranulocytosis (Morgante et al., 2004).

Note: There is evidence that cholinesterase inhibitors (e.g., donepezil, galantamine and rivastigmine) and memantine may delay the emergence of behavioural symptoms in Alzheimer’s Disease and other dementias. A recent meta-analysis of cholinesterase inhibitors in older adults with Alzheimer’s disease suggested small but statistically significant improvement in studies using the NPI (Neuropsychiatric Inventory) as an outcome measure and a trend towards benefit in studies using the ADAS-noncog (Trinh et al., 2003).

There is urgent need for more studies of residents with behavioural symptoms. We need to establish better predictors of response to particular groups of medication. Large scale trials comparing the effectiveness of these medications would also be invaluable.

**Recommendation: Behavioural Symptoms: Pharmacological Interventions**

Pharmacological treatments for behavioural symptoms or psychosis associated with dementia should be evaluated for tapering or discontinuation on a regular basis (e.g., every 3-6 months). Ongoing monitoring for adverse effects should be undertaken. [A]

The AGS/AAGP (2003) consensus statement supports the above recommendation with a review being carried out at least every 6 months. At least 3 RCTs have demonstrated that it is possible to successfully withdraw antipsychotic medication in the majority of residents following a period of stability (Ballard et al. 2004; Cohen-Mansfield et al. 1999; van Reekum et al. 2002).
Part 6: Organizational and System Issues

6.1 Introduction

The recommendations in this section relate to a) organizational issues and b) system issues. Organizational issues focus on internal policy and procedures, such as human resource practices, whereas system issues focus on community context and partnerships.

6.2 Organizational Issues: Discussion and Recommendations

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<th>Recommendation: Organizational Issues</th>
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<td>LTC homes should develop the physical and social environment as a therapeutic milieu through the intentional use of design principles. [D]</td>
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Given the importance of the physical and social environment in LTC homes for meeting the goals of care, it is recommended that the setting be developed as a therapeutic milieu through the intentional use of guidelines and principles for designing the physical environment and adjusting the social environment.

Factors in the social environment (e.g., philosophy of care, how care is provided, relational and social opportunities, activity, staff communication) and in the physical environment (e.g., space, noise, security features, layout, legibility) form the milieu. A therapeutic milieu can be designed to promote the mental health of all residents (e.g., decrease noise by eliminating overhead paging and call bells) or to address individual issues (e.g., peer support for a depressed resident, consideration of roommate compatibility) (Verma et al., 1998).

Many of the social characteristics of the milieu are mentioned in the preceding sections. It is beyond the scope of these Guidelines to review the literature on designing the physical environment in detail. However the importance of this literature to the design of an effective therapeutic milieu is acknowledged.

Important aspects of this literature address such issues as reducing agitation through management of unit size and design (Houde, 1996; Williams-Burgess et al., 1996) and control of environmental stressors (Kovach & Meyer, 1997). The Eden Model is a well-known example of a systemic approach to physical design that relies on the principles and values that should underlie resident care (www.edenalt.com). In a study that examined the impact of the Eden Model on quality of life and quality of work life in five LTC homes, the number of aggressive incidents by residents decreased by 60%, staff morale increased and staff injury and absenteeism decreased (Ransom, 2000).

Similarly, the CCSMH developed a set of guidelines, titled Supportive Physical Design Principles for Long-Term Care Settings. The Guidelines address features of the milieu (physical and social environment) that support and enhance resident well being. Detailed recommendations can be found at http://www.ccsmh.ca/en/design Principles.cfm, and include the following:
- Maximize safety and security
- Maximize awareness and orientation
- Support functional abilities through application of principles of psychosocial rehabilitation
- Facilitate social contact and interaction
- Provide for privacy
- Provide opportunities for personal control
- Regulate the quantity and quality of stimulation
- Promote continuity of the self

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<th>Recommendation: Organizational Issues</th>
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<td>LTC homes should have a written protocol in place related to staffing needs specific to the care of older residents with mood and/or behavioural symptoms. [C]</td>
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Staffing levels and mix related to case mix index often influence the ability to provide appropriate levels of care. While there is limited evidence regarding staff needs in LTC homes, judgement of appropriate staffing patterns in nursing is an important factor in the provision of safe and competent care. Staffing decisions must take into account resident acuity, complexity level, and the availability of expert resources.

The literature suggests that the ratio of registered nurses to residents, along with other defined factors such as experience of staff, significantly influences clinical outcomes in a positive way (Anderson et al., 2003). A study funded by the Centers for Medicare and Medicaid Services (2001) found that higher staffing levels for long-stay residents were related to fewer pressure ulcers, reduced skin trauma, and less weight loss. The researchers found that for every unit increase in staffing there was a positive improvement in resident outcomes. There was also a threshold for minimum staffing, which was 2.8 hours per resident per day (hprd) for nursing assistants/personal support workers, and 1.3 hprd for all licensed staff. Schnelle (2004) confirmed this threshold. Nursing homes in the upper 10th percentile on staffing (>4.1 hprd) performed significantly better on 13 of 16
care processes (such as assisting with eating or toileting). In Canada, the Canadian Nursing Association has drafted a document, Health Human Resources Knowledge Series on evaluation of staff mix (http://www.cna-aiic.ca/CNA/documents/pdf/publications/Final_Staf_Mix_Literature_Review_e.pdf).

Research is required to understand the specific staffing ratio and mix of staff required to care for older persons with mood and/or behavioural symptoms. More research is needed to define the roles of various types of practitioners (e.g., registered nurses, registered practical nurses, healthcare aides, personal support workers) in the care of residents with mood and behavioural symptoms.

### Recommendation: Organizational Issues

**LTC homes should have an education and training program for staff related to the needs of residents with depression and/or behavioural concerns. Ideally dedicated internal staff would be available to provide leadership in this area, including the development and delivery of best practices.** [C]

Poor education and training can compromise resident care and safety (Anderson et al., 2005). Care providers require education and training in the detection and management of depressive and behavioural symptoms (Boustani et al., 2005). Expert opinion suggests that education is necessary, but is often not sufficient to improve practice. Supporting care providers to make the transition from ‘knowing’ to ‘doing’ is complex. There is no single process of knowledge utilization (KU) that describes how all staff use knowledge in different practice settings.

Anderson and colleagues (2005) found that effective nursing home care involves sufficient cognitive diversity among care providers, that is, the system has a variety of people in diverse roles who make new information available. Several strategies supporting the education and training needs of care providers caring for clients with depression and/or behavioural concerns have been found effective. One is to create an internal clinical resource team, which includes reallocating internal resources, and another is to hire an advanced practice nurse or nurse practitioner for the facility (Kane et al., 2002; Ryden et al., 2000). These two strategies aim to: provide support to front line care providers who are providing services and support to older persons; engage in identifying and facilitating the delivery of learning and development of strategies in the facility aligned with best practice and the realities of the LTC facility; assist in identifying improvements in policy and practice related to identified issues in the LTC home; be an internal resource that works with and connects effectively in collaborative relationships with external resources; and reports directly to senior administration.

Residents with Advanced Practice Nurses (APN) as part of their care have been shown to experience significantly greater improvement or fewer declines in incontinence, pressure ulcers and aggressive behaviour (Ryden et al., 2000). As well, significantly less deterioration in affect was noted. Residents in nursing homes affiliated with APNs had family members that expressed greater satisfaction with the medical care their relatives received (Kane et al., 2002).

An Ontario program called PIECES is an example of an internal resource within a nursing home, which improves the behavioural care of residents (http://www.piecescanada.com). It is a comprehensive provincial training strategy to enhance the ability of health professionals to meet the care requirements of individuals with complex physical and cognitive/mental health needs and with associated behavioural issues. PIECES provides a framework for understanding and systematically assessing the meaning behind the observed behaviour. Other Canadian educational resources include the book *Practical Psychiatry in the Long Term Care Facility: a Handbook for Staff* (Conn et al., 2001) and a CCSMH educational inventory “Educational Materials for Front Line Workers” (www.ccsmh.ca).

An additional strategy to improve training and education of staff is to collaborate with academic programs (including academic appointments for facility staff as appropriate) as a means of promoting knowledge transfer and translation. Further, administrators, directors of care, and charge nurses within LTC homes are required to provide leadership to enhance residents’ care and to support the utilization of new evidence into practice (Anderson et al., 2005). Very little is known about how to improve the management and supervision of nursing home care, and thus further research is required.

There is no single process of KU that describes how all care providers use knowledge in different practice settings. It would be premature to apply the findings of KU studies conducted in acute care settings with professional mental health care practitioners to LTC homes and with unregulated care providers such as personal support workers. Therefore, more specific KU research is required in LTC homes.

### Recommendation: Organizational Issues

**LTC homes should have a written protocol in place related to the administration of medication by paraprofessional staff.** [D]

Practices vary across the country in regards to the administration of medications within LTC homes by nonregulated and regulated nursing staff. However, we believe that LTC homes should have a written protocol to guide practice on
this issue. Administration of medications must be consistent with professional practice legislation, health care legislation, and educational standards. As a component of this protocol, it should be specified that any staff member administering medications must monitor and document the resident’s response to drug therapy. Continuing education for staff related to the administration and monitoring of drug therapy specific to the needs of older residents is essential.

**Recommendation: Organizational Issues**

LTC homes should have a written policy in place regarding the use of restraints. [D]

**The issue of restraints is important to this discussion of the assessment and management of behavioural symptoms in LTC homes, since it needs to be emphasized that restraint is not a therapeutic response to behavioural symptoms. Rather, the use of physical restraints should be understood as a short-term intervention implemented only under very restricted circumstances.**

The reader is referred to the companion National Guideline for Seniors’ Mental Health: The Assessment and Treatment of Delirium (CCSMH 2006) for a detailed discussion on restraints, including specific recommendations.

### 6.3 Systems Issues: Discussion and Recommendations

**Recommendation: System Issues**

LTC homes should obtain mental health services from local practitioners or multidisciplinary teams, with interest and expertise in geriatric mental health issues. [D]

We support expert opinion and previous guidelines that have contended that LTC homes need access to mental health experts. In some regions, psychogeriatric outreach teams may be available to provide assessment, treatment and staff education. Another option is to contract with individual practitioners. Regional acute care specialized inpatient services should be available for residents whose behaviours cannot be managed by the LTC facility. Some LTC homes may have special units where enhanced care can be provided.

Unfortunately many regions across the country have very limited access to such services. New technologies may allow for the provision of consultation through interactive video-conferencing (telehealth). In a few rural regions in Canada, consultation via telehealth is being used to complement local geriatric mental health services.

**Recommendation: System Issues**

Administrators and managers within LTC homes should be prepared to advocate with local, provincial, and national policy makers and funding agencies to promote the health and well being of older residents. [D]

In order to advocate on behalf of their residents, administrators and managers within the facility are responsible for being aware of current epidemiological trends and related health care needs of an aging population, with specific attention to the incidence of depression and behavioural symptoms in LTC residents. Canadian health documents, for example, *Building on Values: The Future of Health Care in Canada Report* (Commission on the Future of Health Care in Canada, 2002)\(^v\), the *First Ministers’ Accord* (Canadian Intergovernmental Conference Secretariat, 2003)\(^v\), and the *Academy of Canadian Executive Nurses’ Leadership Paper* (Ferguson-Paré et al., 2002)\(^v\) have identified that increased attention to leadership and human resource development in health care is needed now.

Professional staff in LTC settings can become better leaders with appropriate preparation and educational support; and attention to the quality of their work life (McGilton et al., 2004).\(^v\)

**Recommendation: System Issues**

LTC homes should have a process in place that ensures adherence to the ethical and legislative rights of the older resident. [D]

The interdisciplinary team should encourage and facilitate elderly people to understand who is their Substitute Decision Maker (SDM) in the hierarchy of SDMs while still mentally capable. The SDM is enacted when a person is deemed mentally incapable. At this point the SDM hierarchy is consulted to see who has the authority to make decisions on behalf of the patient, unless a Power of Attorney (POA) has already been appointed. When discussing issues of decision making with patient and clients, help them to understand who would be consulted to make decisions if they were no longer able to decide on their own, according to the SDM hierarchy. If they want to appoint someone who is not their first SDM according to the hierarchy to make their health decisions, then a formal POA should be appointed. For example, in Ontario the current hierarchy of SDMs is as follows:

- Guardian of the person
- Attorney in a Power of Attorney for Personal Care
- Representative as appointed by the Consent and Capacity Board
• Spouse or Partner
• Custodial Parent or child
• Parent with right of access
• Brother or Sister
• Any other relative
• Public Guardian and Trustee

If a patient has a spouse but would like their child to act as the decision maker, in this case a POA should be created. This is also the case if there are multiple children or siblings who would be eligible to act as an SDM but the patient would like to specify a particular child or sibling to make decisions on their behalf.

Ethical dilemmas emerge from a variety of issues within LTC settings and they need to be debated and resolved frequently. It is important for practitioners to know and understand their provincial law, as it is provincial law that helps to protect, promote and support seniors’ rights. Additionally, the United Nations Declaration of the Rights of Older Persons (http://www.un.org/esa/socdev/iyop/iyop-pop.htm) provides a framework for LTC homes to assess their progress in protecting and promoting the rights of older adults. It is most important, however, for practitioners to know and understand the law in the province where they practice, as it is provincial law that helps to protect, promote and support seniors’ rights.

Recommendation: System Issues

LTC homes should ensure adequate planning, allocation of required resources and organizational and administrative support for the implementation of best practice guidelines. [D]

LTC homes should monitor and evaluate the implementation of best practice recommendations. [D]

Best practice guidelines can be successfully implemented only with adequate planning, the allocation of required resources, and organizational and administrative support. Organizations’ implementation plans should include:

• Assessment of organizational readiness and barriers to education;
• Involvement of all members who will support the process;
• Dedication of a qualified individual to provide leadership for the education and implementation process;
• Ongoing opportunities for discussion and education to reinforce rationale for best practice; and
• Opportunities for reflection on individual and organizational experience in implementing the guidelines.

Organizations implementing recommendations for best practice are advised to consider the means by which the implementation and its impact will be monitored and evaluated. Considerations would include:

• Having dedicated staff provide clinical expertise and leadership with good interpersonal skills, facilitation and project management skills;
• Establishing a steering committee of key stakeholders committed to leading the initiative with an established work plan for tracking activities, responsibilities and timelines;
• Providing educational sessions and ongoing support for implementation; and
• Organizational/administrative support to facilitate the implementation and evaluation.
Caring for residents in LTC homes with mental health problems is often challenging. Concern about the quality of care around the globe led to the recent formation of an International Psychogeriatric Association (IPA) Task Force on Mental Health Services in Residential Care Homes (http://www.ipa-online.org). Early discussions suggest that similar issues are relevant in almost all countries. These issues include inadequate staffing levels, lack of staff training regarding mental health issues, aging and poorly designed LTC homes, failure to identify and assess residents in a timely fashion, inappropriate use of psychotropic medications, limited availability of mental health consultants, etc.

Although we share these issues in Canada, there are model LTC homes which offer excellent care and in some regions first rate mental health services. Different models of service are applied but there is some evidence that liaison-style services (e.g., multidisciplinary and including education) may be more effective than the traditional medical consultation model (Draper, 2000). There have been a number of innovative educational programs including the PIECES Program (http://www.piecescanada.com/pc-on.html) and the funding of Psychogeriatric Resource Consultants in Ontario.

We hope that these Guidelines will prove to be useful to frontline staff, consultants, administrators, accreditation bodies and others in the service of the residents we care for, as well as for their families. We realize that it may be difficult to implement all of the recommendations given the challenges described in this guideline document, but we hope that each facility will strive to adopt as many as possible.

We view this as a dynamic document and plan to periodically update the recommendations as new developments occur. Updates will be posted on the CCSMH website (www.ccsmh.ca). We need your feedback regarding how to improve the document so please fill out the feedback survey on the CCSMH website or contact us directly. We are also planning a national survey of LTC homes to obtain feedback on the implementation of the Guidelines.


Houde D. Psychogeriatric services planning project. Greater Vancouver Regional District Vital Planning and Development, 1 - 73. Vancouver (BC); 1996.


interRAI [homepage on the Internet]. 2006. Available from:www.interRAI.org


MacCourt P. Brief to the Senate Standing Committee on Social Affairs, Science and Technology. Vancouver, BC; June 2005: p. 4.


University of Iowa Gerontological Nursing Interventions Research Center. Wheelchair biking for the treatment of depression. Iowa City (IA): University of Iowa Gerontological Nursing Interventions Research Center, Research Dissemination Core; 2003.


Appendix A: Guideline Development Process

Approval for Guideline Project from Pop. Health, Fund, Public Health Agency of Canada

Guideline Topics Formalized

Determine & Formalize Co-Leads for each group

Determine & Formalize Group Members and Consultants
- Determined criteria for selection
- Gathered Names and Contacted individuals
- Formalized membership

Phase 1: Group Administration & Preparation for Draft Documents (April - June 2005)

Meetings with Co-Leads & Individual Workgroups

- Terms of Reference
- Guiding Principles
- Scope of Guidelines

Comprehensive literature and guideline review

Creation of Guideline Framework Template
- Identification of guideline & literature review tools and grading of evidence

Phase 1 I: Creation of Draft Guideline Documents (May - Sept. 2005)

Meetings with Co-Leads & Workgroups

Shortlist, Review & Rate literature and guidelines

Summarize evidence, gaps & recommendations

Create draft guideline documents

Review and revise draft documents

Phase III: Dissemination & Consultation

Stage 1: To guideline group members (May - Dec.2005)


Feedback from external stakeholders reviewed

Achieving consensus within guideline groups on content & recommendations

Final revisions to draft documents

Phase V: Completion of Final Guideline Document (Jan. 2006)

Phase VI: Dissemination & Evaluation (Mar. 2006)
Avorn and Gurwitz (1995) outlined some basic questions that should be asked prior to the prescribing of any drug in LTC settings. These questions are listed in Table 1.

### Table 1: Questions to be asked in evaluating any drug use in a nursing home

1. What is the target problem being treated? (Can we also identify the goal of therapy as well?)
2. Is the drug necessary?
3. Are nonpharmacologic therapies available?
4. Is this the lowest practical dose?
5. Could discontinuing therapy with a medicine help to reduce symptoms?
6. Does this drug have adverse effects that are more likely to occur in an older patient?
7. Is this the most cost-effective choice?
8. By what criteria, and at what time, will the effects of therapy be assessed?

Studies have shown that there has frequently been a failure to document reasons for prescribing medications in LTC settings. It is important to describe and document the target problem being treated, clearly identify treatment goals, to consider alternatives to medications, to review potential adverse effects, interactions, and most importantly, to determine by what criteria, and when, the effects of therapy will be reassessed. Beers and colleagues (1991) convened a panel of national experts in the United States in an attempt to reach a consensus on defining inappropriate medication use in the nursing home. Using these criteria, they reported that more than 40% of residents had at least one inappropriate prescription in a group of California nursing homes.

Most studies suggest that between 50% and 75% of nursing home residents have at least one prescription for a psychotropic medication. The patterns and rates of use of these medications vary widely from institution to institution and from country to country. Snowden (1993) notes that factors which might explain these variations include differences in the prevalence and severity of disorders, levels of physical disability, prescribing habits of physicians, involvement by pharmacists, number of untrained staff, size and design of institutions, funding and type of institutions, socio-economic background of the residents, and policies regarding admissions. Concerns about the use of psychotropic medications have included the lack of a documented diagnosis, physician characteristics (rather than those of patients) predicting drug dosage, mental health consultation being rarely available for LTC residents and the high risk of complications, such as falls, fractures and movement disorders. Particular concerns have been raised with regard to the possible overuse of antipsychotic (neuroleptic) drugs and benzodiazepines.

Before prescribing any psychotropic medication it is important to rule out any acute medical conditions (such as infections), and consider the differential diagnosis including medication treatment and management of coexisting chronic medical conditions that may be contributing to the changes in mood or behaviour. It is important to be aware of the altered pharmacokinetics and pharmacodynamics of medications in the older adult.

The American Society of Consultant Pharmacists (ASCP) has developed “Guidelines for the Use of Psychotherapeutic Medications in Older Adults” (1995). The eight guidelines are as follows:

1. Older adults should be screened for presence of affective, cognitive and other psychiatric disorders.
2. Older adults who exhibit symptoms of psychiatric disorders should be thoroughly assessed by a qualified health care professional.
3. Behavioural symptoms in older adults should be objectively and quantitatively monitored by caregivers or facility staff and documented on an ongoing basis. When possible, psychiatric symptoms should also be monitored in this fashion.
4. If the behaviours do not present an immediate serious threat to the patient or others, the initial approach to management of behavioural symptoms in older adults should focus on environmental modifications, behavioural interventions, psychotherapy or other nonpharmacologic interventions.
5. When medications are indicated, select an appropriate psychotherapeutic agent, considering effectiveness of the medication and risk of side effects.
6. Begin medication at the lowest appropriate dosage and increase the dose gradually.
7. Monitor the patient for therapeutic response from the medication and for adverse drug reactions.
8. The psychotherapeutic medication regimen should be routinely re-evaluated for the need for continued use of medication, dosage adjustments or a change in medication.

### Appendix B. General Principles for Pharmacological Intervention