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NATIONAL GUIDELINES FOR SENIORS' MENTAL HEALTH

The Assessment and Treatment of Depression



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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.

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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 chosen 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 and they 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 preva-

lence 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 (Drance, 2005; Rovner et al., 1990).

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). With the projected growth of the seniors' population, the lack of an accepted national standard to guide their care is a serious problem.

We have 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
- Should 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 & 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 & 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

Phase III: Dissemination & Consultation (May 2005/Jan. 2006)

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.

Phase IV: Revised Draft of Guideline Documents (Oct. 2005/Jan. 2006)

- 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

Phase V: Completion of Final Guideline Document (Dec. 2005/Jan. 2006)

- 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.

Guideline and Literature Review

A strategic and comprehensive guideline and literature review on the assessment and treatment of depression in older adults was completed.

Search Strategy for Existing Evidence

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

- English language references only
- References specifically addressed depression
- Dissertations were excluded
- Guidelines, meta-analyses and reviews were dated January 1995 to May 2005
- Research articles were dated January 1999 to June 2005

Guideline, Meta-analyses and Literature Reviews Search

The initial search for existing evidence-based summaries (e.g., guidelines, protocols, etc.) examined several major databases, specifically, Medline, EMBASE, PsychInfo, CINAHL, AgeLine, and the Cochrane Library. The following search terms were used: "depression", "major depression", "depressive disorder", "bi-polar disorder", "elderly", "older adult(s)", "aged", "geriatric", "depression guideline(s)", "elderly depression guideline(s)", "practice guideline(s) depression", "practice guideline(s) older adults depression", "protocol(s) depression", "clinical pathways", "clinical practice guideline(s)", "best practice guideline(s)", and "clinical guideline(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 Guidelines Clearinghouse: <http://www.guideline.gov/>

- National Institute on Aging: <http://www.nia.nih.gov/>
- 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 twenty-four potentially relevant guidelines. These were further considered by the Guideline Development Group as to whether they addressed the guideline topic specifically and were accessible either online, in the literature, or through contact with the developers. Through this process and after conducting a quality appraisal of these guidelines using the *Appraisal of Guidelines for Research and Evaluation Instrument* (AGREE); (AGREE Collaboration, 2001), seven guidelines were selected and obtained for inclusion as the literature base for the project. These seven guidelines were:

- Alexopoulos GS, Katz IR, Reynolds CF, Carpenter D, Docherty JP. The expert consensus guideline series: Pharmacotherapy of depressive disorders in older patients. A Postgrad Med Special Report. New York: McGraw-Hill; 2001.
- Baldwin RC, Chiu E, Katona C, Graham N. Guidelines on depression in older people: practicing the evidence. London: Martin Dunitz Ltd; 2002.
- Kurlowicz LH. Nursing protocol standard of practice protocol: depression in elderly patients. *Geriatric Nursing* 1997;18(5):192-200.
- Peck S. Clinical guideline for the care and treatment of older people with depression in a general hospital setting. Isle of Wight Healthcare; 2003. [On-line]. Available: <http://www.iow.nhs.uk/Department/mental/older/pdfs/Depression%20Guideline.pdf>
- Registered Nurses Association of Ontario (RNAO). Care-giving strategies for older adults with delirium, dementia and depression. Toronto (ON): Registered Nurses Association of Ontario; 2004. Available: http://www.rnao.org/bestpractices/completed_guidelines/BPG_Guide_C4_care_giving_elders_ddd.asp

- Registered Nurses Association of Ontario (RNAO). Screening for delirium, dementia and depression in older adults. Toronto (ON): Registered Nurses Association of Ontario; 2003. Available: http://www.rnao.org/best_practices/completed_guidelines/BPG_Guide_C3_ddd.asp
- Royal Australian and New Zealand College of Psychiatrists. Australian and New Zealand clinical practice guidelines for the treatment of depression. New Zealand; 2004. [On-line]. Available: <http://www.ranzcp.org/pdffiles/cpgs/Depression%20Clinican%20Full.pdf>

Supplemental Research Literature Search

The timeframe (1999-2005) 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, PsycINFO, HealthStar, Embase, CINAHL, Cochrane Library), with necessary variance in controlled vocabulary (i.e., minor differences in search terms as proscribed 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 1999 and 2005.

The key words used in all the literature searches were: "endogenous depression", "reactive depression", "spreading depression", "recurrent depression", "involutional depression", "anaclitic depression", "treatment resistant depression", "depression", "major depression", "depressive disorder", "bi-polar disorder", "affective disorder", "evidence based practice", "best practice", "meta analysis", "systematic review", "empirical studies", "clinical trial(s)", "interdisciplinary treatment approach", "care plan", "medical diagnosis", "diagnosis", "therapy", "treatment", "prevention", "rehabilitation", "drug therapy", "professional practice", "research based", "geriatric", "aged", and "elderly".

This process yielded over 200 citations. The abstracts were circulated to the Guideline Development Co-leads and 149 recent research articles were selected. Full text articles were obtained and disseminated to Guideline Group Members. As the development of the guideline document progressed, additional literature (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 essentially 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).^{Category of Evidence}

Categories of evidence for causal relationships and treatment

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

(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 with depression, 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 the rating 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 the assessment and treatment of depression.

Strength of recommendation

Directly based on category I evidence	A
Directly based on category II evidence or extrapolated recommendation from category I evidence	B
Directly based on category III evidence or extrapolated recommendation from category I or II evidence	C
Directly based on category IV evidence or extrapolated recommendation from category I, II, or III evidence	D

(Shekelle et al., 1999)

Key Concepts, Definitions and Abbreviations

Key Concepts and Definitions

There are several key concepts and definitions that underpin the discussion of the literature and formulation of the recommendations presented in this document. In alphabetical order, these are as follows:

Assessment: Refers to the process that follows a positive screen and involves evaluating the depression and the patient in a more specific fashion in order to establish the diagnosis and develop a treatment plan.

Depression: The term depression is used when a cluster of depressive symptoms is present on most days, for most of the time, for at least 2 weeks and when the symptoms are of such intensity that they are out of the ordinary for that individual.

Dysthymic Disorder: A mood disorder with depressed mood present for most of the day, for more days than not, as indicated either by subjective account or observation by others, for at a duration of at least 2 years.

Minor Depressive Disorder: A depressive episode of at least 2 week duration with fewer depressive symptoms than the five required for meeting the criteria of a major depressive episode.

Relapse: The re-appearance of full syndromal depression within 6 months of remission of the index episode and is felt to be related to the continuation of that episode.

Screening: Refers to the process of detecting or identifying a possible case of depression among a specific population.

Systems of Care: An organized grouping of healthcare networks working in collaboration to provide treatment for older adults with depression.

Abbreviations

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

ACT: Assertive Community Treatment

BASDEC: Brief Assessment Schedule for the Elderly

BDT: Brief Dynamic Therapy

BT: Behavioural Therapy

CAMDEX: Cambridge Mental Disorders of the Elderly Examination

CARE: Comprehensive Assessment and Referral Evaluation

CBT: Cognitive-Behavioural Therapy

CES-D: Center for Epidemiological Studies- Depression Scale

CIE: Canberra Interview for the Elderly

DBT: Dialectical Behaviour Therapy

DMAS: Dementia Mood Assessment Scale

DSM-IV: Diagnostic and Statistical Manual, 4th Edition

ECG: Electrocardiogram

ECT: Electroconvulsive Therapy

GDS: Geriatric Depression Scale

GMSS: Geriatric Mental State Schedule

ICD 10: International Classification of Disease, 10th Edition

IMPACT: Improving Mood-Promoting Access to Collaborative Treatment

IPT: Interpersonal Psychotherapy

LTC: Long Term Care

NNT: Number Needed to Treat

PROSPECT Study: The Prevention of Suicide in Primary Care Elderly Collaborative Trial

PST: Problem-Solving Therapy

RT: Reminiscence Therapy

SIADH: Syndrome of Inappropriate Anti-diuretic Hormone Secretion

Sig: E Caps: A mnemonic for the depressive symptoms of geriatric depression – sleep disturbance; low interest; excessive feelings of guilt; decreased energy; problems with concentration; changes in appetite; psychomotor retardation or agitation; thoughts of death or suicide.

SSRI: Selective Serotonin Reuptake Inhibitor

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 a discussion of the literature relevant to the recommendations for that section, followed by the recommen-

dations. 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: Screening and Assessment

Recommendations: Screening and Assessment – Risk Factors (p. 22)

Health care providers should be familiar with the physical, psychological, and social risk factors for depressive disorders in older adults and include a screening for depression for their clients/patients who present with some of these risk factors. [D]

We recommend targeted screening of those elderly at higher risk for depression due to the following situations:

- Recently bereaved with unusual symptoms (e.g., active suicidal ideation, guilt not related to the deceased, psychomotor retardation, mood congruent delusions, marked functional impairment after 2 months of the loss, reaction that seems out of proportion with the loss)
- Bereaved individuals, 3 to 6 months after the loss
- Socially isolated
- Persistent complaints of memory difficulties;
- Chronic disabling illness
- Recent major physical illness (e.g., within 3 months)
- Persistent sleep difficulties
- Significant somatic concerns or recent onset anxiety
- Refusal to eat or neglect of personal care
- Recurrent or prolonged hospitalization
- Diagnosis of dementia, Parkinson disease or stroke
- Recent placement in a nursing/Long Term Care (LTC) home [B]

Recommendations: Screening and Assessment – Screening and Screening Tools (p. 22)

Health care providers should have knowledge and skills in the application of age-appropriate screening and assessment tools for depression in older adults. [D]

In hospital settings, we recommend screening high risk elderly upon intake, or as soon as the acute condition has stabilized. [D]

Appropriate depression screening tools for elderly persons without significant cognitive impairment in general medical or geriatric settings include the self-rating *Geriatric Depression Scale (GDS)*, the *SELFCARE self-rating scale*, and the *Brief Assessment Schedule Depression Cards (BASDEC)* for hospitalized patients. [B]

For patients with moderate to severe cognitive impairment, an observer-rated instrument, such as the *Cornell Scale for Depression in Dementia* is recommended instead of the *GDS*. [B]

Recommendations: Screening and Assessment – Further Assessment (p. 22)

Following a positive screen for depression, a complete bio-psycho-social assessment should be conducted, including:

- A review of diagnostic criteria outlined in DSM IV-TR or ICD 10 diagnostic manuals
- An estimate of severity, including the presence of psychotic or catatonic symptoms.
- Risk assessment for suicide
- Personal and family history of mood disorder
- Review of medication use and substance use
- Review of current stresses and life situation
- Level of functioning and/or disability
- Family situation, social integration/support and personal strengths
- Mental status examination, including assessment of cognitive functions
- Physical examination and laboratory investigations looking for evidence of medical problems that could contribute to or mimic depressive symptoms [D]

LTC homes' assessment protocols 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. [D]

Recommendations: Screening and Assessment – Suicide (p. 22)

Clinicians should always assess the risk of suicide in patients with suspected depression by directly asking patients about suicidal ideation, intent and plan. Those at high risk for suicide should be referred to a specialized mental health professional and/or service as a priority for further assessment, treatment, and suicide prevention strategies. [D]

Recommendation: Treatment Options for Type and Severity of Depression

Recommendation: Treatment: Adjustment Disorder with Depressed Mood (p. 23)

We recommend initial treatment with supportive psychosocial interventions or psychotherapy. If symptoms become severe enough to meet DSM IV diagnostic criteria for a depressive disorder or persist after resolution of the stressor, more specific therapies in keeping with the revised diagnosis should be considered (e.g., medication, more intensive/specific psychotherapy). [D]

Recommendations: Treatment: Minor Depressive Disorder (p. 24)

Patients with minor depression of less than 4 weeks duration should be treated with supportive psychotherapy or psychosocial interventions. [D]

Pharmacological treatment or evidence-based psychotherapy should be considered if symptoms persist for more than 4 weeks after psychosocial interventions have been initiated. [D]

Recommendations: Treatment: Dysthymic Disorder (p. 24)

Patients with dysthymic disorder should be treated with pharmacological therapy, with or without psychotherapy, with periodic reassessment to measure response. [B]

In specific clinical situations, for example where patients do not wish to take antidepressants, psychotherapy may be used alone with periodic reassessment to measure response. [D]

Recommendation: Treatment: Major Depressive Disorder, Single or Recurrent Episode – Mild to Moderate Severity (p. 24)

Mild or moderate unipolar major depression should be treated pharmacologically using antidepressants or with psychotherapy or a combination of both. [A]

Recommendations: Treatment: Major Depressive Disorder, Single or Recurrent Episode – Severe but Without Psychosis (p. 25)

Patients with severe unipolar depression should be offered a combination of antidepressants and concurrent psychotherapy when appropriate services are available and there is no contra-indication to either treatment. [D]

ECT should be considered if adequate trials of antidepressants combined with psychotherapy have been ineffective or if the health of the patient is deteriorating rapidly due to depression. [D]

Recommendation: Treatment: Major Depressive Disorder, Single or Recurrent Episodes – Severe with Psychotic Features (p. 26)

If there is no specific contra-indication to its use, patients with psychotic depression should be offered treatment with ECT when available. Alternatively, a combination of antidepressant plus antipsychotic medication should be used. If this combination is not effective (e.g., poorly tolerated, no improvement in at least some of the symptoms within 4-8 weeks of treatment, or lack of remission despite optimisation of dose and duration of treatment over more than 8-12 weeks), ECT needs to be offered. ECT should also be considered if severe health consequences (e.g., suicide, metabolic derangement) are imminent because pharmacological treatment has been poorly tolerated or would be too slow to provide needed improvements. [D]

Recommendation: Referrals for Psychiatric Care at Time of Diagnosis

Recommendation: Treatment: Referrals for Psychiatric Care at Time of Diagnosis (p. 26)

Clinicians should refer patients with the following to available psychiatry services:

- Psychotic depression
- Bipolar disorder
- Depression with suicidal ideation or intent

Additionally, patients with the following conditions may benefit from such referral:

- Depression with co-morbid substance abuse
- Major depressive episode, severe
- Depression with co-morbid dementia [D]

Recommendations: Psychotherapies and Psychosocial Interventions

Recommendations : Psychotherapies and Psychosocial Interventions (p. 31)

Supportive care should be offered to all patients with depression. [B]

Evidence based psychotherapies recommended for geriatric depression include: behaviour therapy; cognitive-behaviour therapy; problem-solving therapy; brief dynamic therapy; interpersonal therapy; and reminiscence therapy. [A]

Psychotherapy and/or psychosocial interventions should be available to patients with dysthymic disorder, minor depression, or depressive symptoms of normal grief reactions during bereavement. [B]

Psychotherapy should be available to patients suffering from major depression, either alone as first line treatment or in combination with antidepressant medication, for individuals who prefer this treatment modality and are able to safely participate in treatment (e.g., no severe cognitive impairment, no psychotic symptoms). [A]

Psychotherapy in combination with antidepressant medication should be available to patients with severe major depression, or chronic or recurrent depression. [A]

At least one form of psychosocial intervention should be offered to the patient depending upon the patient's needs and preferences, and available resources. These interventions should be delivered by professionals who have had some training in the provision of geriatric care. [C]

Psychotherapies should be delivered by trained mental health professionals. It is recommended that health care teams and professionals treating elderly depressed patients have access to personnel with training and competence in delivering psychotherapies which have demonstrated efficacy. When psychotherapy is not available, supportive care should be offered and other psychosocial interventions should be considered. [D]

Recommendations: Pharmacological Treatment

Recommendations: Selecting an Appropriate Antidepressant (p. 34)

Older patients have a response rate with antidepressant therapy similar to younger adults. Clinicians should approach elderly depressed individuals with therapeutic optimism. [A]

Antidepressants should be used when indicated, even in patients with multiple co-morbidities and serious illnesses, as they have similar efficacy rates compared with use in well elderly. Adverse events in patients with multiple co-morbidities can be minimized by careful selection of drugs that are not likely to worsen or complicate patient-specific medical problems. [B]

Co-morbid psychiatric disorders, particularly generalized anxiety disorders and substance abuse, should be identified and appropriately treated as they will adversely influence the outcome of depression. In cases where benzodiazepines have to be used to prevent acute withdrawal or as a temporary measure until antidepressants or psychotherapeutic interventions take effect, there should be a review and gradual discontinuation when feasible. Clinicians should avoid the use of benzodiazepines for treatment of depressive symptoms with elderly patients. [B]

Recommendations: Monitoring for Side Effects and Drug Interactions (p. 36)

Clinicians should choose an antidepressant with the lowest risk of drug-drug interactions when patients are taking multiple medications. Good choices include citalopram, sertraline, venlafaxine, bupropion and mirtazapine. [C]

We recommend that physicians and pharmacists consult up-to-date drug interaction data bases when a new antidepressant is prescribed to patients taking multiple medications. [C]

When choosing agents from a specific class, clinicians should select those found to be safer with the elderly (e.g., selecting drugs with the lowest anti-cholinergic properties amongst available antidepressants). [D]

When starting antidepressant therapy (e.g., SSRI or venlafaxine), clinicians should monitor for serotonin-related side effects (such as agitation) and for short-term worsening of symptoms. [B]

When initiating any antidepressant, we recommend monitoring for suicidal ideation and risk. [C]

Tricyclic antidepressants (TCAs) should not be used in patients with conduction abnormalities on electrocardiogram (ECG) or postural hypotension. [B]

If TCAs are used, clinicians should monitor for postural hypotension, cardiac symptoms and anti-cholinergic side effects and blood levels. [D]

We recommend checking sodium blood levels after one month of treatment with SSRIs, especially with patients taking other medications that can cause hyponatremia (e.g., diuretics). [C]

We recommend checking sodium levels before switching to another agent due to poor response or tolerance or when patients display symptoms of hyponatremia (e.g., fatigue, malaise, delirium). [C]

Recommendations: Titration and Duration of Therapy (p. 37 – 38)

When starting antidepressants, patients should be seen at weekly intervals for several weeks to assess response, side effects, and to titrate the dose. Visits should include, at a minimum, supportive psychosocial interventions and monitoring for worsening of depression, agitation and suicide risk. [D]

Clinicians should start at half of the recommended dose for younger adults, but aim at reaching an average dose within one month if the medication is well tolerated at weekly reassessments.

If there is no sign of improvement after at least 2 weeks on an average dose, further gradual increases are recommended until there is either some clinical improvement, limiting side effects, or one has reached the maximum recommended dose. [D]

Before considering a change in medication, it is important to ensure an adequate trial. Change should be made if:
there is no improvement in symptoms after at least 4 weeks at the maximum tolerated or recommended dose;
there is insufficient improvement after 8 weeks at the maximum tolerated or recommended dose. [C]

When significant improvement has occurred but recovery is not complete after an adequate trial, the clinician should consider:

- a further 4 weeks of treatment with or without augmentation with another antidepressant or lithium or specific psychotherapy (e.g., IPT, CBT, Problem-solving);
- a switch to another antidepressant (same or another class) after discussing with the patient the potential risk of losing any significant improvements made with the first treatment. [C]

Augmentation strategies require supervision by experienced physicians. [D]

When switching agents, it is generally safe to reduce the current medication while starting low doses of the alternate agent. Specific drug interaction profiles need to be checked for both drugs involved during this overlap since antidepressants commonly interact with each other. [C]

Given its long half-life and risk of interaction with many of the drugs prescribed for the elderly, we do not recommend the use of fluoxetine as first-line treatment despite its documented efficacy. [C]

Antidepressants, especially SSRIs, should not be abruptly discontinued but should be tapered off over a 7 to 10 day period when possible. [C]

Recommendations: Monitoring and Long Term Treatment

Recommendations: Monitoring and Long Term Treatment (p. 40)

Health care providers should monitor the older adult for re-occurrence of depression for the first 2 years after treatment. Ongoing monitoring should focus on depressive symptoms that were present during the initial (index) episode. [B]

Assistance from specialists may be required for the long term treatment of patients with severe symptoms affecting function and overall health, psychotic depression, depression with active suicidal ideation, depression with bipolar disorder, and depression that has not responded to treatment trials. [D]

Older patients who achieve remission of symptoms following treatment of their first episode of depression should be treated for a minimum of one-year (and up to 2 years) with their full therapeutic dose. [B]

When discontinuing antidepressant treatment after remission of symptoms, we recommend a slow taper over months, monitoring closely for recurrence of symptoms and resuming full therapeutic dose if there is any sign of relapse or recurrence. [D]

An evidence based psychotherapy represents a treatment option for patients who present with relapse and incomplete remission [B].

Older patients with partial resolution of symptoms should receive indefinite maintenance therapy and ongoing efforts at a complete resolution of symptoms through the use of augmentation or combination strategies, as well as consideration for ECT. [B]

Older patients who have had more than 2 depressive episodes, had particularly severe or difficult-to-treat depressions or required ECT should continue to take antidepressant maintenance treatment indefinitely, unless there is a specific contra-indication to its use. [D]

For those patients who fail to remain well with traditional maintenance therapy but have responded well to ECT, maintenance ECT may be a useful option. [D]

In LTC homes, the response to antidepressant therapy should be evaluated monthly after initial improvement and at quarterly care conferences, as well as at the annual assessment after remission of symptoms. A decision to continue or discontinue the antidepressant therapy should be based on:

- whether the depression has been treated long enough to allow sustained remission of symptoms (e.g., now one year of full remission); or
- whether the treatment is still tolerated well in the context of their health problems; and
- the risks of discontinuation (i.e., return of original depressive symptoms) are less than those associated with continuation of medication. [D]

Recommendations: Education and Prevention (p. 41 - 42)

Specialized content in regards to assessment and treatment of depression in older adults should be included as part of the basic education and continuing education programs of all health care professionals. [D]

Specific training on geriatric mental health issues should be provided for personnel caring for depressed older adults. [D]

Health care professionals should provide older depressed adults with education regarding the nature of depression, its biological, psychological and social aspects, effective coping strategies, and lifestyle changes that will assist their recovery, while being mindful of the individual's stresses and strengths. [B]

Families of depressed older adults should be provided with information regarding the signs and symptoms of depression, attitudes and behaviours of the depressed person and their own reaction to them, and depression coping strategies, as well as available treatment options and the benefits of treatment. [D]

Public education efforts should focus on the prevention of depression and suicide in older adults. [D]

Recommendations: Special Populations

Recommendations: Special Populations: Bipolar Disorder (p. 43 – 44)

Elderly individuals who present with manic or hypo-manic symptoms for the first time after age 65 need a thorough assessment for possible underlying medical causes. [C]

A mood stabilizer (e.g. lithium) should be the first line treatment of bipolar disorder. When depressive episodes occur despite prior stabilization with a mood stabilizer, antidepressant medication needs to be added. [B]

The choice of mood stabilizer should be based on prior response to treatment, type of illness (e.g., rapid-cycling or not), medical contra-indications to the use of specific mood stabilizers (i.e., side effects that could worsen pre-existing medical problems), and potential interactions with other drugs required by the patient. [C]

All mood stabilizers require monitoring over time for possible short-term and longer term adverse events. [B]

Recommendations: Special Populations: Dementia (p. 45)

Patients who have mild depressive symptoms or symptoms of short duration should be treated with psychosocial supportive interventions first. [D]

Pharmacological treatment is recommended for patients who have major depression co-existing with dementia. [B]

In selecting pharmacological treatment for depression with dementia, clinicians should select drugs that have low anticholinergic properties, such as citalopram and escitalopram, sertraline, moclobemide, venlafaxine, or bupropion. [C]

Psychosocial treatment should be part of the treatment of depression co-existing with dementia. This treatment should be flexible to account for the decline in functioning as well as multifaceted to provide help with the diversity of problems facing the patient and caregiver. It should be delivered by clinicians sensitized to the vulnerabilities and frailties of older adults with dementia. This treatment should include helping caregivers deal with the disease in a skill-oriented manner. [A]

For patients who have psychotic depression and dementia, a combination of antidepressant and antipsychotic medication is usually the first choice, although ECT may be used if medications are ineffective or rapid response is required to maintain safety. [D]

Recommendations: Special Populations: Vascular Depression (p. 45)

Patients who have had strokes should be monitored closely for the possible development of depression as a common complication of stroke, even in those who do not report depressed mood. [B]

Patients who have depression following single or multiple cerebral vascular injury should be treated following the guidelines outlined in *Section 8.3, Vascular Depression*, but taking care not to worsen their ongoing vascular risk factors. [D]

Recommendations: Models of Care (p. 48)

Health care professionals and organizations should implement a model of care that addresses the physical/functional as well as the psychosocial needs of older depressed adults.

Given the complex care needs of older adults, these are most likely to require interdisciplinary involvement in care, whether in primary care or specialized mental health settings. [B]

Health care professionals and organizations should implement a model of care that promotes continuity of care as older adults appear to respond better to consistent primary care providers. [B]

Part 1: Background

Introduction: Late Life Depression

Late-life depression is a serious and growing mental health problem (Blazer, 2002a). Prevalence studies based on structured or semi-structured interviews by British and American clinicians indicate the presence of substantial depressive symptomatology in 14.7% to 20% of elderly living in the community. In their respective studies, Copeland and colleagues (1992) reported an 11.5% presence of “diagnostic syndrome cases of depressive disorder” in Liverpool, while Gurland and colleagues (1983) found 13% and 12.4% of “clinical (pervasive) depression” in London and New York community samples. Furthermore, Blazer and Williams (1980) reported a 14.7% presence of substantial depressive symptomatology (3.7% with major depression) in Durham County. Studies based on diagnostic criteria, such as the American Psychiatric Association’s (APA) Diagnostic and Statistical Manual (DSM) and interviews by trained interviewers, identified a much lower percentage of cases (1% major depression and 2% dysthymia) (Bland et al., 1988; Weissman et al., 1988), partly because depressions associated with physical disorders and those complicating bereavement were excluded. Even when lower estimates from these studies are used, a very significant number of elderly Canadians living in the community (over 100,000) have a depressive illness and an additional 400,000 live with substantial depressive symptoms that may benefit from treatment. Research has shown the rate of depression to be even higher in older adults within hospitals (21% reported by Cooper, 1987; range of 12-45% reported by Koenig et al., 1988) and long-term care settings, where rates can be as high as 40% (Ames, 1990; Ames et al., 1988). Depression is the most common mental health problem for older adults and has profound negative impacts on all aspects of their life, not to mention the impact on family and the community. Despite its prevalence, depression should not be considered a normal part of aging. Common depressive symptoms, such as decreased energy and interest, poor sleep and increasing preoccupations with health problems, should be viewed as possible symptoms of a treatable illness rather than inevitable changes of aging. However, conditions that are common with aging can be associated with or complicated by depression. These include dementia, stroke, and Parkinson’s disease.

The identification and diagnosis of depression can be a challenge in all age groups but particularly in the elderly, leading to under-diagnosis or misdiagnosis. Common barriers to identification and assessment include communication limitations, such as hearing impairment, and the pres-

ence of dementia or cognitive impairment, which interferes with accurate reporting of depressive symptoms and their duration. Dementia, a common illness in this age group, may contribute to symptoms of depression, but may also be mistaken for depression, particularly early in its course when withdrawal from usual interests and apathy may be prominent. With the present cohort of elderly, other factors affecting presentation and diagnosis include greater social stigma of depression and poor understanding of normal aging changes versus illness. As such, older adults may be less likely to report depression or visit a physician for mood concerns. Given that depression affects bodily functions (e.g., sleep, digestion) it is often difficult to sort out whether these physical changes are due to depression or concurrent medical illnesses that are prevalent in the elderly.

There are huge personal, social, and economic costs associated with depression in the elderly. Depression late in life is associated with significant functional decline, family stress, greater risk of medical illness, reduced recovery from illness, and premature death from suicide or other causes (Blazer et al., 2001; Charney et al., 2003; Unutzer et al., 2000). Older patients with depression may become functionally impaired and require placement when the level of assistance they require exceeds the capacity of their formal and informal caregivers in the community. Depression often interferes with recovery from common medical problems of old age (e.g., stroke) and efforts to physically rehabilitate depressed people are often thwarted by low motivation and participation, leading to poor outcomes.

It is important that clinicians be aware of the prevalence of depression, the challenges of diagnosis, and the complexity of caring for older adults who are often also medically ill. However, it is also vital that clinicians realize that depression in the elderly is treatable and that treatment can result in major functional, social, and health gains.

Overview: Guideline Sections

The initial section of this Guideline addresses the issues and processes of screening and assessing for depression and outlines the various treatment approaches (i.e., psychotherapy and pharmacological interventions) related to types of depression and degree of severity. The treatment modalities for depression are then presented in more detail, followed by recommendations for monitoring treatment. The final sections address issues related to education, special populations, and systems of care for depression in older adults.

Part 2: Screening And Assessment Of Depression In Older Adults

2.1. Screening

The term “screening” refers to the process of detecting or identifying a possible case of depression among a specific population. The term “assessment” refers to the process that follows a positive screen and involves evaluating the depression and the patient in a more specific fashion in order to establish the diagnosis and develop a treatment plan.

Current Canadian recommendations suggest that screening for depression in primary care settings should be completed only if effective follow-up and treatment can be provided (Ames, 1990; MacMillan et al., 2005). Although access to specialized geriatric mental health services remains limited in many parts of the country and in long term care settings (Conn et al., 1992), family physicians and primary care practitioners are able to provide appropriate follow up and effective treatment for a large proportion of depressed older patients, either on their own or with the assistance of various mental health professionals in their communities (e.g., psychologists, general psychiatrists). Clinicians often screen for the presence of a mood or adjustment disorder when they are aware of a precipitating event or recent loss. However, a complex array of physical, psychological, and social factors increase the risk of depression in old age. An understanding of these factors will increase clinicians’ abilities to effectively target the use of screening, particularly when several risk factors are present.

2.1.1 Risk Factors

Several risk factors for depression in the elderly are summarized by the World Psychiatric Association (1999) and Baldwin and colleagues (2002) and include the following *predisposing factors*:

- Female gender
- Being widowed or divorced
- A previous history of depression
- Brain changes due to vascular problems
- Personality type, such as avoidant or dependent personality and lifelong problems developing close relationships
- Major physical and chronic disabling illnesses
- Taking medications, such as centrally acting antihypertensive drugs (e.g., beta-blockers, calcium channel blockers, digoxin), analgesics, steroids, antiparkinsonians, benzodiazepines, and antipsychotics
- Excessive consumption of alcohol
- Social factors (e.g., social disadvantage and low social support)
- Providing care to a significant other person affected by a major disease (e.g., dementia)

Precipitating factors include:

- Recent bereavement
- Moving to an institution such as a nursing home, particularly in the first year of placement

- Adverse life events (e.g., separation, losses, financial crisis)
- Chronic stress associated with declining health, family or marital problems and social isolation
- Persistent sleep difficulties

In addition, it is recognized that depression is a recurrent condition, even more so when it begins in late life. Therefore, it is important to consider the possibility of a recurrence in those who have a prior history of depression. The role played by the biological processes of ageing in increasing the risk for depression is still a matter of debate (Krishnan, 2002). Hyperactivity and dysregulation of the hypothalamic-pituitary axis have been associated with depression in all age groups, but also with conditions commonly associated with ageing, such as dementia. Increases in brain monoamine oxidase and other brain changes affecting neurotransmitters (e.g., norepinephrine and serotonin) may be partly responsible for the appearance of late life depression (Kenney, 1982).

Furthermore, medical conditions such as stroke, Parkinson’s disease, and Alzheimer disease/dementia are associated with increased risk of depression, especially if functional problems result from these medical illnesses (Robinson et al., 1999). However, risk factors for cerebral-vascular disease (e.g., hypertension, smoking and alcohol consumption) are also associated with increased rates of depression, even in the absence of functional limitations (Hamalainen et al., 2001).^{11a} In primary care settings, persons with the higher risk for depression are those with recent major physical illnesses (i.e., within 3 months), chronic handicapping illness, or receiving high levels of home support. Older adults who lost a spouse were nine times more likely to suffer from depression than their married counterparts (Turvey et al., 1999). In addition to recent bereavement, social isolation or persistent complaint of loneliness, and persistent sleep difficulties also represent risk factors for depression (Baldwin et al., 2002).^{11b}

Screening is most effective when targeted to higher risk groups. The presence of risk factors for depression (listed earlier) should prompt clinicians to consider the use of a screening tool or inquire about symptoms that make up the diagnostic criteria for a depressive disorder.

2.1.2 Screening Tools

A variety of tools have been developed for screening and assessing depression in older adults. These tools were developed to reflect the differences in presentation of depression in older patients and to address issues such as the presence of concurrent medical disorders (e.g., dementia). A good review and compendium of rating scales specific to geriatrics was published by Burns and colleagues (1999).

The following *short screening tools are primarily used in general medical practice, nursing/residential homes or inpatient settings*:

- The *Geriatric Depression Scale (GDS)*, initially a 30 item self rating scale with a cut-off of 11 (with 84% sensitivity and 95% specificity) (Almeida & Almeida, 1999; Hoyl et al., 1999; Yesavage et al., 1982). A 15-item short form of the GDS is also available with a recommended cut-off of 7 for similar sensitivity and specificity (Leshner & Berryhill, 1994; Shiekh & Yesavage, 1986). The efficiency of the GDS appears to diminish with increases in cognitive impairment (Burke et al., 1989; Feher et al., 1992). Even briefer versions, a 4 item and a 10 item version have been developed (Katona, 1994; Shah et al., 1997,1996).
- The *Brief Assessment Schedule for the Elderly (BASDEC)* is composed of 19 cards with depressive statements, which are handed out by an interviewer and placed by the patient in a True, False or Don't Know pile (Adshead et al., 1992). This screening tool has been used with hospitalized patients with medical illness (Adshead et al., 1992).^{1b} A score of 7 or more indicates the likely presence of a depressive disorder.
- The *SELFCARE (D)* is a 12 item scale derived from the *Comprehensive Assessment and Referral Evaluation (CARE)* schedule (Bird et al., 1987). A cut off of 5/6 yields a sensitivity of 77% and specificity of 98% with a positive predictive value of 96%.

For community surveys, the following tools have been used:

- The *Center for Epidemiological Studies- Depression scale (CES-D)* is a 20 item self administered scale often used in epidemiological research (Radloff, 1990; Radloff & Teri, 1986). However, it may not be suitable for individuals with visual or cognitive impairments. A cut off of 16 out of a maximum of 60 points suggests mild depression and 23 or more indicates clinically significant depression.
- The *Geriatric Mental State Schedule (GMSS)* is a 45 minute interview with a trained interviewer (Copeland et al., 1976; Gurland et al., 1976). It measures a wide range of psychopathology in the elderly, including depression. It has been translated in a number of different languages and can be administered via a laptop computer.

Screening tools for depression occurring in the presence of dementia or significant cognitive difficulties include:

- The *Cornell Scale for Depression in Dementia* is a 19 item scale completed through a relatively short interview with a family member or caregiver (20 minutes) and the patient (10 minutes) (Alexopoulos et al., 1988). It was developed to facilitate the identification of depression in individuals who have dementia. It is often included as part of the protocols of geriatric assessment teams in Canada.

- The National Institute of Mental Health's *Dementia Mood Assessment Scale (DMAS)* is a 24-item scale, which uses direct observation and a semi-structured interview with the patient by a trained interviewer to measure mood symptoms in cognitively impaired subjects (Sunderland et al., 1988). The DMAS is partially derived from the *Hamilton Depression Rating Scale* and it has been validated in relation to the GDS and the *Montgomery and Asberg Depression Rating Scale*.
- The *Canberra Interview for the Elderly (CIE)* is an interview schedule with patient and informants to identify cases of dementia and depression, and is mainly used in research (MacKinnon et al., 1993).
- The *Cambridge Mental Disorders of the Elderly Examination (CAMDEX)* includes an interview with patient and informants. It was primarily developed for the purpose of diagnosing dementia, but it includes a screening section for depression (Roth M et al., 1986).

The above rating scales and screening tools have been studied in different clinical settings and used by several disciplines. There is evidence for their effectiveness at identifying and assessing depression. Concerns related to rating scales, screening or evaluation tools include possible language and cultural bias, whether they can be used for diagnosis, and confusion regarding the role of these tools for monitoring treatment response.

In hospital settings, the stabilization of the acute medical condition that has prompted the admission is often necessary before an adequate screening for depression can take place. However, screening for depression is important for those persons with recurrent hospital visits or prolonged stay, and for those who present with the previously outlined risk factors. Screening has, however, not been shown to be effective at improving outcomes in a general population of elderly patients admitted to hospital (Cole et al., 2006).^{11a}

All those recently admitted to a long term care (LTC) home should be screened for depression given that relocation to a LTC home is a well recognized precipitating factor for depression and that persons who move to such a care setting also have a number of other risk factors for depression (Dwyer & Byrne, 2000; Jongenelis et al., 2004; Soon & Levine, 2002). Please refer to the *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)* (CCSMH, 2006).

2.2 Assessment of Patients with Positive Screening Tests or with Suspected Depression

When patients have a positive screen or when clinicians suspect depression based on presentation, patient self report or family concerns, a more comprehensive assessment is in

order. A sound understanding of the criteria for depression and knowledge of common presenting symptoms in older patients are keys for the assessment.

Diagnostic Criteria

Several *diagnostic criteria* have been developed for depression, none of which are specific to the elderly. The duration, fluctuation and intensity of symptoms distinguish depressive disorders from sadness, which may be appropriate to a certain circumstance or situation. For establishing a diagnosis of depression, the Diagnostic and Statistical Manual, 4th edition (DSM-IV-TR) (APA, 2000) and the International Classification of Disease, 10th edition (ICD 10) (World Health Association [WHO], 2003) require the presence of a number of core symptoms and additional symptoms.

There is insufficient evidence to suggest that major depression in older adults is distinct enough to be sub-categorized as a separate disorder. That being said, ageing may accentuate some features while minimizing others. The best-known example of this is the minimization of complaints of sadness as compared with younger people. This characteristic does not appear to be entirely explainable by social and educational factors specific to current cohorts of older adults and may have a biological basis. While depressed elderly may not complain as intensely of depressed mood and sadness in the initial consultation, they are more likely to focus on somatic symptoms, anxiety or cognitive problems. This characteristic presentation may contribute to under-recognition or misdiagnosis. For example, the presence of somatic complaints or preoccupations such as fatigue and pain may suggest hypochondriasis or prompt lengthy medical investigations (National Institute of Health Consensus Panel, 1992). Indeed, the physical or vegetative symptoms of depression are often more difficult to evaluate given the greater likelihood of concurrent medical illnesses in the elderly. Likewise, new or worsened anxiety and sleep difficulties due to depression may result in a misdiagnosis of an anxiety disorder and the use of benzodiazepines, while the focus on subjective memory complaints may lead to an incorrect diagnosis of dementia (Baldwin et al., 2002; National Institute of Health Consensus Panel, 1992).^{11b}

The term depression is used when a cluster of depressive symptoms is present on most days, for most of the time, for at least 2 weeks and when the symptoms are of such intensity that they are out of the ordinary for that individual. These depressive symptoms are defined in the DSM IV and ICD 10 as (APA, 2000; WHO, 2003):

- Depressed mood
- Loss of interest or pleasure in normal or previously enjoyable activities
- Decreased energy and increased fatigue
- Sleep disturbance
- Inappropriate or excessive feelings of guilt
- Diminished ability to think or concentrate
- Appetite change (i.e., usually a loss of appetite in the elderly) with corresponding weight change

- Psychomotor agitation or retardation
- Suicidal ideation or recurrent thoughts of death

The ICD 10 lists loss of confidence or self esteem as an additional symptom (WHO, 2003). Feelings of hopelessness or worthlessness, feeling that life is empty, avoiding social interactions, difficulty initiating new projects, and feelings of helplessness are other important symptoms. ICD 10 classifies depressive episodes as mild, moderate or severe, based on the presence of 2 or 3 core symptoms and the presence of 4 to 6 additional depressive symptoms. In Canada, most clinicians have adopted the DSM IV-TR classification which describes different types of depressive disorders (APA, 2000), including:

- Major depressive episodes (either part of a unipolar or bipolar mood disorder or secondary to a medical condition)
- Dysthymic disorder
- Depressive disorders not otherwise specified. A group of disorders that includes minor depressive disorder, postpsychotic depressive disorder of schizophrenia, and depressive disorders of unclear aetiology (e.g., primary or secondary to a general medical condition or substance induced).

It must be noted that minor depressive episodes (episodes of at least 2 weeks of depressive symptoms, but with fewer than the five symptoms required for a diagnosis of major depression) are common in the elderly. The term minor depression may be misleading in that this condition is far from trivial or inconsequential. Minor depression seems to be associated with the same negative effects as major depression and physical ill-health (Tannock & Katona, 1995).

In the DSM IV-TR, major depressive episodes may be further described according to severity (i.e., mild, moderate, severe without psychotic features) or according to specific features that may influence the choice of treatment (i.e., psychotic, catatonic, melancholic or atypical features) (APA, 2000).

Diagnostic Challenges in the Elderly

Diagnostic challenges in the elderly include diagnosing depression in the following and are explored in greater detail below:

- a) The absence of depressed mood;
- b) Those who have significant cognitive impairment, dementia or delirium;
- c) Those who complain mostly of somatic or physical problems; and
- d) Those who are recently bereaved.

a) Diagnosing Depression in the Absence of Depressed Mood: As noted above, some clinical features of depression are likely accentuated and others minimized in the elderly. For example, depressed older people complain less often of sadness or explain their depressed mood as being the conse-

quence of other depressive symptoms, such as the physical changes they experience. This important feature was highlighted several years ago when a group from Boston devised the Sig: E Caps as a mnemonic for the depressive symptoms of geriatric depression (Jenike, 1988). Each letter represents the following diagnostic criteria from the DSM IV: sleep disturbance; low interest; excessive feelings of guilt; decreased energy; problems with concentration; changes in appetite; psychomotor retardation or agitation; and thoughts of death or suicide. Importantly, it does not rely on the presence of depressed or sad mood, as geriatric depression can indeed present without depressed or sad mood. The presence of 5 of the above 8 symptoms daily or nearly every day for at least 2 weeks indicates the presence of a major depression. This Sig: E Caps acronym is often used by clinicians as a quick reminder of diagnostic criteria for geriatric depression and allows them to focus the clinical interview on these important symptoms. While depressed mood may be absent or under-reported in geriatric depression, complaints of anxious mood or nervousness frequently leads depressed elderly to consult and/or request the prescription of anxiolytics from their physician (Forsell & Winbald, 1998). Given the common association between anxiety and depression and the risks associated with the use of anxiolytics in the elderly (e.g., falls, cognitive impairment and worsening of depression), clinicians are urged to assess for the possible presence of depression whenever patients consult for the onset of anxiety symptoms or request benzodiazepines, even in the absence of depressed mood.

b) Diagnosing Depression in those who have Cognitive Problems:

The elderly also tend to present more subjective memory complaints during the course of depression than younger adults. This implies that a thorough evaluation for the possible presence of depression should be carried out before confirming a diagnosis of dementia, particularly for those individuals who are aware of their cognitive difficulties and request help for them. Even though we now recognize that late onset depressive disorders are often the harbinger of dementia (Green et al., 2003), the quality of life of the patient and his/her family will be severely diminished if depression is not properly recognized and treated. We recommend that such depressive disorders be treated first and that further assessment for dementia be postponed until depressive symptoms have cleared and no longer contribute to poor cognitive functioning. Co-existing dementia can make the diagnosis of depression increasingly challenging (Burns et al., 1990; Dwyer & Byrne, 2000). While depression often co-exists with or complicates dementia, persons affected by both disorders may not be able to reliably report their depressive symptoms during clinical interviews due to memory difficulties. Aphasia may also interfere with the verbalisation of depressive thoughts or symptoms. As dementia progresses to more advanced stages, disruptive vocalizations or behaviours may become the only means of communicating distressing depressive symptoms. Assessment of depressive symptoms in the presence of

dementia requires the collaboration of family members and caregivers and the use of observational rating scales rather than self-report scales. The *National Guidelines for Seniors' Mental Health: The Assessment and Treatment of Mental Health Issues in LTC Homes (Focus on Mood and Behaviour Symptoms)* (CCSMH, 2006) also covers this important issue as many LTC residents have both depression and dementia.

Delirium may also present with affective changes that are suggestive of depression, including lability (i.e., susceptible to change) of mood, apathy, loss of interest, and excessive tiredness during the course of hypo-active delirium. Clinicians are reminded that depression should not be diagnosed in the context of an acute delirium, but reassessment for depressive symptoms should be done after delirium has cleared significantly. Readers are referred to the *National Guidelines for Seniors' Mental Health: The Assessment and Treatment of Delirium* (CCSMH, 2006) for further assistance in distinguishing depression from delirium and dementia.

c) Diagnosing Depression in those with Somatic or Physical Problems:

Hypochondriasis or somatic pre-occupation is another symptom that has been consistently reported as being more common in later-life depression. The physical changes experienced during the course of geriatric depression, such as the slowing of the digestive system, low energy/excessive fatigue and psychomotor slowing, are likely responsible for these persistent complaints/worries. However, the elderly are also more at risk for depression due to a medical condition. Failure to diagnose treatable medical conditions, which contribute to depressive symptoms, will ultimately lead to poor outcomes. It is therefore important to include depression as a possible (differential) diagnosis when patients present with persistent somatic pre-occupations or unexplained physical symptoms, and to assess for possible underlying medical problems when patients present with depressive symptoms. Clinical investigations (e.g., physical and laboratory exams) should search for endocrine/metabolic causes (e.g., hypo/hyper-thyroidism, adrenal gland dysfunction, high calcium levels, B12 deficiency), neurological/brain diseases (e.g., stroke, Parkinson disease, Alzheimer disease), undiagnosed cancer (e.g., lung, brain, pancreas) and chronic infections (e.g., neurosyphilis, brucellosis). In addition, clinicians have to keep in mind that the following medical problems are often complicated by depression: cancer; stroke; Parkinson disease; heart disease; and chronic obstructive pulmonary disease (Baldwin et al., 2002).

d) Diagnosing Depression in the Recently Bereaved:

Almost every bereaved person experiences some depressive symptoms. In the majority of cases, these symptoms abate gradually over the first year. However, some symptoms are unusual in the course of a normal grief reaction and generally indicate the presence of a major depressive disorder. These include: active suicidal ideation (i.e., more than a passive wish to have died first or with the deceased); pres-

ence of mood-congruent delusions; significant functional limitations impairing one's routine daily activities beyond the first 2 months of the loss; excessive feelings of guilt not related to the deceased and self-devaluation; and psychomotor retardation or a reaction that seems out of proportion with the degree of loss (APA, 2000). When any of these symptoms are present, a full assessment for depression should be completed as bereavement is likely complicated by a major depressive episode at this point. If the diagnosis of major depressive episode is confirmed, treatment should be consistent with this diagnosis (see *Part 3: Treatment Options for Type and Severity of Depression*). In the event that active suicidal ideation is present, appropriate suicide prevention measures should be taken. In the presence of mood-congruent delusions, including delusions of guilt, recommendations for the treatment of psychotic depression should be followed. For further guidance refer to *Part 3: Treatment Options for Type and Severity of Depression* and refer to the *National Guidelines for Seniors' Mental Health: The Assessment of Suicide Risk and Prevention of Suicide (CCSMH, 2006)*.

Clinicians should not only assess those who present with abnormal grief reaction, but also those who have significant depressive symptoms lasting longer than 6 months after the loss. They should be evaluated further to identify if a depressive disorder is present and requires more specific treatment than the supportive psychosocial interventions usually available to bereaved individuals through their families and communities.

2.2.1 Collateral Information

When one suspects the possible presence of depression, a thorough inquiry into the signs and symptoms of depression is warranted. Self-rating assessment tools, such as the *GDS*, are commonly used in conjunction with an interview with cognitively intact patients who can reliably report on the subjective experience of depression. For those with moderate to advanced dementia, who may not be able to reliably report symptoms, the *Cornell Scale for Depression in Dementia* can be used, taking into account observations from family and caregivers. An assessment for depression will also include a comprehensive bio-psychosocial evaluation, which looks for precipitating or contributing factors such as losses, physical illnesses or the presence of medications that can cause depression. A history of symptoms and previous mental illness, and a mental status examination that includes a cognitive assessment, physical examination, and a review of medication and substance use will yield important information for a more precise diagnosis.

The importance of collateral history from family members, caregivers and from other health care providers is crucial in the assessment of depression. The role of collateral history is well understood in geriatric care and usually provides

important information about previous mood, personality style and function, significant changes from usual functioning, and possible bio-psycho-social factors/stresses contributing to these changes (e.g., losses, living situation, substance use). Clinicians are reminded that occasionally, family members or caregivers may not provide reliable or accurate collateral history for a variety of reasons, including underlying cognitive issues, elder abuse or longstanding family issues. Evolving legislation about privacy has generally meant that clinicians in the "circle of care" have greater access to information from other health providers, therefore increasing the likelihood that important information can be obtained for a thorough assessment.

Suicide Risk

The most feared complication of depression is suicide. In assessing persons who have depression, one has to inquire about suicidal ideation and evaluate suicide risk with as much detail as possible. Patients should be asked directly about suicidal ideation and whether it is accompanied by intent and/or plan. Clinicians need to know about the following risk factors for suicide and keep those in mind, even in the absence of suicidal intent (Conwell et al., 2002; Shah & Ganesvaran, 1997; Waern et al., 2002).

Non-modifiable risk factors:

- Old age
- Male Gender
- Being widowed or divorced
- Previous attempt at self harm
- Losses (e.g., health, status, role, independence, significant relations)

Potentially modifiable risk factors:

- Social isolation
- Presence of chronic painful conditions: moderate pain (Odds Ratio 1.9) severe pain (Odds Ratio 7.5)
- Abuse/misuse of alcohol or other medications
- Presence and severity of depression
- Presence of hopelessness and suicidal ideation
- Access to means, especially firearms

The following behaviours should also alert clinicians to potential suicide:

- Agitation
- Giving personal possessions away
- Reviewing one's will
- Increase in alcohol consumption
- Non-compliance with medical treatment
- Taking unnecessary risk
- Preoccupation with death

For more information on suicide and the elderly, please refer to the *National Guidelines for seniors' mental health: Assessment of Suicide Risk and Prevention of Suicide (CCSMH, 2006)*.

Recommendations: Screening and Assessment

Recommendations: Screening and Assessment – Risk Factors

Health care providers should be familiar with the physical, psychological, and social risk factors for depressive disorders in older adults and include a screening for depression for their clients/patients who present with some of these risk factors. [D]

We recommend targeted screening of those elderly at higher risk for depression due to the following situations:

- Recently bereaved with unusual symptoms (e.g., active suicidal ideation, guilt not related to the deceased, psychomotor retardation, mood congruent delusions, marked functional impairment after 2 months of the loss, reaction that seems out of proportion with the loss)
- Bereaved individuals, 3 to 6 months after the loss
- Socially isolated
- Persistent complaints of memory difficulties;
- Chronic disabling illness
- Recent major physical illness (e.g., within 3 months)
- Persistent sleep difficulties
- Significant somatic concerns or recent onset anxiety
- Refusal to eat or neglect of personal care
- Recurrent or prolonged hospitalization
- Diagnosis of dementia, Parkinson disease or stroke
- Recent placement in a nursing/Long Term Care (LTC) home [B]

Recommendations: Screening and Assessment – Screening and Screening Tools

Health care providers should have knowledge and skills in the application of age-appropriate screening and assessment tools for depression in older adults. [D]

In hospital settings, we recommend screening high risk elderly upon intake, or as soon as the acute condition has stabilized. [D]

Appropriate depression screening tools for elderly persons without significant cognitive impairment in general medical or geriatric settings include the self-rating *Geriatric Depression Scale (GDS)*, the *SELFCARE self-rating scale*, and the *Brief Assessment Schedule Depression Cards (BASDEC)* for hospitalized patients. [B]

For patients with moderate to severe cognitive impairment, an observer-rated instrument, such as the *Cornell Scale for Depression in Dementia* is recommended instead of the *GDS*. [B]

Recommendations: Screening and Assessment – Further Assessment

Following a positive screen for depression, a complete bio-psycho-social assessment should be conducted, including:

- A review of diagnostic criteria outlined in DSM IV-TR or ICD 10 diagnostic manuals
- An estimate of severity, including the presence of psychotic or catatonic symptoms.
- Risk assessment for suicide
- Personal and family history of mood disorder
- Review of medication use and substance use
- Review of current stresses and life situation
- Level of functioning and/or disability
- Family situation, social integration/support and personal strengths
- Mental status examination, including assessment of cognitive functions
- Physical examination and laboratory investigations looking for evidence of medical problems that could contribute to or mimic depressive symptoms [D]

LTC homes' assessment protocols 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. [D]

Recommendations: Screening and Assessment – Suicide

Clinicians should always assess the risk of suicide in patients with suspected depression by directly asking patients about suicidal ideation, intent and plan. Those at high risk for suicide should be referred to a specialized mental health professional and/or service as a priority for further assessment, treatment, and suicide prevention strategies. [D]

Part 3. Treatment Options for Type and Severity of Depression

Recent guidelines (Alexopoulos et al., 2001; Baldwin et al., 2002) have divided treatment into 3 main phases:

- **Acute treatment phase:** to achieve remission of symptoms
- **Continuation phase:** to prevent recurrence of the same episode of illness (relapse)
- **Maintenance (prophylaxis) phase:** to prevent future episodes (recurrence)

We have chosen to divide treatment into the following sections:

- **Part 3: Treatment Options for Type and Severity of Depression** – This section will focus on how diagnosis influences the choice of treatment.
- **Part 4: Psychotherapies and Psychosocial Interventions** – This section will review the non-pharmacological interventions.
- **Part 5: Pharmacological Treatment**– This section will review the pharmacological treatment, while considering that for the majority of persons who have depression, a combination of biological, psychological and social interventions should be considered
- **Part 6: Monitoring and Long-Term Treatment**

Parts 3, 4 and 5 (*Treatment Options for Type and Severity of Depression; Psychotherapies and Psychosocial Interventions; Pharmacological Treatment*) discuss the various treatments that have demonstrated efficacy for depression in older adults. Given that several treatment modalities have proven efficacy for depression, it may be difficult to decide which treatment(s) will best meet the needs of a specific individual with depression. Many factors may influence the choice of treatment for a depressed individual, including: the individual's preference for one therapy or another; affordability; availability; the presence of contra-indications to some treatment modalities (e.g., a medical problem that makes the use of medication unsafe or cognitive problems that interfere with psychotherapy); and the presence of specific causative factors that need to be addressed (e.g., longstanding psychological issues, biological/physical factors or social factors). In keeping with the bio-psycho-social approach to depression, clinicians should review all factors, from their comprehensive assessment of that individual, which may be contributing to the illness and propose a treatment strategy that will address all potentially modifiable factors over time. However, type and severity of depression are other important factors that guide the choice of intervention.

3.1 Treatment: Adjustment Disorder with Depressed Mood

This disorder is not viewed as a depressive disorder in the *DSM-IV*, but rather as a specific reaction to a clearly identified stressor or negative event. Examples of such situations

are hospital admission on account of an acute illness or very low morale related to the illness itself. The reaction may be based on temporary or more permanent difficulties in utilizing healthy coping mechanisms to deal with a difficult situation. Psychosocial interventions that minimize the impact of the stressor and strengthen coping skills is the recommended first line treatment for this condition. If the duration of the stressor is long, periodic reassessment of mood and other depressive symptoms is important in order to identify the possible emergence of a depressive disorder (e.g., major depressive episode) that would require a different treatment approach.

Recommendation: Treatment: Adjustment Disorder with Depressed Mood

We recommend initial treatment with supportive psychosocial interventions or psychotherapy. If symptoms become severe enough to meet DSM IV diagnostic criteria for a depressive disorder or persist after resolution of the stressor, more specific therapies in keeping with the revised diagnosis should be considered (e.g., medication, more intensive/specific psychotherapy). [D]

3.2 Treatment: Minor Depressive Disorder

This disorder is defined as a depressive episode of at least 2 weeks duration with fewer depressive symptoms than the five required for meeting the criteria of a major depressive episode. The depressive symptoms are not clearly related to a specific stressor, loss or acute physical illness, or part of a longstanding dysthymic disorder.

There has been at least one study suggesting benefit with antidepressants compared with placebo when minor depression persists longer than 4 weeks, but with the elderly this is a poorly studied area (Williams et al., 2000). For example, there is little data on the effectiveness of psychotherapy for this specific type of depression (see *Part 4: Psychotherapies and Psychosocial Interventions*). According to expert consensus, psychotherapy should be considered as an adjunct intervention (Alexopoulos et al., 2001).^{11a} When psychotherapy is utilized, an evidence-based psychotherapy is recommended (see *Part 4: Psychotherapies and Psychosocial Interventions*). Given that most psychotherapies require more than 4 weeks to be effective, clinicians may elect to wait longer than 4 weeks after the commencement of psychotherapy before considering the addition of pharmacological treatment, assuming there is a solid therapeutic alliance and depressive symptoms are not worsening.

Recommendations: Treatment: Minor Depressive Disorder

Patients with minor depression of less than 4 weeks duration should be treated with supportive psychotherapy or psychosocial interventions. [D]

Pharmacological treatment or evidence-based psychotherapy should be considered if symptoms persist for more than 4 weeks after psychosocial interventions have been initiated. [D]

In specific clinical situations, for example where patients do not wish to take antidepressants, psychotherapy may be used alone with periodic reassessment to measure response. [D]

3.4 Treatment: Major Depressive Disorder, Single or Recurrent Episode – Mild to Moderate Severity

Antidepressants *plus* psychotherapy (e.g., interpersonal psychotherapy [IPT], cognitive-behavioural therapy [CBT], problem-solving therapy [PST] or supportive psychotherapy) are recommended as first-line treatment in the American Expert Consensus Guidelines (Alexopoulos et al., 2001), while antidepressants *or* psychotherapy (IPT, CBT, PST, or brief dynamic therapy [BDT]) have been recommended in the guidelines of the World Psychiatric Association (Baldwin et al., 2002).^{1b} While some studies support the superiority of combined treatment in some cases, other studies indicate that some patients can achieve remission of symptoms with either intervention alone (see also *Part 4: Psychotherapies and Psychosocial Interventions*). Issues related to costs, accessibility of specific forms of psychotherapy and patient preference still need to guide clinicians in the choice of the most appropriate initial treatment.

Recommendation: Treatment: Major Depressive Disorder, Single or Recurrent Episode – Mild to Moderate Severity

Mild or moderate unipolar major depression should be treated pharmacologically using antidepressants or with psychotherapy or a combination of both. [A]

3.4.1 Treatment: Major Depressive Disorder, Single or Recurrent Episode – Severe but Without Psychosis

When possible, antidepressants combined with psychotherapy should be considered as first line treatment. The presence of physical disorders should not alter the decision to treat, but may impact on the choice of agent, often removing well studied tricyclic antidepressants from the list of acceptable agents. However, some of the newer antidepressants (e.g., Venlafaxine, Mirtazapine) have shown good efficacy in studies that included many subjects with severe depression (Davis & Wilde, 1996; Poirier & Boyer, 1999). Electroconvulsive therapy (ECT) should be considered as an alternate treatment, particularly for those at risk of immediate health consequences from their depression. A recent Cochrane review found little evidence for ECT in the elderly, but clinical experience suggests an important role for ECT in ‘treatment-resistant’ depressions and when a rapid improvement in depressive symptoms is required for the safety of the patient (Van der Wurff et al., 2003).

3.3 Treatment: Dysthymic Disorder

Dysthymic disorder is defined as a mood disorder with depressed mood present for most of the day, for more days than not, as indicated either by subjective account or observation by others, for a duration of at least 2 years. At least 2 of the following symptoms need to be present along with depressed mood: poor appetite or overeating; insomnia or hypersomnia; low energy or fatigue; low self-esteem; poor concentration or difficulty making decisions; and feelings of hopelessness. An additional requirement is that no major depressive episode has been present during the first 2 years of the disturbance, and symptoms are not accounted for by chronic or partly remitted major depressive disorder or depressive episodes of bipolar disorder. Much of the evidence for treatment originates from mixed-age studies. There has been at least one study demonstrating efficacy of antidepressant treatment for dysthymic disorder in older patients and suggests that an antidepressant be offered as first-line therapy (Williams et al., 2000). The contribution of psychotherapy in the treatment of dysthymia in the elderly is uncertain, with minimal gains assessed by the few studies conducted to date (Arean & Cook, 2002; Bohlmeijer et al., 2003). Psychotherapy should therefore be considered for use as an adjunct intervention. If psychotherapy is used as an initial management strategy, the addition of pharmacotherapy should be considered unless there is clear improvement in symptoms early in treatment or a specific contra-indication to its use (Alexopoulos et al., 2001).

Readers are reminded that persons who have incompletely resolved major depression will often appear to meet the diagnostic criteria for dysthymic disorder. In these instances, ‘incompletely resolved major depression’ should be retained as the correct diagnosis and treatment recommendations that apply for this diagnosis should be followed, aiming at a more complete remission of symptoms.

Recommendations: Treatment: Dysthymic Disorder

Patients with dysthymic disorder should be treated with pharmacological therapy, with or without psychotherapy, with periodic reassessment to measure response. [B]

Recommendations: Treatment: Major Depressive Disorder, Single or Recurrent Episode – Severe but Without Psychosis

Patients with severe unipolar depression should be offered a combination of antidepressants and concurrent psychotherapy when appropriate services are available and there is no contra-indication to either treatment. [D]

ECT should be considered if adequate trials of antidepressants combined with psychotherapy have been ineffective or if the health of the patient is deteriorating rapidly due to depression. [D]

3.4.2 Treatment: Major Depressive Disorder, Single or Recurrent Episodes – Severe With Psychotic Features

There is evidence that treatment with an antidepressant alone will only benefit a small minority of patients and is often insufficient to bring about a full remission of symptoms (Baldwin et al., 2002). Treatment with a combination of an antidepressant and antipsychotic agent is often used as initial treatment, but studies suggest that the rates of recovery with pharmacotherapy are low in the elderly (33% in Manly et al., 2000) and the time required to reach full recovery is usually longer than with ECT (UK ECT Review Group, 2003). ECT should be considered early and, where readily available, should be considered as first line treatment. It is the most effective treatment with a recovery rate higher than 80% and response being usually more rapid and complete than with pharmacotherapy (Baldwin et al., 2002).^{11a}

In addition, emerging evidence suggests that the elderly (including the very old) may have even higher response rates than younger patients with ECT (Manly et al., 2000). An additional advantage is that patients treated successfully with ECT will usually require an antidepressant only as maintenance treatment as opposed to a combination of antidepressant and anti-psychotic medication, therefore minimizing the risks of side effects from antipsychotic use in the long term. The side effects of prolonged use of older antipsychotic medications include a high risk of tardive dyskinesia and parkinsonism. As well, with the prolonged use of atypical antipsychotic medications, there are increased risk factors for cardiovascular and cerebrovascular events (e.g., weight gain, dyslipidemia, diabetes), in addition to a small risk for tardive dyskinesia and parkinsonism.

Disadvantages of ECT include patients' or family members' fear or misconceptions regarding the treatment, immediate side effects and risks of ECT (e.g., memory loss, confusion, falls and remote risk of stroke). As well, there are possible contraindications to the use of ECT (e.g., recent myocardial infarction, presence of space occupying lesion in the brain). In the hope of minimizing the risks of parkinsonism and tardive dyskinesia, which commonly occur when elderly patients are treated with older antipsychotic medications, atypical antipsychotics (e.g., Risperidone, Olanzapine and Quetiapine) have largely replaced older antipsychotics in the treatment of psychotic illnesses in the elderly. The use of atypical antipsychotics is controversial given the concerns regarding increased risk of cardiovascular and cerebrovascular events and recent reports on increased mortality (1.6 greater death rate in elderly demented patients taking atypicals compared to those taking placebo) (Health Canada, 2005; Schneider et al., 2005). A database review completed in Ontario found that patients with dementia who were prescribed antipsychotics had a higher overall rate of death, but did not have higher stroke rates (Gill et al., 2005).¹¹ The clinical impact of these side effects on populations of depressed patients remains unclear at this time. Prolonged use of atypical antipsychotic medication (i.e., months) is however less likely to cause tardive dyskinesia and severe parkinsonism than older antipsychotics. Although usually a matter of months, the length of time antipsychotics are required with psychotic depression is variable, but is likely to be less than when used for other indications such as schizophrenia or dementia. Discontinuation of the antipsychotic portion of the treatment can lead to a return of depressive and psychotic symptoms. Therefore, close monitoring is required to avoid a relapse of depression and potential harm to the patient (e.g., suicide, discouragement).

As previously mentioned, the rates of recovery with a combination of antidepressant and antipsychotic are lower than with ECT. Therefore, clinicians need to diligently assess for effectiveness of response. Given the severity and risks inherent to these depressions, clinicians want to achieve improvement in symptoms as quickly as possible, usually in a matter of weeks rather than months. Unless ECT is used to achieve remission of symptoms, clinical experience suggests that patients who do not achieve remission of symptoms after 8-12 weeks at maximum tolerated or recommended dose of antidepressant medication combined with an antipsychotic medication and appropriate psychotherapeutic interventions, are very much at risk for chronic major "treatment-resistant depression." Given the challenges of management, urgent specialist consultation should be sought for the treatment of psychotic depression (Alexopoulos et al., 2001; Baldwin et al., 2002).

Recommendation: Treatment: Major Depressive Disorder, Single or Recurrent Episodes – Severe with Psychotic Features

If there is no specific contra-indication to its use, patients with psychotic depression should be offered treatment with ECT when available. Alternatively, a combination of antidepressant plus antipsychotic medication should be used. If this combination is not effective (e.g., poorly tolerated, no improvement in at least some of the symptoms within 4-8 weeks of treatment, or lack of remission despite optimisation of dose and duration of treatment over more than 8-12 weeks), ECT needs to be offered. ECT should also be considered if severe health consequences (e.g., suicide, metabolic derangement) are imminent because pharmacological treatment has been poorly tolerated or would be too slow to provide needed improvements. [D]

Recommendation: Treatment: Referrals for Psychiatric Care at Time of Diagnosis

Clinicians should refer patients with the following to available psychiatry services:

- Psychotic depression
- Bipolar disorder
- Depression with suicidal ideation or intent

Additionally, patients with the following conditions may benefit from such referral:

- Depression with co-morbid substance abuse
- Major depressive episode, severe
- Depression with co-morbid dementia [D]

3.5 Referrals for Psychiatric Care at Time of Diagnosis

In order to achieve successful treatment and maintain safety, patients who present with severe symptoms and those at greater risk of injury or harm are likely to require more intensive psychiatric services than can be offered in most primary care settings. This is particularly true for patients who have psychotic depression or severe depression of bipolar disorder (where combinations of medications or ECT may be required) and those who present with suicidal ideation or intent.

Those with a concurrent diagnosis of substance abuse are also likely to require specialized mental health services or a period of treatment in a supervised setting in order to safely address both psychiatric problems. In cases of concurrent dementia, psychiatric services can assist with a review of potentially treatable causes of dementia, the selection of antidepressants with low anticholinergic properties, and the identification of key strategies to ensure safe adherence to and monitoring of recommended treatments.

3.6 Remission of Depressive Symptoms

While treatment studies have traditionally focused on measuring improvement in depressive symptoms with one specific intervention (e.g., 50% reduction in Hamilton-Depression rating scores), there is now an increasing emphasis on targeting *remission of depressive symptoms as being the most appropriate goal of therapy*. Remission has been achieved when patients and family members describe the formerly depressed individual as being “back to his/her usual or normal self” or when depression rating scores fall below the cut-off score for probable depression. While clinicians agree that it is possible to achieve remission of depressive symptoms in the elderly, it is becoming increasingly clear that, in many cases, more than one therapeutic intervention may be required to achieve this goal (e.g., treatment with one antidepressant may not be sufficient). It is therefore very important to monitor response to treatment and consider the addition of targeted therapeutic interventions when there is an incomplete remission of symptoms. At the same time, clinicians have to keep in mind that remission may be impeded by undiagnosed or poorly controlled physical or mental disorders. A reassessment with particular focus on what may be impeding recovery is therefore recommended. Despite the fact that there are several therapeutic tools with demonstrated efficacy in the elderly, we still have little data to guide the choice and specific timing (or algorithms) for treatment interventions for a given individual.

Part 4: Psychotherapies and Psychosocial Interventions

This section addresses the psychotherapies that are best supported by available research evidence in terms of efficacy for treating late life depression. It also includes psychosocial interventions (e.g., psycho-education, family counselling, visiting nurse services, bereavement groups, community-based activity programs, physical exercise), which are typically considered as adjunctive to primary treatment with pharmacotherapy, psychotherapy, or both (Alexopoulos et al., 2001; Reynolds et al., 2004).^{iv} These interventions do not meet the definition and criteria of specific psychotherapies, but most of them draw on principles and strategies derived from the psychotherapy body of knowledge.

It is important to stress that, in order to provide a safe and efficacious intervention, the delivery of psychotherapy requires specialized education, training and supervision. Indeed, greater improvements in depression have been reported when the therapists had an advanced degree (at least master's level) *plus* experience working with older adults (Pinquart & Sörensen, 2001).^b While research continues to expand our knowledge regarding how and to whom to apply the various psychotherapies, it should be recognized that many of these interventions are still relatively new and there are insufficient numbers of health care practitioners with adequate training to deliver these psychotherapeutic services. Consequently, these services are unevenly available across the "continuum of health care sites." That being said, training in evidence-based psychotherapies is recommended for present and future providers, given our increasing aging population.

Since the early 1990's, a growing body of evidence has accumulated in support of the efficacy of psychotherapies in the care of late life depression. That body of knowledge includes over 20 narrative literature reviews and 4 meta-analyses (Bohlmeijer et al., 2003; Engels & Vermey, 1997; Pinquart & Sörensen, 2001; Scogin & McElreath, 1994). The current consensus is to consider psychotherapeutic interventions either as first in a line of treatment options, or as a valuable adjunct to physical treatment, primarily pharmacological.

The relevance of psychotherapeutic and psychosocial interventions is due to the fact that many of the *modifiable* risk factors in late life depression are psychological and social in nature (Reynolds et al., 2004).^b In depression, psychosocial variables may act as mediators (e.g., physical disability leading to social isolation, in turn leading to depression) as well as moderators (e.g., ways of coping moderating the influence of loss on depression) of depression.

There is evidence that older adults exhibit an equal, if not greater, preference for psychological treatments than pharmacological treatments for depression (Landreville et al., 2001; Rokke & Scogin, 1995). Also, psychotherapy represents a useful treatment option for depressed older patients who cannot take or tolerate antidepressant medication because of

their medical conditions. For these reasons, effective psychotherapy represents a viable treatment option.

There is some research suggesting that psychotherapy may have broader or more enduring effects than pharmacological treatment in terms of relapse prevention and improvement in residual depressive symptoms after discontinuation of active intervention, improved interpersonal functioning (Hollon et al., 2005)^b, or increased psychological well-being (Pinquart & Sörensen, 2001).^b

4.1 Empirically Supported Psychotherapies

More than 100 studies have investigated the outcome of psychotherapeutic treatment of late-life depression, including over 50 randomized clinical trials of various types of psychotherapeutic interventions. Several meta-analyses of the geriatric depression literature (Bohlmeijer et al., 2003; Engels & Vermey, 1997; Pinquart & Sörensen, 2001; Scogin & McElreath, 1994) and a number of narrative reviews (e.g., Areán & Cook, 2002; Bartels et al., 2003; Gatz et al., 1998; Karel & Hinrichsen, 2000; Mackin & Areán, 2005; Scogin et al., 2005; Teri & McCurry, 2000) strongly support the point that effective psychologically based treatments for depressed older adults are available.

Studies examining a combination of psychotherapy and pharmacological treatment (e.g., studies of interpersonal psychotherapy) were excluded from this review because they do not identify the specific effects of psychological interventions.

4.2 Psychotherapeutic Interventions

Behavioural and Cognitive-Behavioural Therapies

The behavioural (BT) and cognitive behavioural therapies (CBT) foster the development of strategies and skills aimed at behavioural activation and constructive processing of information regarding self and others. Behaviour therapy (BT) focuses primarily on increasing activity levels, in particular identifying, planning and increasing pleasant events. Cognitive-behaviour therapy (CBT) is an active, collaborative intervention that helps patients recognize and correct negative patterns of thinking that cause or maintain depression. CBT incorporates behavioural techniques, including behavioural activation and assertiveness training.

The didactic orientation of BT and CBT, and the availability of manuals for conducting the interventions, make them suitable for self-administration. Bibliotherapy involves reading and written exercises, consistent with the behavioural and cognitive approaches, which are completed away from the clinic and at the patient's pace (Floyd et al., 2004). Problem-solving therapy (PST) helps the depressed person develop skills in order to approach life problems, such as

managing a health condition or adapting to a nursing home, in an active fashion, using the steps of problem solving as a coping strategy.

Interpersonal Psychotherapy

Interpersonal psychotherapy (IPT) is a short-term intervention that blends elements of psychodynamic-oriented therapies (e.g., exploration, clarification of affect) and CBT (e.g., behaviour change techniques, reality testing of perceptions and interpretations) and focuses on current stresses and challenges in interpersonal relationships (e.g., disputes with others, grief following a loss, role change, and insufficient social support).

Brief Dynamic Therapy

Brief dynamic therapy (BDT) focuses on internal conflicts, viewed through the patients' past and present relationships, as well as the relationship with the therapist. Interpretation is the main procedure leading patients to a better insight into their conflicts, particularly in the realm of relationships, and a better understanding of themselves.

Reminiscence Therapy

Reminiscence therapy (RT) involves accompanying the older person on a journey through the past that includes revisiting pleasant times, reactivating coping skills, and re-evaluating good and bad aspects of one's life trajectory in the pursuit of meaning and integration.

4.3 Summary of the Research Evidence: Efficacy of Psychotherapy

Efficacy of Psychotherapeutic Interventions

To date, CBT has been the most studied form of psychotherapy in terms of efficacy in the treatment of depression in older adults (Mackin & Areán, 2005). Trials have focused mainly on major depression, with research on dysthymia and minor depression lagging behind. Samples in existing studies are predominantly comprised of white, relatively young (60-75 years), mostly middle- and higher-socioeconomic status participants. Studies on the use of psychotherapy for depressed older adults who have medical or other psychiatric conditions, cognitive impairments or disabilities, are either too small in scale or have not been conducted. This also applies to older adults from low-income minorities and in rural areas.

- BT has been shown to be an effective treatment for depressed older people, either as superior to a control condition or nondifferentially efficacious in comparison to another evidence based treatment such as CBT or BDT (e.g., Areán, 2004; Areán & Cook, 2002; Mackin & Areán, 2005; Pinguart & Sörensen, 2001; Scogin & McElreath, 1994; Scogin et al., 2005).^{1a}

- CBT has been shown to be an effective treatment for depressed older people (Areán, 2004; Areán & Cook, 2002; Mackin & Areán, 2005; Pinguart & Sörensen, 2001; Scogin & McElreath, 1994; Scogin et al., 2005).^{1a} CBT was found either superior to a control condition (i.e., usual care, wait-list controls, pill-placebo) or equivalent to another evidence based treatment, such as BT or BDT. There is evidence supporting the maintenance of gains over time (1-2 year follow-up) (Areán & Cook, 2002; Reynolds et al., 2004).^{1b}
- BT or CBT delivered via bibliotherapy has been shown to be an effective treatment for depressed older people (Areán & Cook, 2002; Pinguart & Sörensen, 2001; Scogin & McElreath, 1994; Scogin et al., 2005).^{1a}
- PST has been shown to be an effective treatment for depressed older people (1a; Areán & Cook, 2002; Scogin & McElreath, 1994; Pinguart & Sörensen, 2001; Scogin et al., 2005).^{1a}
- Since IPT has been studied in conjunction with medication or pill-placebo, its efficacy as a stand-alone intervention in the treatment of late-life depression intervention is still uncertain. However, there are several small-scale studies that provide suggestive evidence that IPT may be an effective treatment for late life depression on its own, particularly in the treatment of chronic and recurrent depressions (Hollon et al., 2005).^{1b-11a}
- BDT has been shown to be an effective treatment for late life depression, non-differentially efficacious than other evidence based treatments, such as CBT and BT (Gallagher-Thompson & Steffen, 1994; Thompson et al., 1987; Scogin et al., 2005)^{1b}, and positive outcomes were maintained over 2 years (Gallagher-Thompson et al., 1990).^{1b}
- RT has been shown to be an effective treatment for late life depression (Bohlmeijer et al., 2003; Hsieh & Wang, 2003; Scogin et al., 2005).^{1a}

In summary, as Scogin and his colleagues wrote (2005, p. 231) "practitioners working with depressed older adults have several options to draw from should they wish to base their treatment planning and therapy enactment on protocols having passed clinical-trial muster". As stand-alone interventions for major depression in later life for patients with moderate depressive episodes, psychological treatments appear to be safe and effective alternatives to drug therapy, with treatment gains maintained over an extended period of time (Areán & Cook, 2002; Reynolds et al., 2004).^{1b} For more severely depressed patients expert consensus has recommended the combined use of pharmacological and psychological interventions (Baldwin et al., 2002).^{1v}

Psychotherapies are also potentially useful in dysthymic disorder and in minor depression. However, only a few studies (on CBT, PST, IPT, and RT) have been conducted on

these conditions, and to date, the reported gains do not appear as promising as those found for major depression (Areán & Cook, 2002).^{1b}

Effective psychological treatments for depression in later life foster the development of coping skills to reduce depression, thus raising self-efficacy, and they promote meaningful social involvement (Leszcz, 2004).^{1v} Importantly, interventions which have these attributes as stated goals are typically well received by older adults.

Efficacy of Combined Pharmacological-Psychotherapeutic Treatment

Part 5: Pharmacological Treatment specifically addresses the pharmacological treatment of late-life depression. Treatments using a combination of pharmacotherapy and psychotherapy for depressed older adults are commonly used by practitioners. Unfortunately, research on the combined effects of antidepressant medication and psychotherapy is very limited and a sufficient data base of replicated studies with a variety of psychotherapies is not presently available for review. The few available studies pertain to major depression, as there is no research on combined treatments for dysthymic disorder or minor depression.

Research supports the usefulness of combining antidepressant medication and IPT in the case of chronic or recurrent depression (Reynolds et al., 1999a, 1999b; Miller et al., 2001).^{1b} More precisely, IPT with antidepressant medication (i.e., Nortriptyline) was demonstrated as superior to IPT combined with pill-placebo, particularly for the prevention of relapse (Reynolds et al., 1999b; Taylor et al., 1999).^{1b} Evidence also exists in support of combining antidepressant medication and CBT (Thompson et al., 2001).^{1b} Specifically, the combination of CBT and antidepressant medication (i.e., Desipramine) was found to be superior in terms of efficacy to medication alone (Thompson et al., 2001).^{1b} In view of the limited research, the generalizability of these findings is not clear.

In summary, combined treatment with IPT or CBT and antidepressant medication appears to retain the specific benefits of each intervention. There is limited evidence that it may enhance the probability of response over either monotherapy, especially in chronic depressions (Hollon et al., 2005).^{1b} Given the frequent practice of combining pharmacological and psychological treatments, "it is vital to investigate the type and frequency of psychological treatments that work well with older adults who are also receiving medication management for their depressive symptoms" (Hartman-Stein, 2005, p. 240).

A Few Indications for Psychotherapeutic Interventions

There is limited available data on later life depression from which one could base recommendations for a particular psychotherapy. As indicated above, most research on the

outcomes of psychotherapy has been conducted with samples comprised of relatively healthy volunteers, at the exclusion, among others, of frail and cognitively impaired older adults. Research on patient outcome predictors is also limited. Few prescriptive indices have yet to be established for the purpose of selecting among the different treatments (Hollon et al., 2005), because systematic research examining the optimal matching of treatment type to client characteristics has not been conducted with depressed older adults (Scogin et al., 2005). Therefore caution should be exercised in interpreting individual studies reporting the advantage or superiority of one particular treatment for a given depressive condition. In the absence of empirical evidence, it is more likely that the provider's training and experience will determine which psychotherapy is actually offered. The following are simply presented as suggestions.

Generally speaking, it is thought that patients are best matched to psychotherapy that complement their strengths (e.g., coping styles, personality dispositions, life attitudes, interpersonal skills, social support) rather than to interventions intended to correct their deficits. However, this has yet to be examined by research.

A meta-analysis of psychotherapeutic and psychosocial interventions demonstrated that individual interventions seem to be more effective than group interventions (Pinquart & Sörensen., 2001).^{1a} However, the group modality may be preferred because it is more economical and presents the advantages of breaking down social isolation and providing social support (Leszcz, 2004).^{1v}

Elderly depressed patients with a co-morbid personality disorder are generally less responsive to treatment, both pharmacological and psychological. Recently, dialectical behaviour therapy (DBT) has been suggested as a promising intervention for depressed older adults presenting with a co-morbid personality disorder, as an adjunct to antidepressant medication (Lynch et al., 2003).^{1b}

PST, with its focus on the development of concrete skills, may be useful in reducing depression and disability in patients with major depression and cognitive impairment, such as executive dysfunction (Alexopoulos et al., 2003).^{1b}

Given its focus on interpersonal issues, IPT may be a useful psychotherapeutic approach to consider in situations where role disputes are among current concerns and in bereavement-related depression (Reynolds et al., 1999b).^{1b}

Reminiscence and life review may be an appropriate intervention with depressed older adults who are caught in a cycle of ruminations, bitterness, evasive memories, and who hold long standing negative views of themselves as inadequate and worthless (Watt & Cappeliez, 2000, 1995).¹¹¹ Reminiscence therapy may also be useful with confused or demented older adults living in residential facilities (Goldwasser et al., 1987).¹¹¹

CBT may be particularly useful with patients who show enduring negative thought patterns and who lack hope regarding any possibility of change. In the context of caregiver depression, CBT or BT may be more useful when the treatment goal consists of learning skills for coping with the challenges presented by the cognitive and behavioural decline of the demented family member. Whereas BDT may be more effective when the treatment goal is to deal with the affective aftermath of the new life change created by the incipient dementia (Gallagher-Thompson & Steffen, 1994; Teri et al., 1997).^{1b}

Use of Psychotherapy

Despite the availability of effective treatments for late life depression, data indicates that only a small minority of adults over the age of 65 years with depression access any kind of care for emotional or mental health problems (Crabb & Hunsley, in press).^{1b} Data from the Canadian Community Health Survey (Cycle 1.1) indicate that compared to middle-aged adults with depression, individuals aged 65 and older with depression are less likely to report any mental health consultation in the past year, and are especially unlikely to report consulting with professionals other than a family physician (Crabb & Hunsley, in press). Mental health services are particularly under utilized by depressed older adults from current cohorts.

In the same vein, a study conducted in the United States found that the use of psychotherapy remains uncommon among depressed older adults despite its widely acknowledged efficacy (Wei et al., 2005).^{1b} Using Medicare data on 2,025 episodes of depression, these authors calculated that psychotherapy was used in 25% of the episodes, with only a minority of these patients (33%) remaining with consistent treatment, a situation the authors attribute to supply-side barriers, in particular the lack of psychotherapy providers (Wei et al., 2005).

4.4 Psychosocial Interventions

There is a wide variety of psychosocial interventions used in the treatment of later life depression. As indicated above, these interventions do not meet the definition and criteria of specific psychotherapies, but several draw on principles and strategies gleaned from the psychotherapy body of knowledge. These interventions are widely used by a variety of health professionals and support mental health providers. They are typically considered as adjunctive to primary treatment with pharmacotherapy, with psychotherapy, or with both (Alexopoulos et al., 2001; Reynolds et al., 2004).^{1v}

Some of these interventions, such as supportive listening and providing information, may be referred to as counseling. There is also the provision of reassurance and encouragement to engage in pleasurable activities. Other interventions come under the realm of lifestyle education, physical exercise, and religious and social activity programs. They

comprise of a variety of strategies, which often target different activities of daily living that may contribute to or be affected by depression in the older person. These types of psychosocial interventions may be particularly useful with nursing homes residents, for whom there is evidence of increased psychological well-being and enhanced sense of control as a result of these interventions (Pinquart & Sörensen, 2001).^{1a}

It is also important to note that the organizational supports available for communities (e.g., day programs, drop in and senior centers) are vital in order to address the ongoing psychological needs of the depressed older adult. This is particularly important in geographical areas where specific evidence based psychotherapies are not readily available.

4.5 Psychotherapy: Need for Further Research

This review of the literature and discussion with experts from various disciplines highlight the need to devise psychotherapy research programs that focus on outlining clearer indications (and contra-indications) for specific forms of psychotherapy. While we now know that psychotherapy can be effective for some depressed individuals, we still do not have a good appreciation of who should be referred as a priority (i.e., who stands to benefit from this approach the most and when it is more cost-effective to start with psychotherapy rather than pharmacological treatment).

As Niederehe aptly wrote (2005, p. 319), “research needs to address aspects of treatment delivery”. It would mean paying attention to issues of real-world feasibility and broad disseminability of the interventions, and overcoming obstacles for bridging the intervention into the world of everyday clinical services. It also implies adapting the treatment to the setting and for use by the type of personnel apt to be involved, and prioritizing cost considerations of the intervention.

4.6 An Introductory Comment about the Recommendations

Clearly each depressed older patient is an individual case. In regular clinical practice the consideration of psychotherapy as a treatment option will depend on a number of factors, such as the circumstances that precipitated the depression, the quality of the social support system, the interest and preference of the patient for an intervention of a psychological nature, the style of coping, the level of cognitive functioning, etc. Evidently the availability of qualified personnel to deliver the psychotherapy will figure prominently among the factors that will be taken into consideration. Given the demonstrated effectiveness of psychological interventions for depression, an important future development must consist of evidence-based psychotherapy protocols that can be delivered by mental health professionals and implemented with large number of patients.

Recommendations: Psychotherapies and Psychosocial Interventions

Supportive care should be offered to all patients with depression. [B]

Evidence based psychotherapies recommended for geriatric depression include: behaviour therapy; cognitive-behaviour therapy; problem-solving therapy; brief dynamic therapy; interpersonal therapy; and reminiscence therapy. [A]

Psychotherapy and/or psychosocial interventions should be available to patients with dysthymic disorder, minor depression, or depressive symptoms of normal grief reactions during bereavement. [B]

Psychotherapy should be available to patients suffering from major depression, either alone as first line treatment or in combination with antidepressant medication, for individuals who prefer this treatment modality and are able to safely participate in treatment (e.g., no severe cognitive impairment, no psychotic symptoms). [A]

Psychotherapy in combination with antidepressant medication should be available to patients with severe major depression, or chronic or recurrent depression. [A]

At least one form of psychosocial intervention should be offered to the patient depending upon the patient's needs and preferences, and available resources. These interventions should be delivered by professionals who have had some training in the provision of geriatric care. [C]

Psychotherapies should be delivered by trained mental health professionals. It is recommended that health care teams and professionals treating elderly depressed patients have access to personnel with training and competence in delivering psychotherapies which have demonstrated efficacy. When psychotherapy is not available, supportive care should be offered and other psychosocial interventions should be considered. [D]

Part 5: Pharmacological Treatment

5.1 Selecting an Appropriate Pharmacological Treatment

As noted, the pharmacological treatment of depressed elderly is part of an overall treatment approach involving social/environmental and psychological modalities to address all the modifiable contributing factors of an individual's depression as identified through a thorough initial assessment (Baldwin et al., 2002; RNAO, 2004, 2003). Therefore, health professionals must be aware of and be prepared to offer or access different pharmacological and non-pharmacological care strategies for depressed individuals. The majority of studies on antidepressant medications have been conducted with younger populations, but there is a growing body of research specifically about older patients. It should be noted that subjects who participate in studies of antidepressant efficacy may not be representative of patients seen in clinical practice (Zimmerman et al., 2002). The generalizability of results from clinical trials to the older adult population at large is further impaired by the under-representation of older participants in research with mixed-aged adult samples.

Although many studies have focused on antidepressant efficacy and side effects in the elderly, studies have also looked at overall prescribing patterns and practices. Overall, depression is not as under-treated as earlier studies suggested, but even with the advent of the new antidepressants, the rates of adequate treatment are not encouraging. Community studies still show low rates of treatment of depression for older patients, leading to poor outcomes (Cole, 1990). When antidepressants are used, studies suggest that optimal dosing does not always occur. In a Canadian study, doses deemed adequate by an expert panel were used in 79% of Selective Serotonin Reuptake Inhibitors (SSRIs) and 31% of Tricyclic Antidepressants (TCAs) (Rojas-Fernandez et al., 1999). The old adage of 'start low and go slow' is relevant for antidepressants, especially with older agents such as TCAs, but should be altered to read: "start low and go slow, but go!" There are still too many cases when adequate therapeutic doses are not reached. There is indeed little evidence that low-dose antidepressant therapy is effective in older patients, while failure to reach adequate doses is often responsible for lack of response and referrals to mental health services for "treatment-resistant depression" (Baldwin et al., 2002).

Pharmacological Treatment: Non-Psychotic Major Depressive Episodes

Pharmacological treatment of non-psychotic major depressive episodes using antidepressants has been shown beneficial in the elderly. There have been several meta-analyses of treatment in people over age 60, showing similar levels of response compared with younger patients (Gerson et al., 1999; Mittmann et al., 1997). The response rate for both

groups is generally 30% with placebo and 60% with treatment (Gildengers et al., 2002). One meta-analysis of older adults, however, showed a lower response of only 50% (Gerson et al., 1999). To prevent one bad outcome of depression, the Number Needed to Treat (NNT) for TCAs has been found to be 4, while SSRIs have more variable NNT (e.g., 4 for citalopram and 8-32 for fluoxetine) (Gill & Hatcher, 2000, 1999; Katona & Livingston, 2002; Wilson et al., 2001).^{1a} The potential side-effects of TCAs limit their use in the elderly. On a more negative note, a recent randomized controlled trial of citalopram in a population with a mean age of 79 showed little benefit over placebo except with severe depression. Treatment response varied as much by site of treatment as by treatment modality (Roose et al., 2004).^{1b} These data demonstrate that non-pharmacological care provided to study subjects who are on placebo (e.g., regular monitoring, encouragement and instilling hope that one can feel better) can provide effective treatment in less severe depression and reinforce the need to include supportive psychotherapeutic interventions in the treatment of all depressed elderly.

Pharmacological Treatment: Depression and Co-morbid Medical and Psychiatric Illnesses

Many older patients with depression have significant comorbid medical and psychiatric illnesses. A Cochrane meta-analysis of treatment in adults of all ages with a variety of physical illnesses (e.g., diabetes, cancer, HIV, Parkinson disease, myocardial infarction) found a NNT of 4, similar to treatment in a general older population (Gill & Hatcher, 1999, 2000).^{1a} In a small study using an SSRI (fluoxetine), patients with concurrent medical illness in an acute geriatric unit improved as well or better than those with less significant illness (Evans et al., 1997).^{1b} Other SSRIs such as escitalopram, citalopram and sertraline have been shown to be efficacious in medically compromised individuals (e.g., post-stroke depression and dementia) and appear to have a favorable safety and drug interaction profile (Lepola et al., 2004). While this data indicates that antidepressant treatment can be efficacious for depressive disorders in the medically ill, experts agree that optimizing treatment of concurrent medical disorders is important in improving overall prognosis and care should be taken in selecting the most appropriate antidepressant to minimize the risk of worsening these pre-existing conditions (Alexopoulos et al., 2001). For example, many of the common medical problems seen in old age (e.g., dementia, cardio-vascular problems, diabetes and Parkinson disease) will worsen with highly anticholinergic tricyclic antidepressants (Cole et al., 2000). For this reason, newer agents that have lower anticholinergic properties and less potential to cause postural hypotension or cardiac conduction problems (e.g., SSRIs, venlafaxine, bupropion and mirtazapine) are usually recommended for treatment of medically ill patients (Alexopoulos et al., 2001; Baldwin et al., 2002). In addition, clinicians have to careful-

ly select antidepressants that are less likely to interact with the medications already prescribed for these concurrent medical conditions, which limits the use of SSRIs that have high potential for unwanted interactions (e.g., fluoxetine, paroxetine and fluvoxamine).

The presence of co-morbid psychiatric illnesses, such as anxiety disorders, may worsen prognosis and attention to anxiety symptoms is important (Lenze 2003; Lenze et al., 2003). Given the fact that older patients often present with anxiety as a prominent feature of depression, it is not surprising that studies have shown high use of benzodiazepines in patients with undiagnosed depression or for the treatment of depression in the elderly (Wilson et al., 1999).^{1b} This is a concern because appropriate antidepressant treatment is often delayed or not used at all in the treatment of these depressive disorders, leading to chronic depressive disorders that either worsen or become more difficult to treat over time. Benzodiazepines have no demonstrated efficacy in the treatment of depressive disorders. New onset of anxiety symptoms or worsening anxiety problems in the elderly should prompt clinicians to assess for the possible presence of a depressive disorder and plan treatment accordingly. The use of antidepressants for the treatment of anxiety disorders is not well studied in the elderly, but they have been shown to improve anxiety symptoms in depression and are deemed a safer and more effective

long term treatment than benzodiazepines (Rampello et al., 2006; Schatzberg et al., 2002).^{1b} Given that several antidepressants have been shown to be effective for the long term treatment of anxiety disorders (in younger populations) and that benzodiazepines are poorly tolerated in the elderly (e.g., falls, memory problems, worsening of dementia), we recommend the use of antidepressants as the main treatment for both anxiety and depressive disorders.

Another important co-morbid psychiatric problem is substance misuse or abuse. In the elderly, alcohol, benzodiazepines and pain killers are the most commonly abused substances. Untreated depressive disorders can lead to substance abuse when patients attempt to treat their anxiety symptoms and sleep difficulties with alcohol or tranquilizers, or when depression worsens the pain they may have as a result of medical problems. The safe treatment of depressive disorders is much more difficult to achieve with concurrent substance abuse. While there is very little research specifically addressing the issue of treatment, general clinical principles include: the need for slow gradual supervised withdrawal to avoid acute withdrawal symptoms; a longer term rehabilitation approach; and the importance of achieving very good control of depressive symptoms to limit the risk of relapse.

The main classes of antidepressants and some commonly used agents are seen in *Table 5.1*.

Table 5.1 – Commonly used Antidepressant Medications

Generic name	Trade Name	Starting dose (mg/day)	Average Dose	Max recom'd dose (CPS)	Comments/caution
SSRI					
Citalopram	Celexa	10	20-40	40 mg	
Escitalopram	Ciprallex	5	10-20	20 mg	
Fluoxetine	Prozac	5	10-20	20 mg*	*Max. dose used in studies; Long elimination 1/2 life; Several potential interactions
Fluvoxamine	Luvox	25-50	100-200	300 mg	Several potential Interactions
Paroxetine	Paxil	5-10	20	50 mg*	*Significant anticholinergic load & possible interactions
Sertraline	Zoloft	25	50-150	200 mg	
Other agents					
Bupropion	Wellbutrin	100	100 mg BID	150 mg BID	May cause seizures
Mirtazapine	Remeron	15	30-45	45 mg	
Moclobemide	Manerix	150	150-300 BID	300 mg BID	Do not combine with MAO B inhibitors or Tricyclics
Venlafaxine	Effexor	37.5	75-225	375 mg*	*For severe depression; May increase blood pressure
Tricyclic antidepressants					
Desipramine	Norpramin	10-25	50-150	300 mg	Anticholinergic properties; cardio-vascular side effects; Monitor blood levels
Nortriptyline	Aventyl	10-25	40-100	200 mg	Anticholinergic properties; cardio-vascular side effects; Monitor blood levels

Factors Influencing the Selection of Antidepressant Medication

There is no clear evidence regarding greater efficacy of one individual agent over another (Wilson et al., 2001). However, some antidepressants are preferred in the elderly because they are less likely to worsen concurrent medical problems or cause unwanted drug interactions. The choice of antidepressant treatment for a given individual is mostly guided by the following information (Tourigny-Rivard, 1997):

1. **Previous Response to Treatment:** Clinicians should avoid medications that have not worked or have been poorly tolerated in the past and when possible, use a medication that has worked well for the patient in the past (unless there is a contra-indication to its use now).
2. **Type of Depression:** Psychotic depression is unlikely to respond to antidepressants alone and depression of bipolar disorder will require a mood stabilizer (see *Part 8: Special Populations*).
3. **Patient's other Medical Problems:** Clinicians should select an antidepressant with potential side effects that are least likely to worsen other medical problems.
4. **Patient's other Medications:** Clinicians should select an antidepressant that is least likely to interact with other medications.
5. **Potential Risk of Overdose:** Tricyclic antidepressants are lethal in overdose and need to be avoided when the risk of overdose is high.

Recommendations: Selecting an Appropriate Antidepressant

Older patients have a response rate with antidepressant therapy similar to younger adults. Clinicians should approach elderly depressed individuals with therapeutic optimism. [A]

Antidepressants should be used when indicated, even in patients with multiple co-morbidities and serious illnesses, as they have similar efficacy rates compared with use in well elderly. Adverse events in patients with multiple co-morbidities can be minimized by careful selection of drugs that are not likely to worsen or complicate patient-specific medical problems. [B]

Co-morbid psychiatric disorders, particularly generalized anxiety disorders and substance abuse, should be identified and appropriately treated as they will adversely influence the outcome of depression. In cases where benzodiazepines have to be used to prevent acute withdrawal or as a temporary measure until antidepressants or psychotherapeutic interventions take effect, there should be a review and gradual discontinuation when feasible. Clinicians should avoid the use of benzodiazepines for treatment of depressive symptoms with elderly patients. [B]

5.2 Monitoring for Antidepressant Side-Effects and Drug Interactions

When Selective Serotonin Reuptake Inhibitors (SSRIs) and other “new” antidepressants were introduced, it was hoped that they would be better tolerated and have less side effects than Tricyclic antidepressants (TCAs), particularly for the elderly. However, drop-out rates due to side effects remain high (20-30%) in geriatric studies (Baldwin et al., 2002). Several factors may explain the higher rate of side effects in the elderly, including aging changes affecting pharmacokinetics, concurrent medical conditions, and the risk of drug interactions. Since antidepressants are metabolized by the liver, changes in hepatic metabolism seen with aging (including changes to the cytochrome P450 system) increases the likelihood of side effects and drug interactions, particularly in patients who take multiple medications.

Although TCAs have been well studied, their side-effect profile limits their use in many seniors and they are no longer recommended for use as “first line treatment”. The cardiovascular side effects are a major concern given the high rate of symptomatic and silent heart disease in the elderly. These side effects include postural hypotension (i.e., causing falls and fractures) and in particular cardiac conduction abnormalities. An electrocardiogram (ECG) and postural blood pressure measurements should therefore be done before starting any TCA and after any dose changes. The anti-cholinergic side effects of TCAs are also very problematic in the elderly, particularly those who are at risk or already diagnosed with dementia, as TCAs can easily induce a delirium and worsen cognitive functioning. TCAs can also cause acute urinary retention (particularly in men with enlarged prostates), dry mouth and constipation. When a TCA has to be considered as a treatment option (i.e., when SSRIs or other antidepressants are not tolerated or ineffective), nortriptyline and desipramine are usually preferred as they have less anti-cholinergic properties (Alexopoulos et al., 2001). Given that high blood levels of TCAs are associated with increased toxicity and that some patients may have high blood levels of TCAs while taking a relatively low dose (slow metabolizers), monitoring of blood levels is recommended when TCAs are used.

SSRIs are relatively safe for use in patients with cardiovascular problems, which is a major advantage in the elderly. Their most common side effects include nausea, dry mouth, and somnolence. Insomnia, agitation, diarrhea, excessive sweating and sexual dysfunction (in males) can also affect a minority of patients (less than 10%) (Alexopoulos et al., 2001). However, patients taking SSRIs seem to have a similar risk of falls compared to those on TCAs, despite the absence of significant hypotensive effect in SSRI studies (Thapa et al., 1998). Older patients are at greater risk of developing hyponatremia due to renal changes of aging. SSRIs and venlafaxine have been associated with the syndrome of inappropriate anti-diuretic hormone secretion

(SIADH), causing hypo-natremia (Kirby & Ames, 2001; Kirby et al., 2002; Thapa et al., 1998). Based on prospective and retrospective studies, the incidence of SIADH in older patients taking antidepressants is approximately 10% (Fabian et al., 2004; Thapa et al., 1998).^{11b} It is therefore important to monitor sodium blood levels during SSRI therapy. Post marketing surveillance has also identified an increased risk for gastro-intestinal bleeding with SSRIs, particularly in those who have other risk factors (e.g., peptic ulcer disease, taking anti-inflammatory drugs). Over the last few years, concerns regarding increased suicidality in the initial period of treatment with antidepressants and with drugs that are likely to cause agitation has led to strong recommendations for limiting the use of SSRIs and venlafaxine in children and adolescents. Similar concerns have been raised with elderly patients. There are reports of serotonin-related symptoms such as agitation, anxiety and confusion early in the course of treatment with older patients. To date, there is no strong evidence of suicidal ideation secondary to antidepressants in the elderly (Barak et al., 2006; Fabian et al., 2004; Martinez et al., 2005).^{11b} However, clinicians are reminded of the need for close clinical monitoring early in treatment until there is a therapeutic response. Clinicians should specifically look for the emergence of agitation and anxiety, worsening of depression or discouragement, and suicidal ideation in these first 4 to 8 weeks of treatment as it is recognized that depressive symptoms can worsen in the early stages of treatment. Fluoxetine has a very long elimination half-life in older patients and its potential for pro-

longed side effects needs to be considered prior to its use. Paroxetine has a similar level of anti-cholinergic properties as desipramine and nortriptyline, making it a less desirable choice for patients with dementia. Adverse events identified after general use has led to the withdrawal of one agent (nefazodone) from the Canadian market.

Given that the majority of elderly take medications for the treatment of various medical conditions, choosing an antidepressant with low potential for serious interaction is important. Amongst SSRIs, citalopram, escitalopram and sertraline seem to have the least potential for unwanted serious drug-drug interactions (Alexopoulos et al., 2001). Other antidepressants, such as venlafaxine, bupropion and mirtazapine also have a favorable profile (Alexopoulos et al., 2001). Post-marketing data of newer agents has identified greater risks of cytochrome P450 mediated drug interactions with older SSRIs, such as fluoxetine, paroxetine and fluvoxamine. The main cytochrome P450 metabolic pathways of commonly used agents are seen in *Table 5.2*. Moderate to strong inhibition of an isoenzyme that is required for the metabolism of other drugs will lead to significant increases in circulating levels and significant side effects or toxicity from these drugs. Additional information regarding Cytochrome P450 enzymes and their role is provided in *Appendix B*. We recommend that physicians and pharmacists consult up-to-date drug interaction data bases when a new antidepressant is prescribed to patients taking other medications.

Table 5.2 – Potential Cytochrome P450 Interactions Involving Antidepressants
(Cupp & Tracy, 1998; Devane et al., 2004; Nemeroff et al., 1996)

Isoenzyme	Substrate of Isoenzyme	Moderate to Strong Inhibition of Isoenzyme	Inducer of Isoenzyme
CYP2D6	Fluoxetine Paroxetine Venlafaxine Nortriptyline Desipramine Amitriptyline Fluvoxamine	Fluoxetine Paroxetine Bupropion	None known
CYP 3A4	Sertraline Venlafaxine Amitriptyline Citalopram Escitalopram	Fluvoxamine Fluoxetine (metabolite) Sertraline (metabolite, moderate effect) Desipramine	St. John's Wort Carbamazepine Phenytoin Phenobarbitol Dexamethasone
CYP 1A2	Amitriptyline	Fluvoxamine	Phenytoin Phenobarbitol Charcoal-broiled meat

Recommendations: Monitoring for Side Effects and Drug Interactions

Clinicians should choose an antidepressant with the lowest risk of drug-drug interactions when patients are taking multiple medications. Good choices include citalopram, sertraline, venlafaxine, bupropion and mirtazapine. [C]

We recommend that physicians and pharmacists consult up-to-date drug interaction data bases when a new antidepressant is prescribed to patients taking multiple medications. [C]

When choosing agents from a specific class, clinicians should select those found to be safer with the elderly (e.g., selecting drugs with the lowest anti-cholinergic properties amongst available antidepressants). [D]

When starting antidepressant therapy (e.g., SSRI or venlafaxine), clinicians should monitor for serotonin-related side effects (such as agitation) and for short-term worsening of symptoms. [B]

When initiating any antidepressant, we recommend monitoring for suicidal ideation and risk. [C]

Tricyclic antidepressants (TCAs) should not be used in patients with conduction abnormalities on electrocardiogram (ECG) or postural hypotension. [B]

If TCAs are used, clinicians should monitor for postural hypotension, cardiac symptoms and anti-cholinergic side effects and blood levels. [D]

We recommend checking sodium blood levels after one month of treatment with SSRIs, especially with patients taking other medications that can cause hyponatremia (e.g., diuretics). [C]

We recommend checking sodium levels before switching to another agent due to poor response or tolerance or when patients display symptoms of hyponatremia (e.g., fatigue, malaise, delirium). [C]

recent evidence that slow upwards titration of newer antidepressants may not be required in a significant number of older individuals and that clinicians should strive to reach average therapeutic doses of antidepressants more quickly (Roose et al., 2004). We still recommend starting elderly patients on half of the initial dose recommended for younger adults. However, if well tolerated, this initial dose can be increased within one week (Baldwin et al., 2002).^{iv} Experts recommend further increases in dose, as tolerated, to reach the average therapeutic dose of the antidepressant within 4 weeks of initiating treatment. Refer to *Table 5.1* for information on average doses for specific antidepressants.

The average therapeutic dose for elderly populations tends to be lower than the average dose for younger adults, although there is significant individual variability in the amount of medication that can be tolerated and/or required to achieve a therapeutic response. Since there is currently no means of predicting which patients will require a higher than average dose of antidepressants, we recommend upward titration beyond the average dose for those individuals who do not show any sign of improvement and do not experience significant side effects while taking an average dose for at least 2 and up to 4 weeks. If there is no improvement, gradual increases up to the maximum recommended or the maximum tolerated dose needs to occur. Those patients who require longer titration need to be monitored closely for the emergence of discouragement and suicide risk. Further discussion regarding monitoring of response to treatment is found in *Part 6: Monitoring and Long-Term Treatment*.

Monitoring response is vital, as decisions regarding the adequacy of dosing and the choice of agent depends on the patient's response. Clearly delineating and documenting symptoms when initiating treatment provides target symptoms whose response should be monitored. Alternatively, scales such as the Hamilton Depression Rating Scale and the Montgomery-Asberg Scale have been studied as measures of response to treatment but are more commonly used in research settings (Burns et al., 2002; Hamilton, 1960; Montgomery & Asberg, 1979; Mottram et al., 2000).^{ib}

A basic approach to titration is:

- Dosage should be increased at regular intervals (usually every 1 to 2 weeks) until there is some therapeutic response (i.e., improvement in symptoms observed by family or caregivers or subjective improvement), significant side effects, or one has reached the maximum recommended dose (Sackeim et al., 2005).
- If there is no improvement after 4 weeks at maximum tolerated or recommended dose, a change to a different antidepressant medication should be considered. An alternative is to change medication at the 8-week mark, either to another agent within the class (if the patient is on an SSRI) or to another drug class (Alexopoulos et al., 2001; Baldwin et al., 2002).^{ib}

5.3 Initial Dose Titration

The onset of benefit from antidepressants may be slower in older patients, reflecting the finding that recovery from a depressive episode may be slower in the old compared to young patients (Baldwin et al., 2002). There is some evidence that patients over age 75 have a slower time to response than younger elderly patients (Gildengers et al., 2002).^{ib} This slower response may be related in part to the usual clinical practice of slow titration over several weeks to minimize the appearance of side effects. However, there is

- If there is improvement but not full recovery after 4 weeks with the optimized dose, then a further 4 weeks should be given. If response is still not satisfactory after 8 weeks, augmentation strategies should be considered.

The most common options for augmentation in the elderly include the addition of another antidepressant (e.g., mirtazapine, bupropion) or lithium, while carefully checking for possible drug interactions. A succinct review of possible augmentation strategies is provided in Bezchlibnyk-Butler and Jeffries *Clinical Handbook of Psychotropic Drugs* (2002). Lithium augmentation should be considered particularly for those who have a personal or family history suggestive of bipolar disorder and no medical problem that would preclude its safe use. Antidepressant augmentation requires a careful selection of agents to avoid drug interactions and serious side effects, such as serotonin syndrome. Another option is augmentation with psychotherapy (Canadian Psychiatric Association & Canadian Network for Mood and Anxiety Treatments, 2001). There is little evidence of the relative advantage of any of the above strategies in those patients who are relatively “well.” Atypical antipsychotics have been studied as augmenting or mood stabilizing agents for non-psychotic patients (Hirose & Ashby, 2002),^{11b} but there have been no studies specific to the elderly and other augmentation strategies should be considered first. Several small open-label studies have demonstrated benefit with methylphenidate added to antidepressants in older patients, but further research is needed (Lavretsky & Kumar, 2001; Lavretsky et al., 2003).^{11b}

Physicians without comfort and experience using multiple agents should consider referral to a specialist or should use the strategy of switching agents or classes. When switching to an alternate agent, it is not usually necessary to discontinue one agent completely before starting the new agent, but there are no clear guidelines for such a switch. It is however important to select an “overlapping” antidepressant that does not interact with the first one. If fluoxetine is the initial antidepressant, a proper wash out of several weeks will be needed given its long elimination half-life and the fact that it interacts with TCAs and other SSRIs (Solai et al., 2001).^{11a} Abrupt discontinuation of SSRIs, particularly paroxetine, as well as venlafaxine, may lead to a withdrawal syndrome of anxiety, insomnia, flu-like symptoms and paresthesias (Baldwin et al., 2005; Bogetto et al., 2002).^{11b} This is usually self-limiting but can cause distress. Although most commonly reported with SSRIs, a withdrawal syndrome may happen with any antidepressant and for this reason it is advisable to taper agents over a 7 to 10 day period (Anderson et al., 2000).^{1v}

5.4 Frequency of Monitoring

In the first month of treatment, elderly patients are ideally followed at weekly intervals to assess side effects, possible worsening of symptoms, suicide risk and to allow reasonably prompt titration of dose. Those visits help maintain a

strong therapeutic alliance, compliance with treatment and help prevent suicide. The severity of the patient’s symptoms may prompt earlier and more frequent physician visits, especially for those individuals who are considered to be at risk for malnutrition or other complications of depression.

Where possible, patients should be asked to designate a family member or close friend who can provide support and report their observations to the treating physician during this monitoring period. Family members are often able to report encouraging signs of improvement earlier than the patient and can alert physicians if agitation or worsening of symptoms occurs. Target dose for a therapeutic trial is defined as:

- a) the dose which provides relief from depressive symptoms; or
- b) the maximum dose tolerated by the patient; or
- c) the maximum dose recommended by the Canadian Pharmacists Association (2006).

Recommendations: Titration and Duration of Therapy

When starting antidepressants, patients should be seen at weekly intervals for several weeks to assess response, side effects, and to titrate the dose. Visits should include, at a minimum, supportive psychosocial interventions and monitoring for worsening of depression, agitation and suicide risk. [D]

Clinicians should start at half of the recommended dose for younger adults, but aim at reaching an average dose within one month if the medication is well tolerated at weekly reassessments. If there is no sign of improvement after at least 2 weeks on an average dose, further gradual increases are recommended until there is either some clinical improvement, limiting side effects, or one has reached the maximum recommended dose. [D]

Before considering a change in medication, it is important to ensure an adequate trial. Change should be made if:

- there is no improvement in symptoms after at least 4 weeks at the maximum tolerated or recommended dose;
- there is insufficient improvement after 8 weeks at the maximum tolerated or recommended dose. [C]

When significant improvement has occurred but recovery is not complete after an adequate trial, the clinician should consider:

- a further 4 weeks of treatment with or without augmentation with another antidepressant or lithium or specific psychotherapy (e.g., IPT, CBT, Problem-solving);

- a switch to another antidepressant (same or another class) after discussing with the patient the potential risk of losing any significant improvements made with the first treatment. [C]
-

Augmentation strategies require supervision by experienced physicians. [D]

When switching agents, it is generally safe to reduce the current medication while starting low doses of the alternate agent. Specific drug interaction profiles need to be checked for both drugs involved during this overlap since antidepressants commonly interact with each other. [C]

Given its long half-life and risk of interaction with many of the drugs prescribed for the elderly, we do not recommend the use of fluoxetine as first-line treatment despite its documented efficacy. [C]

Antidepressants, especially SSRIs, should not be abruptly discontinued but should be tapered off over a 7 to 10 day period when possible. [C]

Part 6: Monitoring and Long-Term Treatment

Recent guidelines (Alexopoulos et al., 2001; Baldwin et al., 2002) have divided treatment into 3 main phases:

- **Acute treatment phase:** to achieve remission of symptoms
- **Continuation phase:** to prevent recurrence of the same episode of illness (relapse)
- **Maintenance (prophylaxis) phase:** to prevent future episodes (recurrence)

While depression studies have traditionally focused on measuring improvement in symptoms (e.g., 50% reduction on the Hamilton Depression rating scale scores), there is now an increasing emphasis on targeting remission of depressive symptoms as the most appropriate goal of therapy. Remission is an important target for both the acute and maintenance phases of treatment as residual symptoms increase the rate of relapse, recurrence, suicide, and the degree of chronicity, and is associated with poor quality of life and greater health services utilization (Kennedy et al., 2004).

6.1 Monitoring after Initial Response to Therapy

In the literature to date, identification and treatment of depression have been emphasized as being essential to quality clinical care. Monitoring to ensure remission and strategies for assessing progress towards remission have received less attention (Frayne et al., 2004). Some studies have used low cut-off scores on depression rating scales (such as less than 5 on the Hamilton Depression rating scale) to define remission. However, many experienced clinicians prefer to list an individual's specific depressive symptoms, targeting their disappearance, and a return to the level of functioning that existed prior to the depressive illness as an indicator of remission. The frequency and intensity of follow-up needs to vary depending on individual patients, their symptomatology and the severity of the depression, but there is little evidence of an optimal approach.

Experts suggest a period of monitoring even when the continuation of treatment is no longer needed. For patients who have good insight into their depressive illness and can reliably report symptoms of relapse, periodic reassessments over the months during and following discontinuation can facilitate early identification of relapse and a prompt return to maintenance therapy. For those who may have difficulty reporting early signs of relapse, we suggest that the patient identifies a person close to them who can observe and help report potential signs of relapse or attend follow-up visits with them during the period of discontinuation.

In LTC homes, family and staff members' observations need to be sought at regular intervals to help monitor response to treatment. This is usually done through monthly or quarterly care conferences, as well as during the annual reassessment.

6.2 Factors Influencing Remission and Relapse

Approximately 25 to 30% of patients in primary care fail to respond to optimal initial treatment (Callahan, 2001).ⁱⁱⁱ Outcomes are worse among older patients with co-morbid conditions such as alcoholism, dementia, severe physical disability, or concomitant psychiatric illnesses (Cole et al., 1999; Wittchen et al., 1999). These patients may benefit from early referral to specialized treatment centers (Coulehan et al., 1997). Referral to a psychiatrist should be considered as soon as it is determined that an adequate course of therapy has been ineffective in the primary care setting (Alexopoulos et al., 2005).

Recent studies conducted in primary care, such as the PROSPECT study (The Prevention of Suicide in Primary Care Elderly Collaborative Trial), looked at the impact of interdisciplinary care management on suicidality and other outcomes of depression when compared with conventional care (Hunkeler et al., 2005; Meresman et al., 2003; Shulberg et al., 2001; Unutzer et al., 2000).^{ib} This is described in more detail in *Part 9: Systems of Care for Depression*. Remission occurred earlier and more frequently among patients receiving the PROSPECT intervention than among those receiving usual care. For all patients, limitations in physical and emotional functions predicted poor remission rates. Patients experiencing hopelessness were more likely to achieve remission if treated with the intervention practices. Similarly, the intervention was more effective in patients with low baseline anxiety (Bruce & Pearson, 1999).^{ib} Poor self-rated health, social supports, and using antipsychotic medications in the last year or antidepressant medications in the last 7 days, were predictive factors of longer time to remission (Bosworth et al., 2002).ⁱⁱⁱ

Psychotherapy has been shown to prevent depressive relapse and improve residual depressive symptoms even after antidepressants are discontinued (Hollon et al., 2005; Perlis et al., 2002).^{ib} Therefore, the addition of psychotherapy should be considered for those who present with relapse and incomplete remission.

6.3 Duration of Treatment

Relapse is the re-appearance of full syndromal depression within 6 months of remission of the index episode and is related to the continuation of that episode. To avoid relapse, continuation therapy is recommended for a period of at least 12 to 24 months (Alexopoulos et al., 2001; Old Age Depression Interest Group, 1993) in those who present with a first episode of major depression. This reflects data suggesting the increasing likelihood of relapse in the elderly (Rost et al., 2002).^{ib} Maintaining the full dose needed to achieve remission is preferred, whereas maintenance with a reduced dose is associated with higher rates of relapse (Lebowitz et al., 1997). The risks associated with relapse have to be bal-

anced against the potential risks of ongoing maintenance treatment and should be reviewed with patients before gradual taper and discontinuation of treatment. Many patients prefer the continuation of a carefully selected and well tolerated antidepressant over the potential return of depressive symptoms, particularly when the symptoms were particularly severe, distressing or disabling. In these cases, continuation of treatment should be preferred (Baldwin et al., 2002).

Even with optimal treatment interventions, not all patients can achieve remission of symptoms. It is estimated that between 10 to 20% of patients will develop chronic depressive symptomatology even though most of them will have improved from their index episode. All reasonable treatment options (such as ECT, combination of antidepressants or mood stabilizers, addition of psychotherapy) should be considered in order to achieve a maximum improvement. Indeed, augmentation with lithium salts can be effective in approximately 60% of treatment-resistant cases. ECT is also effective in at least 50% of these cases and the addition of venlafaxine or bupropion can be effective in 35% of cases (Bezchlibnyk-Butler & Jeffries, 2002). However, given the possible side effects of augmentation strategies and the need to access hospital-based resources for treatments, such as ECT, specialist consultation is recommended for this group. In addition, indefinite maintenance treatment will be required for those who have difficulty achieving remission.

Although the majority of studies look at midlife patients, there is evidence to suggest that elderly patients have similar rates of recurrence. However, the time between episodes is shorter in older adults with most recurrences occurring within two years (Reynolds et al., 1999b). Individuals who have experienced 3 or more episodes of recurrent unipolar depression are at heightened vulnerability for subsequent episodes and ongoing maintenance of antidepressant therapy should be considered for these individuals, unless or until there are specific medical reasons to warrant the discontinuation of treatment (Agosti et al., 2002).

For those who have required ECT or have had particularly severe depression, the risks of relapse or recurrence are usually deemed unacceptable. Indefinite maintenance therapy is therefore recommended, unless there are specific reasons to preclude its long-term use. There is a minority of patients who, after ECT, fail to remain well with pharmacotherapeutic interventions, including a combination of medications. For this group, maintenance ECT may be a useful option.

Recommendations: Monitoring and Long Term Treatment

Health care providers should monitor the older adult for re-occurrence of depression for the first 2 years after treatment. Ongoing monitoring should focus on depressive symptoms that were present during the initial (index) episode. [B]

Assistance from specialists may be required for the long term treatment of patients with severe symptoms affecting function and overall health, psychotic depression, depression with active suicidal ideation, depression with bipolar disorder, and depression that has not responded to treatment trials. [D]

Older patients who achieve remission of symptoms following treatment of their first episode of depression should be treated for a minimum of one-year (and up to 2 years) with their full therapeutic dose. [B]

When discontinuing antidepressant treatment after remission of symptoms, we recommend a slow taper over months, monitoring closely for recurrence of symptoms and resuming full therapeutic dose if there is any sign of relapse or recurrence. [D]

An evidence based psychotherapy represents a treatment option for patients who present with relapse and incomplete remission [B].

Older patients with partial resolution of symptoms should receive indefinite maintenance therapy and ongoing efforts at a complete resolution of symptoms through the use of augmentation or combination strategies, as well as consideration for ECT. [B]

Older patients who have had more than 2 depressive episodes, had particularly severe or difficult-to-treat depressions or required ECT should continue to take antidepressant maintenance treatment indefinitely, unless there is a specific contra-indication to its use. [D]

For those patients who fail to remain well with traditional maintenance therapy but have responded well to ECT, maintenance ECT may be a useful option. [D]

In LTC homes, the response to antidepressant therapy should be evaluated monthly after initial improvement and at quarterly care conferences, as well as at the annual assessment after remission of symptoms. A decision to continue or discontinue the antidepressant therapy should be based on:

- whether the depression has been treated long enough to allow sustained remission of symptoms (e.g., now one year of full remission); or
- whether the treatment is still tolerated well in the context of their health problems; and
- the risks of discontinuation (i.e., return of original depressive symptoms) are less than those associated with continuation of medication. [D]

Part 7: Education and Prevention

As the number of people in Canada over the age of 65 continues to climb, there is an increased need for health care professionals who have specialized gerontological/geriatric preparation. For example, groups such as the Gerontological Nursing Association of Ontario and the Canadian Gerontological Nurses Association are concerned that the current curriculum in undergraduate nursing programs may not adequately prepare future nurses to meet the complex care needs of older adults, such as those with depression. These types of organizations are increasingly lobbying to increase the gerontological content for the basic level of health care professionals (Baumbusch & Andrusyszyn, 2002).ⁱⁱⁱ These organizations are also working on improving the use of practice guidelines to better educate those already working with older adults (RNAO, 2003, 2004).^{iv} The development of the four *National Guidelines for Seniors' Mental Health (CCSMH, 2006)* have a key role to play not only in the education of professionals, both basic level and continuing education, but also in regards to the development of toolkits to educate clients, their families and the public at large. Information should focus on current knowledge regarding the identification of depressed older adults and on the professionals who can screen, assess and offer psychotherapeutic interventions and pharmacological treatment. Education needs to be available in a variety of forms to increase not only the health care professional's knowledge of depression and available treatment options, but also to increase their ability to seek out and find the necessary assistance and advocate for patients' needs.

The patient-professional relationship is an important factor in achieving better patient participation in care (Callahan, 2001).ⁱⁱⁱ More research is required to understand what motivates older adults to participate in their care. However, recent research demonstrates that improving systems of care for longitudinal management can result in important improvements in patient outcomes. This would entail the education of health care professionals, as well as older adults, their caregivers and the public.

Adherence or compliance to the various interventions and treatments is crucial in the successful treatment of depression. Some simple key messages to patients and their families from their health care providers have been shown to greatly enhance adherence to medication. For example, to promote medication compliance, patients should be told that (Kennedy et al., 2004)^v:

- Antidepressants are not addictive;
- Medications need to be taken daily and as prescribed;
- Mild side-effects are common but temporary;
- It may take 2-4 weeks to notice any improvement; and
- "Do not stop medication without consulting a doctor, even if you feel better."

Primary prevention for depression involves providing support for the bereaved, public health education, and strategies aimed at reducing the stigma of depression (Baldwin et al., 2002).^{iv}

One major aspect of primary prevention is to help build self-efficacy. Educational sessions can involve strategies to maintain and promote physical health and function, enhance cognitive performance, develop a greater sense of personal control and mastery, and improve social skills. Strengthening self-efficacy skills could help the older adult adapt to challenges that lead to brief episodes of sadness and loneliness, and place them at risk for developing a mental illness (Blazer, 2002b).ⁱⁱⁱ

Education regarding depression in older adults needs to be provided to seniors and the broader public. Many older adults have undiagnosed and untreated depression because of their lack of knowledge that depression is a treatable disorder rather than a normal part of aging. Dissemination of information regarding the prevalence of depression, its signs, symptoms, and generally excellent treatment outcomes is essential to encourage seniors and their family members to appropriately flag and consult for depressive symptoms. In addition, early recognition and treatment of depression is probably the single most effective strategy in reducing the rates of suicide in the elderly. Information needs to be provided in different formats and in numerous locations to reach as many individuals as possible. The Canadian Coalition for Seniors' Mental Health (CCSMH; www.ccsmh.ca) plays a key role through its links with other seniors and government groups, in sharing and disseminating the information from these guidelines so that they are used in multiple ways. The *CCSMH National Best Practices Conference: Focus on Seniors' Mental Health* conference and workshops held in September 2005 with interdisciplinary professionals from across Canada is just one example of the ways in which this education can be carried out.

Recommendations: Education and Prevention

Specialized content in regards to assessment and treatment of depression in older adults should be included as part of the basic education and continuing education programs of all health care professionals. [D]

Specific training on geriatric mental health issues should be provided for personnel caring for depressed older adults. [D]

Health care professionals should provide older depressed adults with education regarding the nature of depression, its biological, psychological and social aspects, effective coping strategies, and lifestyle changes that will assist their recovery, while being mindful of the individual's stresses and strengths. [B]

Families of depressed older adults should be provided with information regarding the signs and symptoms of depression, attitudes and behaviours of the depressed person and their own reaction to them, and depression coping strategies, as well as available treatment options and the benefits of treatment. [D]

Public education efforts should focus on the prevention of depression and suicide in older adults. [D]

Part 8: Special Populations

8.1 Special Populations: Bipolar Disorder

Bipolar disorder affects less than 1% of the elderly population (Weissman et al., 1988). However, most elderly individuals affected by this illness have severe recurrent depressive episodes and often require specialist care. Although most individuals will have suffered from episodes of depression before age 65, bipolar disorder can occur for the first time after the age of 65. However, there are other patients who have a well established diagnosis from an earlier age with both manic and depressive episodes clearly documented. Elderly individuals who present with manic or hypomanic symptoms for the first time after age 65 need a thorough assessment for possible underlying medical causes such as a recent stroke, hyperthyroidism, or use of medications that can induce mania (e.g., steroids, thyroxine, levodopa, bromocriptine, sympathomimetics, amphetamines and cimetidine). With advanced age, the course of illness may be different as patients have longer and usually more severe acute episodes, as well as increased frequency of depressive episodes.

Treatment and prevention of depressive episodes of bipolar disorder usually require the use of a mood stabilizer (e.g., lithium). When depressive symptoms occur despite adequate treatment with a mood stabilizer, the addition of an antidepressant may be required. Occasionally, with a severe depressive episode, ECT is required.

There has been some debate regarding which mood stabilizers are best to use with the elderly. Despite concerns regarding the use of lithium in the elderly, particularly in regards to neurological toxicity, it remains an important drug in the management of bipolar disorder since it appears to be most efficient at preventing depressive episodes, an important clinical challenge of geriatric bipolar patients (Shulman et al., 2005). For that reason, lithium should be considered first and other mood stabilizers should be considered when there are specific contra-indication(s) to lithium use. The rapid-cycling subtype of bipolar disorder may respond better to valproic acid, gabapentin, topiramate or lamotrigine (Bezchlibnyk-Butler & Jeffries, 2002, p. 140-142). Anticonvulsant mood stabilizers are not well studied in the elderly and, in general, are also poorly tolerated with a higher incidence of side effects than in younger populations. When valproic acid is used as a mood stabilizer, monitoring has to include a complete blood count and liver function tests for its possible antiplatelet activity and hepatic enzyme elevation. With lamotrigine, there is a small risk of serious dermatological complications and careful monitoring for the appearance of a rash is required.

In comparison to its use with younger patients, lithium requires major adjustments in dosing, timing and monitoring in the elderly. The reader is referred to the lithium guidelines developed by the Geriatric Psychiatry program of

the Royal Ottawa Hospital to minimize the advent of side effects and neurological toxicity (Royal Ottawa Health Group, 2006). Physicians should consider flagging potential but common drug interactions on their patients' file, particularly diuretics, non-steroidal anti-inflammatory drugs, ACE inhibitors and antibiotics and include renal and thyroid function monitoring in the periodic health exam.

Health professionals should particularly remind patients and caregivers of the following:

1. **Alterations in fluid/electrolyte balance** (e.g., diarrhea, vomiting, high fever and dehydration) can lead to lithium toxicity quite quickly in the elderly.
2. **Before taking/adding any new medication** (including over-the-counter medications such as anti-inflammatory drugs), one should inquire about possible drug interaction and/or need for closer monitoring of levels.

There is some debate as to which antidepressants should be used when a mood stabilizer is insufficient. Selection should be guided by the same principles outlined in earlier sections, taking into account previous response to treatment, medical problems, risks of side effects, and potential for drug interactions.

Given that many persons with bipolar disorder have limited insight into the need for ongoing treatment, psychotherapeutic interventions should first focus on the development of a strong therapeutic alliance. An essential ingredient to the therapeutic alliance is the identification of symptoms or consequences that are most disturbing to the patient so that compliance with treatment is aimed directly at avoiding these painful symptoms/consequences, rather than focusing on the diagnosis of bipolar disorder itself. Another strategy for engaging patients in therapy is to focus on the talents and strengths of the patient and how these can be enjoyed through the stability of mood. Furthermore, another important ingredient for success in the treatment of bipolar disorder is the identification by the patient of a person of his/her choice who can alert the patient's physician of early return of symptoms. This will usually allow adjustment of treatment on an ambulatory basis and help reduce the need for hospitalization.

Recommendations: Special Populations: Bipolar Disorder

Elderly individuals who present with manic or hypomanic symptoms for the first time after age 65 need a thorough assessment for possible underlying medical causes. [C]

A mood stabilizer (e.g. lithium) should be the first line treatment of bipolar disorder. When depressive episodes occur despite prior stabilization with a mood stabilizer, antidepressant medication needs to be added. [B]

The choice of mood stabilizer should be based on prior response to treatment, type of illness (e.g., rapid-cycling or not), medical contra-indications to the use of specific mood stabilizers (i.e., side effects that could worsen pre-existing medical problems), and potential interactions with other drugs required by the patient. [C]

All mood stabilizers require monitoring over time for possible short-term and longer term adverse events. [B]

8.2 Special Populations: Dementia

Depression often complicates dementia, including Alzheimer disease and vascular (post stroke) dementia. Eleven to 24% of patients diagnosed with Alzheimer-type dementia meet diagnostic criteria for depression, while an even greater percentage (43%) are considered depressed by their family (Snowdon, 1994). The association between stroke and depression has also been well documented with up to one third of stroke patients developing major depression. It is therefore not surprising to encounter depression during the course of vascular or mixed dementia. Depression may be more common early in the course of dementia. However, the lower incidence of depression reported in later stages of the illness may be attributed to the difficulty of diagnosing depression in patients with severe dementia. In advanced dementia, it may not be possible for the patient to report low mood. Persistent irritability, anger or other negative mood states, especially when this is a change from the usual, are important clues to alert the clinician to the presence of a depressive episode. Depressive episodes may also lead to disturbed behaviour such as aggression with personal care and agitation. Typically these behaviours become the focus of attention. Looking for signs and symptoms that fit the Sig:E Caps screening list, such as weight loss, complaints of poor sleep and psychomotor changes, may help confirm the presence of a correctable depressive syndrome. Symptoms of depression in patients with moderate to severe dementia may also include food refusal, rapidly worsening (worsened) cognition or functional decline, and persistently calling out distressing phrases, such as “help me, help me”, or “please, please, please.” In advanced stages of dementia, it is particularly important to collect the family’s and caregivers’ observations of depressive statements or symptoms as well as collateral information regarding prior history. For example, a previous personal history of depression should alert clinicians to the possibility of a recurring episode.

Studies of pharmacological treatment of depression in this population have found a high rate of placebo response. This has highlighted the therapeutic benefits of supportive strategies and has led to the suggestion of using these strategies for those with mild symptoms or short duration of symptoms (Baldwin et al., 2002). Supportive therapeutic interventions can include any of the following: reminding the patient of prior accomplishments; focusing on their talents and/or pos-

itive aspects of their life; interventions that promote one’s sense of meaning and value; enjoyable recreational activities; visits by supportive and well informed family members; instilling hope; and reminding the patient that depressive symptoms will improve with treatment over time. These are important interventions to prevent discouragement and suicidal gestures. It is also important to encourage enough physical activity to prevent pneumonia and severe de-conditioning, which can easily result from depression when patients take to their beds or couch as a result of tiredness and low energy. Maintaining appropriate nutrition is also crucial, particularly when the loss of appetite is severe.

Psychosocial treatment of depression in older adults with dementia is at an early stage of intervention development. A recent review identified 11 randomized controlled trials representing a diversity of approaches, and seven demonstrated significant improvement in the treatment group compared to the control (Teri et al., 2005).^{ib}

“The behavioral approach focuses on training caregivers in the use of problem-solving techniques to individualize care. It typically involves increasing pleasant events for the person with dementia and improving communication skills for the caregivers. The social engagement and sensory/environmental approaches focus on increasing opportunities for social interaction by increasing pleasant interactions and structuring individualized activity” (Teri et al., 2005; p. 310).

In 6 studies, improvements were maintained beyond the active treatment period. Also, these studies collectively demonstrated the utility of working with caregivers, whether family or staff, to reduce depression in persons with dementia. When using these interventions, practitioners need to be aware of the vulnerabilities and frailties of older adults with dementia.

The use of TCAs is limited by the risk of worsening cognition due to anticholinergic effects, so SSRIs, (Alexopoulos et al., 2001; Nyth et al., 1992) moclobemide (Roth et al., 1996) and venlafaxine are usually preferred agents. Bupropion and mirtazapine may be considered as well, keeping in mind bupropion’s potential to lower seizure threshold and mirtazapine’s mild anticholinergic properties. Paroxetine, an SSRI with approximately as much anticholinergic activity as desipramine and nortriptyline, is usually not recommended as first line treatment. Studies have shown moclobemide (Roth et al., 1996) and citalopram (Nyth et al., 1992) as being superior to placebo in this population, while clinical experience with other antidepressants with low anticholinergic activity (e.g., sertraline and venlafaxine) suggest they are also useful and well tolerated (Alexopoulos et al., 2001).^{iv}

Psychotic depression may occur during the course of dementia. While there is no controlled study of psychotic depression in persons with dementia, experience to date indicates that the main treatment options include ECT or a combination of antidepressant and antipsychotic medication. ECT can be used safely in patients who have dementia, although

they are more likely to develop delirium during the course of ECT. To minimize this complication, treatments are sometimes spaced further apart (e.g., weekly) to allow delirium to clear between treatments. In selecting a combination of antipsychotic and antidepressants, clinicians should try to select drugs with low anticholinergic properties in either category. For further recommendations, please see the *National Guidelines for Seniors' Mental Health: The Assessment and Treatment of Mental Health Issues in Long Term Care Homes (focus on Mood and Behavioural Symptoms)* (CCSMH, 2006).

Recommendations: Special Populations: Dementia

Patients who have mild depressive symptoms or symptoms of short duration should be treated with psychosocial supportive interventions first. [D]

Pharmacological treatment is recommended for patients who have major depression co-existing with dementia. [B]

In selecting pharmacological treatment for depression with dementia, clinicians should select drugs that have low anticholinergic properties, such as citalopram and escitalopram, sertraline, moclobemide, venlafaxine, or bupropion. [C]

Psychosocial treatment should be part of the treatment of depression co-existing with dementia. This treatment should be flexible to account for the decline in functioning as well as multifaceted to provide help with the diversity of problems facing the patient and caregiver. It should be delivered by clinicians sensitized to the vulnerabilities and frailties of older adults with dementia. This treatment should include helping caregivers deal with the disease in a skill-oriented manner. [A]

For patients who have psychotic depression and dementia, a combination of antidepressant and antipsychotic medication is usually the first choice, although ECT may be used if medications are ineffective or rapid response is required to maintain safety. [D]

8.3 Special Populations: Vascular Depression

A relatively new concept in depression is the association between depressive features and vascular injury to the subcortical striato-pallido-thalamo-cortical pathway (Alexopoulos et al., 1997; Baldwin & O'Brien, 2002; O'Brien et al., 2003). Patients may present with late-life depression with marked apathy, decreased insight, and decreased executive function, but also with decreased depressive ideation. Imaging may show white matter and subcortical ischemic changes. Vascular depression may be more resistant to drug treatment (O'Brien et al., 1998) but

this has not been consistent in studies and treatment outcomes may not be significantly different for patients with vascular risk factors (Miller et al., 2002).^{11b} Given that vascular depression can significantly interfere with rehabilitation and ongoing prevention efforts, early identification and treatment of depression are important components of care.

Patients with post-stroke depression have a high rate of spontaneous resolution, but this likelihood diminishes the longer the depression is present. SSRIs (e.g., citalopram and fluoxetine) have been studied the most in the treatment of post-stroke depression (Andersen et al., 1994; Wiart et al., 2000).^{11b} In the selection of antidepressant treatment, clinicians should avoid drugs that can worsen a vascular dementia (i.e., drugs with high anticholinergic properties) and drugs that can cause hypertension (e.g., venlafaxine) or severe hypotension, causing problems with cerebral perfusion.

Recommendations: Special Populations: Vascular Depression

Patients who have had strokes should be monitored closely for the possible development of depression as a common complication of stroke, even in those who do not report depressed mood. [B]

Patients who have depression following single or multiple cerebral vascular injury should be treated following the guidelines outlined in *Section 8.3, Vascular Depression*, but taking care not to worsen their ongoing vascular risk factors. [D]

8.4 Nursing Home Residents

This is covered comprehensively in the *National Guidelines for Seniors' Mental Health : The Assessment and Treatment of Mental Health Issues in Long Term Care Homes (focus on Mood and Behavioural Symptoms)* (CCSMH 2006).

8.5 Aboriginal Patients

No studies specifically related to the identification and diagnosis of depression in Aboriginal Canadian "elders" were found. A retrospective study in BC found that the rate of depression in the general Aboriginal population was similar to that of non-Aboriginals in the region (Thommasen et al., 2001). Statements regarding presentation and challenges of diagnosis are difficult to make given the heterogeneity of Aboriginal populations and the impact of culture on presentation and symptoms. Communication challenges that may have an impact in aboriginal elders include language and patient discomfort with direct questioning about symptoms. It is important to note that little is known regarding differences in presentation of depression between older and younger groups of Aboriginal Canadians, and between Aboriginals and non-Aboriginals. This is clearly an area where further research is needed.

Part 9: Systems of Care

Systems of care are defined as an organized grouping of healthcare networks working in collaboration to provide treatment for older adults with depression. Systems of care for the mental health of older adults have been changing and there is increased research in this area that supports providing coordinated care for those with depression in the various community and in-patient settings. However, the literature is minimal in regards to demonstrating the care of the depressed older adult across the continuum in an integrated health care system. This section addresses some of the recent attempts made to address the best possible systems of care. It is recognized that not all of the following are consistently available across the country.

9.1 Treatment Settings

Generally, older adults seek and prefer to receive care for their late life depression from their primary care physician rather than a psychiatrist. One study found that over 80% of depressed primary care patients prefer to be treated by their primary care physician (Fortney et al., 1998).ⁱⁱⁱ These preferences may be even stronger among those patients concerned about stigma (Fortney et al., 1998).ⁱⁱⁱ The outcome of major depression in usual primary care models is typically poor and is particularly true in late life depression. The reasons for poor patient outcomes are mixed and include: errors in diagnosis; patient being judged as poor candidate for treatment; patient's refusal of treatment; poor adherence to treatment; unacceptable side-effects; and some simply languish on sub-therapeutic or ineffective therapy (Callahan, 2001).ⁱⁱⁱ The main reason may be that most patients in usual care do not receive adequate dose or duration of antidepressant therapy. Usual care for sub-syndromal depression has better outcomes, but this condition appears to respond to nonspecific therapies. Competing demands may also contribute to the low rate of treatment. For example, patients' co-morbid medical conditions may assume a higher priority than depression in the limited available time during a typical primary care visit in a physician's office.

The response to care in interdisciplinary settings, such as those where Advanced Practice Nurses are coordinating care in association with an interprofessional team, is better than usual care in both primary care (McCurren et al., 1999; Rabins et al., 2000)ⁱⁱⁱ and in hospital liaisons (Kurlowicz, 2001).ⁱⁱⁱ

9.2 Models of Care

Therapeutic Alliance

Therapeutic alliance refers to the alliance between persons who have depression and the health care team to maximize cooperation between the person and the proximal social environment (e.g., family, staff) in developing and adhering

to the selected treatment plan. Since any treatment plan requires informed consent (from the patient and/or family), the formulation and presentation of the treatment plan provides an opportunity for education on the etiology of depression, its symptoms, options for treatment, risk-benefits of treatments, possible side-effects, and expectation of remission (Kennedy et al., 2004).^{ib} Families can provide the health team with valuable information, observations and support to ensure the safety and progress of the depressed older person. Primary care teams are in a good position to establish a strong therapeutic alliance as they already have a therapeutic relationship with the patient. Through a better understanding of the illness and its expected course, older adults may place more trust in the proposed treatment plans. They may also feel more in control, as they are actively involved in the decision-making process (Kennedy et al., 2004; Rost et al., 2002).^{ib} Several systems of care have evolved to foster this type of alliance.

Care Management

In the PROSPECT study (The Prevention of Suicide in Primary Care Elderly Collaborative Trial) (Hunkeler et al., 2005; Meresman et al., 2003; Shulberg et al., 2001; Unutzer et al., 2000)^{ib}, masters-trained care managers (e.g., mental health nurse, psychologist, social worker) in primary care practice settings provided pharmacotherapy and interpersonal therapy (see *Part 4: Psychotherapies and Psychosocial Interventions*) to patients who positively screen for major or minor depression. They also provided appropriately timed and targeted recommendations to physicians. The care managers monitored psychopathology, treatment adherence, response, side effects, and provided follow-up care at predetermined intervals or when clinically necessary. The PROSPECT treatment not only included acute care, but also the continuation and maintenance of treatment for up to 2 years, and it demonstrated significantly better care outcomes than usual care.

Those subjects in the PROSPECT study had reported decreased suicidal ideation regardless of the severity of their depression, reinforcing its role as a prevention strategy to reduce future risk of suicide (Bruce et al., 2004). Patients who take longer to respond to treatment and those who have residual symptoms of anxiety are all at high risk for recurrence and thus would benefit from maintenance therapy (Dew et al., 2001; Flint & Rifat, 2000).^{ia} It is important to note that in a number of the PROSPECT studies the mean age of the samples are less than 65 years. However, the samples included individuals into their 90's. Further research with a sample exclusive to individuals 65 years and older is needed.

The use of trained case managers can accelerate remission and perhaps reduce suffering, disability, and family disruption than usual care (Alexopoulos et al., 2005).^{ib} Older pri-

many care patients with major depression and physical and emotional function limitations need aggressive treatment for their depressive symptoms, either through pharmacological, psychological, or a combination of both treatment modalities (Alexopoulos et al., 2005).^{1b} In addition, high levels of subjective social support are related to greater likelihood of remission from depression (Henderson et al., 1997).¹¹¹

Case Management

A case manager who takes responsibility for following up with patients, seeing that they adhere to their treatment plan and that it is adjusted when it is not working, has been associated with better patient outcomes (Baldwin et al., 2002; Hunkeler et al., 2005; Rost et al., 2002).^{1b} Case managers may be part of a mental health system supporting primary care or part of the primary care system itself.

A model of case management that has been positively evaluated in younger populations is the Assertive Community Treatment (ACT). The ACT team has a high staff ratio and provides the individual with access to support when needed (i.e., 24 hours/day, 7 days/week). An individual who is at high risk for relapse and hospitalization needs this type of support when family or social supports are limited (Health Canada, 1997).^{1v} However, experience to date with ACT teams indicates that there are few elderly patients receiving this type of care and this model has not been evaluated specifically with elderly persons who have multiple or complex psychiatric and medical problems. Some of the principles of ACT teams may be beneficial when applied by clinicians with expertise and interest in the elderly and warrants further study.

Collaborative Care

Collaborative care of primary care physicians with on-site mental health specialists has provided enhanced quality of care and improved outcomes of depression in geriatric populations (Katon et al., 1999).¹¹¹ The PROSPECT initiative uses guided management interventions for depression, hopelessness, and suicidal ideation within a collaborative care model. Its aim is to test collaborative models, which may lead to early detection and prevention of suicide in older people through the accurate detection and appropriate management of a depressive disorder, a priority for suicide prevention in older people.

Another collaborative care model for late-life depression is the Improving Mood-Promoting Access to Collaborative Treatment (IMPACT) program (Unutzer et al., 2002).^{11b} The IMPACT intervention includes many elements of evidenced-based models for chronic illness care, which are as follows: collaboration among primary care clinicians patients, and specialists based on a common definition of the problem; developing a therapeutic alliance and a personalized treatment plan that includes patient preferences;

pro-active follow up and outcomes monitoring by a depression care manager (nurse or psychologist); targeted use of specialty consultation; and protocols for stepped care. Patients who did not respond to initial treatment were discussed by the IMPACT team, and “step 2” treatment was developed. “Step 2” treatment includes a review of the anti-depressant medication or a course of Problem Solving Treatment in Primary Care (PST-PC), and a 6 to 8 week brief, structured psychotherapy session for depression delivered by the depression care manager. Patients who did not respond after 10 weeks of step 2 treatment were again reviewed by the team and additional therapies, such as additional medication changes, psychotherapy, hospitalization or ECT, were considered (Katon et al., 2005; Unutzer et al., 2002).^{11b}

Both PROSPECT and IMPACT studies reported similar short-term response rates at 12 months on depression scales of 50% improvement from baseline for those receiving the care via a collaborative care model versus a 19% improvement via usual care (Unutzer et al., 2002). These findings emphasize the potential value of primary care interventions for resolving depression, improving quality of life, and reducing risk factors for suicide later in life (Bruce et al., 2004).^{11b} They also emphasize the need to develop effective strategies to sustain these interventions in routine practice and to increase their efficacy further by allowing more patients to achieve response and remission.

In studies with mixed-aged samples, collaborative care has been found to be effective (von Korff & Goldberg, 2001).^{1v} Models vary but the common principles include the use of multi-faceted interventions, identifying a case manager, and flexible collaboration between primary and secondary (specialist) care to improve access to the skills of a psychiatrist. In addition, three randomized controlled trials have shown that collaborative care is effective in older patients (Banerjee et al., 1996; Unutzer et al., 2002; Waterreus et al., 1994).^{11b}

A study looking at psychiatric specialists visiting LTC homes and primary care settings focused on the following: increasing the detection rate of depression by caregivers; encouraging older people to accept that depression is treatable; and providing accessible treatment programs in residential care. Interventions included education to both the physicians and the personal care support workers (Llewellyn-Jones et al., 1999).^{1b} The results of this study indicated significantly more movement to “less depressed” levels of depression at follow up in the intervention than control group. There was an average improvement of 1.87 points on the geriatric depression scale for the intervention group compared with the control group.

There is insufficient evidence to recommend any one particular model, but the following elements seem to increased successful outcomes (Baldwin et al., 2002)^{11b}:

- Identifying a care coordinator (case manager)
- Active follow-up of patients

- Giving educational packages to caregivers (e.g., in residential and nursing homes)
- Enhancing the links between primary and secondary care.

More collaboration is required between primary and secondary care. However, a recent Canadian study looking at systematic identification of depression in older medical inpatients followed by a multidisciplinary treatment team (including a psychiatrist, a research nurse and the family physician) did not provide measurable benefits over usual care as measured by the Hamilton Depression Scale or the Medical Outcomes 36-item Short Form (Cole et al., 2006). In this study, the number of subjects who completed follow-up at 6 months were low (33 and 31) and the rate of antidepressant use was higher than normal in the usual-care control group (35 to 45 %).

The Canadian Collaborative Mental Health Initiative (CCMHI), established in March 2004, is working to enhance mental health services in primary health care through the following: a series of research and discussion papers; numerous implementation strategies in the form of

toolkits; and the creation of a national Charter for collaborative mental health care. Additional information regarding the CCMHI can be retrieved at their website (<http://www.ccmhi.ca/>).

Recommendations: Models of Care

Health care professionals and organizations should implement a model of care that addresses the physical/functional as well as the psychosocial needs of older depressed adults. Given the complex care needs of older adults, these are most likely to require interdisciplinary involvement in care, whether in primary care or specialized mental health settings. [B]

Health care professionals and organizations should implement a model of care that promotes continuity of care as older adults appear to respond better to consistent primary care providers. [B]

Part 10: Summary

These guidelines for depression in older adults were written from an interdisciplinary perspective, for health care professionals working with depressed older adults in any setting (e.g., rural or urban, home or institution) across Canada. Specifically, these guidelines aim to offer guidance to primary care providers and health care teams working with older adults. The guidelines begin with a focus on screening and assessment and the types of depression diagnoses seen in older adults. Based on available research evidence of efficacy, assistance is then provided on the selection of intervention strategies with respect to psychotherapies and other psychosocial interventions and pharmacological treatments. The guidelines include several sections which need to be addressed in order to successfully help those with depression, namely, the importance of on-going monitoring and treatment for depression, issues of concern regarding special populations, education and systems of care.

These guidelines bring together the evidence available to date. However, it is recognized that while the body of research on depression in older adults is steadily increasing, there are still many areas where the more controlled levels of research (i.e., categories of evidence Ia – II) are lacking. In those instances, we had to rely on more descriptive, case study and qualitative research (category of evidence III), and on expert opinions (category of evidence IV) from the developers of these guidelines themselves, from colleagues and stakeholders and from other published guidelines. The guidelines delineate several important areas for future research with the hope that further revisions of these and other guidelines will benefit from increased understanding and thus confidence in how to help those older adults who suffer from depression.

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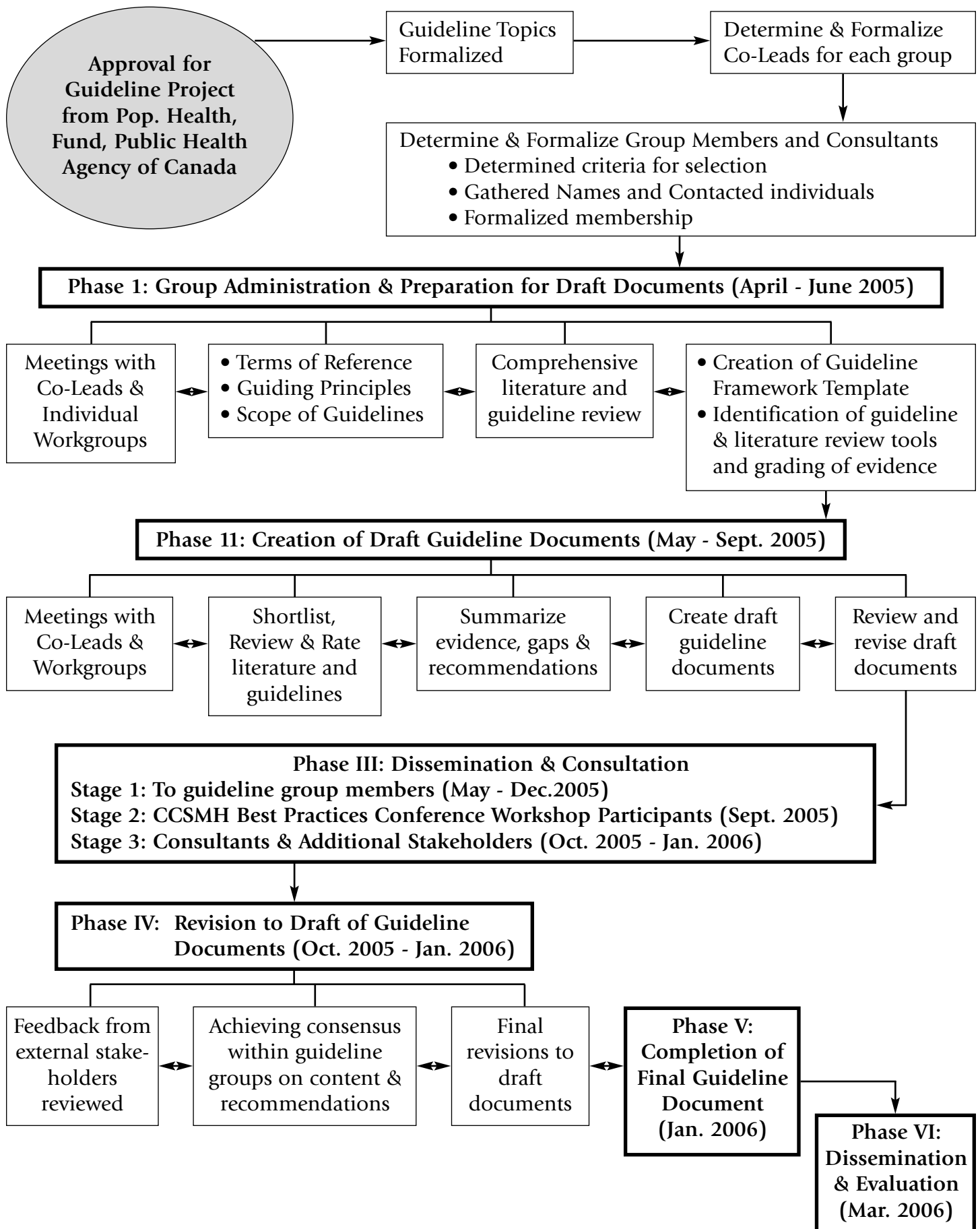
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Appendix A: Guideline Development Process



Appendix B: Cytochrome P450 Enzymes and Their Role

(Lin, 2003)

It is important to understand the role and definitions of the CYP 450 enzymes. They are found in the liver, kidney, small intestines, lungs and brain. Their major function is to metabolize chemicals by making fat-soluble molecules more water-soluble so they can be eliminated via the kidney.

“Substrates” are molecules that bind to the enzyme and are processed by the enzyme. If the enzyme is blocked then the substrate drug will have a slower clearance and the blood level of the drug will rise.

“Inhibitors” are chemicals that bind to the enzyme and permanently prevent the enzyme from being able to process

any other medication. Therefore the blood level of the medication to be processed would rise and accumulate.

“Inducers” are chemicals that accelerate the cytochrome function and medications may be metabolized faster. Then the blood levels would fall faster than expected lowering its therapeutic efficacy.

An interaction can also be based on “competition” whereby 2 medications compete for the same enzyme. This results in one medication being displaced and not metabolized properly resulting in increased blood levels.

