The Impact on Long-term-care Homes

The Third Canadian Consensus Conference on the Diagnosis and Treatment of Dementia (CCCDTD3) resulted in a set of wide-ranging recommendations applicable to care and clinical research involving persons with Alzheimer’s disease and other dementias.¹ All CCCDTD3 recommendations were systematically developed and rated.¹ A full set of recommendations can be found in the articles published in the October 2007 issue of Alzheimer’s and Dementia.

Given the prevalence and acuity of dementia disorders among residents of long-term-care (LTC) homes, this paper focuses on the application of the CCCDTD3 recommendations specific to severe dementia. Our purpose is to explore the unique relevance of these recommendations in the LTC health-service environment.

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Long-term-care Homes

For the purpose of this paper, the term long-term-care (LTC) homes is used generically to refer to any congregate living residence created for older adults and others with chronic illnesses, disabilities, and/or deficits in activities of daily living (ADL) or instrumental activities of daily living (IADL) that necessitate skilled nursing care on a daily basis.²,³ This reference group may include facilities known as nursing homes, complex-care facilities, and/or assisted-living facilities. There is considerable demographic diversity as well as functional variability among individuals who reside in LTC homes.

There is wide variability in how LTC homes are defined, funded and structured in different Canadian provinces and territories. There are no national standards for the optimal mix of expertise and scopes of practice, and clinical resources may differ between facilities. Resources may include a variety of disciplines, however nursing and personal-care services predominate. Typically, LTC residents have an assigned family physician who works with the facility-based care providers to address identified health needs.

Statistics Canada recently published A Portrait of Seniors in Canada.⁴ This extensive report characterizes the current generation of seniors. Currently, only 7% of seniors live in collective dwellings (primarily nursing homes and hospitals), however, the likelihood of institutional residency increases with age, from 2% among seniors aged 65 to 74 years to 32% among those aged...
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85 or older. Mortality rates are declining for all but the oldest age group (90 years and older). Women continue to live longer than men, although the gap is narrowing.

The Canadian Study of Health and Aging revealed that 50% of individuals diagnosed with Alzheimer’s disease (AD) were in the moderate to severe stages of the illness, and 90% of residents in LTC facilities were in moderate to severe stages. In addition to memory disturbance, many LTC residents demonstrate behavioral and psychological symptoms of dementia (BPSD) which often become increasingly prevalent and disturbing as the dementia progresses. Frequently occurring BPSD include agitation, aggression, wandering, repetitive or bizarre behaviors, shouting, disinhibited behaviors and sexually inappropriate behaviors.

Severe Dementia

Recommendations for the diagnosis and treatment of mild to moderate dementia are applicable to residents of LTC homes as well as to those who reside in community settings. However, there are two compelling reasons for the present focus on severe dementia. First, LTC homes are the likely residence of persons with severe dementia and, second, LTC homes are unique in that they represent the only communal setting in which many individuals with severe dementia are likely to be domiciled together. The CCCDTD3 obtained consensus on 17 recommendations for the management of severe dementia. These are presented in Table 1. The levels of evidence for these recommendations vary, and are available in the consensus document.

Recommendations in Table 1 that address assessment (recommendations 1-3), medical management (recommendations 4, 5, 17) and appropriate medication use (recommendations 6, 7, 11-16) are applicable regardless of where the individual with dementia resides. This is implied in all cases, and explicitly stated in recommendation 7:

- Treatment with ChEIs and /or memantine should persist until clinical benefit can no longer be demonstrated.
- Treatment should not be discontinued simply because of institutionalization.

Recent clinical practice guidelines focusing on the assessment and treatment of mental health issues in LTC homes were developed by the Canadian Coalition for Seniors’ Mental Health (CCSMH). There are some differences between the CCCDTD3 and CCSMH pharmacologic recommendations. The CCCDTD3 recommends risperidone and olanzapine for severe agitation, aggression and psychosis. The CCSMH recommendations also include quetiapine. For severe behavioral symptoms without psychosis the CCSMH recommendations include atypical antipsychotics, trazodone and selective serotonin reuptake inhibitors (SSRIs) such as citalopram. The CCCDTD3 states that there is insufficient evidence to recommend for or against the use of trazodone for nonpsychotic agitation and only recommends SSRIs for the treatment of depression.

However, the issue that looms largest for all of these recommendations is resource allocation. Systemic changes are needed to ensure that all LTC residents have equitable access to available medications and the professional expertise necessary to prescribe their appropriate use. For example, as a minimum, LTC homes should have an assessment protocol and policy that mandates regular reassessment and the resources to consult external experts when needed. It is important to note that, in most Canadian provinces, the government will not...
Table 1

Recommendations for the Management of Severe AD

1. Severe AD can be defined as the stage in which the patient becomes totally dependent on a caregiver for survival. This will typically correspond to a score of < 10 on the MMSE and a score of 6 to 7 on the GDS.

2. Patients with severe AD should be assessed at least every four months or if treated with pharmacotherapy at least every three months.

3. Assessment should include cognition (e.g., MMSE), function, behavior, medical status, nutrition, safety and caregiver health.

4. The goals for management are to improve the quality of life for patients and caregivers, maintain optimal function and provide maximum comfort.

5. Medical management includes treatment of intercurrent medical conditions (e.g., infections, parkinsonian symptoms, seizures, pressure ulcers), ameliorating pain, improving nutritional status and optimizing sensory function.

6. Patients with severe AD can be treated with ChEIs, memantine or the combination. Expected benefits would include modest improvements or slower decline in cognition, function and behavior.

7. Treatment with ChEIs and/or memantine should persist until clinical benefit can no longer be demonstrated. Treatment should not be discontinued simply because of institutionalization.

8. The management of patients with BPSD should begin with appropriate assessments, diagnosis and identification of target symptoms and consideration of the safety of the patient, their caregiver and others in their environment.

9. Nonpharmacologic treatments should be initiated first. Approaches that might be useful for severe AD include behavioral management for depression and caregivers/staff education programs for a variety of behaviors. Music and multi-sensory interventions are useful during treatment sessions but longer-term benefits have not been demonstrated.

10. Pharmacologic interventions should be initiated concurrently with nonpharmacologic approaches in the presence of severe depression, psychosis or aggression that puts the patient or others at risk of harm.

11. Pharmacologic interventions for BPSD should be initiated at the lowest doses, titrated slowly and monitored for effectiveness and safety.

12. Attempts to taper and withdraw medications for BPSD after a period of three months of behavioral stability should occur in a standardized fashion.

13. Risperidone and olanzapine can be used for severe agitation, aggression and psychosis. The potential benefit of all antipsychotics must be weighed against the potential risks such as cerebrovascular adverse events and mortality.

14. There is insufficient evidence to recommend for or against the use of trazodone in the management of nonpsychotic agitated patients.

15. Benzodiazepines should be used only for short periods as prn agents.

16. Selective serotonin reuptake inhibitors can be used for the treatment of severe depression.

17. If BPSD fails to improve after appropriate nonpharmacologic and pharmacologic interventions, refer to a specialty service.

AD: Alzheimer’s disease; GDS: Global Deterioration Scale; MMSE: Mini-Mental State Examination; ChEIs: Cholinesterase inhibitors; BPSD: Behavioral and Psychological Symptoms of Dementia.
cover the cost of cholinesterase inhibitors (ChEIs) once the Mini-
Mental State Exam (MMSE) score drops below 10 points. Also, the cost
of memantine is not covered in most provinces.

The remaining three recommend-
dations (recommendations 8 to 10)
have a unique interpretation in the
LTC context, as they speak specifically to issues of safety and educa-
tion. Safety and education are rele-
vant to all environments in which
individuals with dementia reside,
but will be operationalized differ-
ently in each context. In the LTC
environment, the uniqueness aris-
es largely from the communal
nature of the setting, with large
numbers of dementia sufferers
spending the majority of their
time in close proximity to each
other. We consider the implica-
tions of recommendations 8 to 10
for LTC homes specifically. To
facilitate the following discussion,
consider Mrs. Smith, a typical
LTC resident.

Case Presentation
Mrs. Smith is an 85-year-old
woman who suffers from several
chronic conditions, including a mus-
culoskeletal disease that impacts her
mobility and sensory impairments
(hearing and vision). She is inconti-
nent, under weight, and has moderate-
to-severe dementia. She is disorien-
ted to person, place and time and occasionally agitated as evid-
ced by calling out and pacing
(unsteadily). She requires com-
plete assistance with ADLs, and
participates in programs and
activities only with significant
levels of support and only on
“good” days. She is a widow, but
has family members who make
brief visits, usually on weekends.
She seldom recognizes them. She
spends the majority of her time in
the presence of other residents
and staff, with an absence of
meaningful social interaction or
engagement.

Mrs. Smith is well-known to
the treatment team, including the
facility-based staff and her con-
sulting physician. She has been a
resident for 18 months. Her physi-
cian sees her for routine checkups,
and nursing rounds result in few
revisions to her care plan. Occasion-
ally, family members
and facility care providers dis-
agree on some aspects of care pro-
visions, but relationships are gen-
erally congenial. Only the
required minimum of end-of-life
care planning has occurred (she
has a “do not resuscitate” order),
but care providers and family
expect that she will eventually
pass on in the care of the facility.

In the average 24-hour period,
facility-based healthcare providers
may choose to ignore, deflect and/or
redirect a variety of Mrs. Smith’s
dementia-related behaviors (e.g.,
pacing, calling out), depending on
contextual factors such as whether
the behaviors are noticed, per-
ceived risk, available resources
and deviance from the norm.
Behaviors that are more unusual,
more risky or have significant
consequences are more likely to
result in communication with the
consulting physician or a family
member. For example, if she falls or
interferes substantially with another
resident, incident-reporting proce-
dures and responses are likely to
follow. Persistent increases in agi-

Systemic changes are needed to ensure that all LTC residents have equitable access to available medications and the professional expertise necessary to prescribe their appropriate use.
Application of Recommendations (Table 1): Recommendation 8 mandates two sets of actions. The first is the appropriate assessment, diagnosis and identification of target symptoms. There are well-established behavior-assessment methods that are ideally suited to generate the required information within the LTC setting. In Mrs. Smith’s case, behavior assessment identifies agitation as the behavior of a particular concern, because it creates a risk to herself (she paces rapidly when agitated, despite her frailty and risk for falling) and others (she is at risk for bumping into and tripping over others). Behavioral analysis reveals frustration is a frequent precursor to her agitation and pacing, but the need or desire fueling her frustration is not always apparent and/or not always achievable, for example, when what she wants is something currently in the possession of another resident. Her apparent emotional distress is readily communicated to other residents who also become agitated. Her care providers themselves can become frustrated, particularly when her agitation occurs at times when resources are stretched, such as shift change or when other residents are similarly displaying behaviors of concern. Unchecked, her agitation can escalate into aggression towards others, despite her general frailty. If Mrs. Smith becomes agitated when family members are present, they blame themselves, feel helpless and experience reluctance to maintain their regular visiting schedule.

The second action mandated by recommendation 8 is the consideration of safety. Behaviors such as agitation, aggression, delusions and sexual inappropriateness create safety concerns. There is a risk of physical and/or mental harm to the individual presenting the behaviors, the target(s), and even bystanders. Harm may or may not be the object of the actor, but regardless, LTC facilities have a duty to minimize risk and ensure the safety of residents, visitors and care providers. Thus, the impact on the LTC community as well as the impact on the individual must be taken into consideration when developing a care plan to respond to BPSD.

In Mrs. Smith’s case, it is evident that behavioral contagion is likely and inhabitants of the environment are emotionally and physically vulnerable. Thus, it is critical that care providers have the skills for effective crisis intervention and the expectation that crisis escalation is preventable with early intervention. Moreover, the organizational culture must support a quality-improvement philosophy that enables staff to share expertise, learn from experience and assist each other as needed to maintain a therapeutic rather than punitive milieu. There needs to be explicit discussion of the antecedents and consequences of Mrs. Smith’s behaviors and a shared plan of action for prevention and de-escalation.

The CCSMH guideline similarly endorses the principle of first-line treatment by nonpharmacologic methods in general, as articulated in CCCDTD3 recommendation 9, as well as the caveat that concurrent implementation of pharmacologic and nonpharmacologic interventions may be necessary in situations where symptoms are particularly severe, as articulated in CCCDTD3 recommendation 10. Considerations of safety and risk management for the entire LTC community are
again relevant in determining when circumstances warrant a staged vs. concurrent intervention approach.

With respect to caregiver/staff education programs, it is a reality that LTC homes differ in their resources for educational programming and residents differ in whether they have family members and friends who are willing and able to participate in educational offerings. That aside, it is clear that lack of knowledge and skills can compromise resident care and safety and there is an urgent need for standards, strategies and further research on how to optimize the effectiveness of knowledge utilization in the LTC setting. In Mrs. Smith’s case, there are involved family members who have demonstrated their commitment to remaining involved with her and their need for education (they are distressed by her agitation). It is important that the LTC home make available to the family the information and training they require to enable and encourage them to stay involved with Mrs. Smith and contribute to her quality of life.

Conclusions
The issues that are unique to the management of severe dementia in LTC homes are those that hinge on the intersection of population density, disease severity and caregiving resources (including staff ratios, education and norms around family participation in the therapeutic milieu). As Canadian demographics continue to shift, there will be increasing demand for the development of effective strategies for the management of severe dementia in LTC homes. Continued thoughtful analysis and discussion of the issues of safety, risk management and knowledge utilization will be essential to the evolution of care in this environment.

References: