

July
2010

Older Adults Behavioural Support System

An evidence-based provincial framework and operational program model for a cross-sectoral system of specialized supports and treatments designed to meet the needs of older adults with cognitive impairment and associated complex and challenging behaviours.

Scott Dudgeon
Patti Reed
The Distance Learning Group



CONTENTS

Background	3
Purpose	3
Introduction	5
Definition of Priority Population.....	8
Tiered Levels of Continuous Care.....	9
System Design	11
Regional Behavioural Support System	11
Guiding Principles	12
BEHAVIOURAL SUPPORT SYSTEM CONCEPTUAL MODEL	14
Core Concepts	14
BEHAVIOURAL SUPPORT SYSTEM MODEL: Essential Elements	18
Summary	28
References	29

BACKGROUND

Ensuring a healthy and safe environment and an effective system of care and treatment for people with behaviours associated with complex and challenging mental health, dementia or other neurological conditions poses an enormous pressure on the health care system and on human service providers across the continuum of care. In April 2007, MOHLTC released *Building a Better System: Caring for Older Individuals with Aggressive Behaviours in Long-Term Care Homes* in response to the results of a Coroner's Inquest regarding the tragic death of two residents who were killed by a newly admitted resident into a long term care home in Toronto. Highlighted through this event was the lack of prevention, knowledge, coordination, integration, early identification or adequate supports to safely manage residents with aggressive behaviours or the safety of others in a fragmented, silo-driven service structure.

Building the capacity of the health care system to address the impact of the exponential growth in the number of people with Alzheimer disease or related dementias and the demand for specialized supports to manage complex and challenging behaviour is critical to future provincial planning. Recent reports state that persons with dementia account for 25% of ALC hospitalizations (CIHI, 2009) and comprise 65% of the long term care home population (MOHLTC, 2007), and that 40% of the residents of long term care homes exhibit aggressive behaviours. The literature suggests that 80%-90% of nursing home residents live with some form of mental illness and/or cognitive impairment with more than two thirds of the residents diagnosed with some form of dementia, 10% diagnosed with affective disorders and 2.4% diagnosed with schizophrenia or another psychiatric illness.¹

In April 2009, a knowledge exchange session with key stakeholders directly or indirectly involved with care for older individuals with complex behavioural challenges was convened by Alzheimer Knowledge Exchange (AKE), Alzheimer Society Ontario (ASO), MOHLTC and the North Simcoe Muskoka LHIN. Consensus was reached on the need to build a shared model of behavioural supports that is guided by provincial policy with the overall goal of implementing an integrated system approach to the care of those with complex and challenging behaviours. In December 2009, a Behavioural Support Systems roundtable consultation was held with over 80 representatives across sectors and across communities to provide input on the expected deliverables of the Ontario Behavioural Support Systems (BSS) Project.

The Ontario BSS Project is led by the North Simcoe Muskoka LHIN in partnership with the Alzheimer Society of Ontario and the Alzheimer Knowledge Exchange with support from the Ontario Health Quality Council and the Health System Accountability and Performance Division of the Ontario Ministry of Health and Long Term Care.

PURPOSE

The long range vision of the Ontario Behavioural Support System is the development of a model and policy and implementation framework that demonstrates an integrated, cross-sectoral

¹ Canadian Coalition for Seniors' Mental Health, "National Guidelines for Seniors' Mental Health: The Assessment and Treatment of Mental Health Issues in Long Term Care Homes, May 2006.

comprehensive system with access to specialized resources as required within a knowledgeable care community that is designed to meet the needs of people with responsive behaviours associated with complex mental health issues, dementia or other neurological conditions.

The purpose of this report is to describe an evidence-informed² integrated BSS model with 'scalable' options for implementation. For the purposes of this report 'scalable' is intended to mean the following:

1. Scope: The conceptual framework of the model is aligned with the emerging values and principles of overall health care direction and related Ministry planning and is adaptable for implementation in areas throughout the province of Ontario.

The provincial framework and operational model is intentionally designed within the context of Ontario and its' legislation, policy direction, funding structures and available resources. Evident in the literature review and in dialogue with leaders in behavioural support systems for older adults across the country, there are shared similarities in approaches and concerns in adequately addressing the complex needs of this population. There may be applicability for many of the core concepts in the BSS model with implementation of local adaptations according to policy and funding resources outside of Ontario.

2. Scale: The core components of the model can be implemented incrementally in a planned, staged strategy that builds intersectoral collaboration and a platform for both knowledge transfer and sustainability as the implementation moves forward from phase to phase.
3. Service design: Implementation of the model should begin with the size of the community and the local capacity (existing professional expertise and resources) and build up from there. The integrated model recognizes that high quality service delivery requires partnerships among clients and family members, primary care, community, hospital and long-term care settings to be effective.
4. Target population: The shared care model is specifically designed for older adults with cognitive impairments due to dementia, mental illness or other neurological conditions with associated complex and challenging behaviours and their caregivers; however the vision and guiding principles and overall framework are applicable to other populations with behaviours associated with cognitive impairments and complex and challenging mental health needs (such as older adults with substance abuse disorders, people with an acquired brain injury, and younger adults with age-related and neurological illnesses).

Note: It is recognized that the presenting symptoms, treatment interventions and professional expertise or knowledge base of care providers will be somewhat different for

² "Evidence-informed" is defined as best practices that include the understandings of people with lived experience, the learnings from the field of practice, and traditional research findings.

various other populations who also have cognitive impairments and responsive behaviours. Older adults were intentionally chosen as the target population for the initial BSS model design due to the significant and rapidly growing unresolved demand for care and the major impact this is having on the provincial health care system.

The project involved a rapid evidence review of the literature highlighting evidence-based research on behavioural supports for older adults. The BSS Model reflects best practices both nationally and internationally. It also reflects 'made in Ontario' innovative strategies demonstrated through a provincial review of LHIN Aging at Home initiatives and an inventory of funded BSS projects that have been developed over the past two years. Implementation of this model will ensure equitable access to a continuum of specialized care that is flexible and responsive to the changing needs of older adults experiencing difficult behaviours.

This document includes: a description of the target population, an overarching philosophy, values and guiding principles of care, a description of a continuum of specialized care and required services based on an evidence-based service model, an approach to care and key service delivery components for successful implementation.

INTRODUCTION

Primary care providers, long-term care facilities and community agencies are dealing with a significant and growing number of older people with complex physical and mental health needs with associated behaviours, including: people with behavioural problems related to dementias, other neurological dysfunction and mental illness; older people who develop serious mental illness, including those who require acute and ongoing mental health care as well as services provided by the long term care support services; and older people with long-standing serious mental illness who require complex care and/or have functional limitations.

The percentage of the Ontario population that is 65 years old or older is expected to accelerate rapidly as the first of the baby boom generation become seniors in 2011. It is estimated that within the next twenty years approximately 21% of Canadians will be seniors and that almost half of the older adults will be over age 85. According to Statistics Canada the life expectancy of Canadians has also increased and people over 80 is the second fastest growing age group. Dementia is an age-related disease and affects approximately 35% of those aged 85 and older. The projected prevalence of dementia is expected to increase from 1.5% of the Canadian population in 2008 to 2.8% of the population in 2038 (representing over 1,125,000 people)³

The needs of older adults with responsive behaviours may not be met by generic services provided to the elderly. According to the statistics, older adults with cognitive impairments who are exhibiting challenging behaviour are a relatively small group in relation to the total seniors' population. However, effectively meeting the complex needs of this group has a significant impact on the health care system and will further increase as the oldest adults demographic

³ Rising Tide: The Impact of Dementia on Canadian Society, 2010, Alzheimer Society of Canada.

(age 85+) continues to grow along with the disproportionate increase in dementia, depression and other mental illnesses, and substance abuse disorders.

Among the general population of older adults it is estimated that 15-40% of Canadian seniors require mental health services and that 5-10% have severe psychiatric impairment that may require specialized services.⁴ “Mental health problems in late life usually occur in the context of medical illness, disability and psychosocial issues related to social or emotional isolation. Seniors are particularly at risk during critical transitions, including disablement, widow-hood, caring for a spouse with dementia or institutionalization.”⁵

In a recent descriptive report describing an overview of persons diagnosed with Alzheimer's disease or dementia that were assessed with the RAI HC assessment tool and receiving home care services between the years 2003-2008, it was found that over 16% of the older adults were assessed with serious behaviours including: verbally abusive behaviour (65%), physically abusive behaviour (26%), socially inappropriate behaviour (47%) and resisting care (54%). Seventy-nine percent of the persons with serious behaviour lived in a private residence, 18% lived alone and 58.8% lived with their primary caregiver (usually a spouse or child). However, the days and hours of formal care time for personal support and homemaking or therapy services was found to be the same or less than those with moderate or no behaviours with the exception of daycare or day hospital which averaged an additional 1-2 more hours per week. Caregivers were found to be providing 3 to 8 more hours of informal care time per week for people with serious behaviours and 64.5% of those caregivers expressed feelings of distress or an inability to continue as compared to 31.5% of caregivers for people with dementia and no behaviours.⁶

The number of individuals that require specialized behavioural supports is more prevalent in long term care homes (LTCHs). Residents with Alzheimer disease, dementia or other mental health issues account for 65% of the LTC home population.⁷ A CIHI study conducted in five LTCHs in Nova Scotia between 2003 and 2007 found that delirium, insomnia and signs of depression were the three most important factors associated with aggressive behaviours and that 40% of the residents showed one or more behaviours considered to be aggressive.

In a 2010 report from the Ontario Health Quality Council⁸ (OHQC) it is noted that behaviours such as aggression, agitation or wandering is common among residents of long term care homes and that about one in nine residents exhibited worsening behaviour over the past three

⁴ Canadian Association of Gerontology “Issues Paper: Issues in the Delivery of Mental Health Services to Older Adults” retrieved on the World Wide Web at www.cagacg.ca/english/pdf/issuesmental_561.pdf on June 15, 2010.

⁵ Ontario MOHLTC “Specialized Geriatric Mental Health Outreach Teams Program Policy and Accountability Framework” 2004, p.3.

⁶ Costa, A. Overview of Persons with a diagnosis of Alzheimer's/Dementia with and without Behavioural Symptoms, Descriptive Report for Alzheimer Society of Ontario, Nov. 2009.

⁷ Ministry of Health and Long Term Care, Long Term Care Resident Profile – 1992-2006, 2007.

⁸ Ontario Health Quality Council, “2010 Report on Ontario's Health System”, Quality Monitor, 2010.

months. One characteristic of behavioural and psychological symptoms of dementia is the intermittent occurrence of severe aggression which is especially difficult to manage in long term care homes. The OHQC report also advises that 17% of residents are physically restrained which is a much higher rate than in other countries.

Ontario currently offers a patchwork of specialized supports with islands of isolated excellence. Services are found supportive for those that can access them but the range of available services is often fragmented, hard to negotiate and inflexible. Services may overlap to offer a duplication of some resources and leave some needs completely unaddressed. Integrated care can be seen as a response to the inefficiencies people experience due to the increasing fragmentation within health and social care systems. As service users, this is especially relevant to older people who often have multiple and diverse needs (i.e. medical co-morbidities, socio-economic, personal supports for activities of daily living) for longer periods that change over time.

Since the release of the MOHLTC policy document, *Putting People First: The Reform of Mental Health Services in Ontario* in 1993, there has been recognition of the need for increased capacity in the provision of specialty geriatric mental health services. The subsequent release of *Making it Happen: Operational Framework for the Delivery of Mental Health Services and Supports* in 1998 identified how core services should be delivered based on best practices and levels of need. Geriatric mental health services were considered a specialty population that required more intensive treatment and higher levels of coordinated care in both community and hospital settings.

Mental health reform in Ontario has made significant gains in the past decade to improve the availability and effectiveness of services across the system. Investments through Aging at Home in specialized geriatric psychiatry outreach teams, hospital Geriatric Emergency Management (GEM) nurses, behavioural support units in long term care homes, and Alzheimer day programs have greatly enhanced service capacity. In a parallel process, new investments through Primary Care Reform such as Community Health Centres that have a seniors focus and Family Health Teams that engage mental health professionals in shared care have further improved access to health care for older adults.

The proposed Ontario Behavioural Support System Model is aligned with current health policy development and strategic directions of the province. The model is purposely designed to build community capacity in three ways:

- 1) by strengthening the knowledge base of generic services for older adults with responsive behaviours through direct teaching, modeling, coaching and mentoring;
- 2) by ensuring that specialized services are a readily available resource to whomever seeks professional expertise to assess and access the level of care that will maintain an older adult with responsive behaviours in his/her place of residence; and
- 3) by improving the efficiency of existing services and supports for the target population through a strategically planned, coordinated approach to the delivery of services.

DEFINITION OF PRIORITY POPULATION

The BSS model is adaptable to younger adults and people without cognitive impairments; however, the proposed BSS model is **designed for older adults with complex and responsive behaviours associated with cognitive impairments** due to complex mental health and addictions, dementia, or other neurological conditions.

The most common mental health disorders among older adults are depression, dementia, delusional disorders and delirium. The term 'responsive behaviour' describes any behaviour that is deemed to be dangerous to themselves or others or is considered antisocial within environments where people must coexist with others, i.e. family home, long term care home. Behavioural symptoms include agitation, aggression, wandering, repetitive or bizarre behaviours, shouting, disinhibited behaviours and sexually inappropriate behaviour.

Aggressive behaviour includes: resisting help with personal care or medications, physical abuse such as hitting, scratching, biting or sexually abusing others, shouting, wandering, throwing objects, or general anger.

Responsive behaviour may be termed "challenging behaviour" or "BPSD" ('behavioural and psychological symptoms of dementia'). "Challenging Behaviour" or 'behaviour that challenges' is a term that is used to describe behaviours presented by clients that challenge those around them. These behaviours also tend to impact on the availability of opportunity for the person who presents the challenge...and may refer to the capacity of the environment around the person to cope with the behaviour."⁹ Other than the obvious behaviours of physical abuse or violence, it is often the impact of the behaviour on those who experience it that creates the perception of behaviours being severely challenging. For example, someone who screams loudly throughout the night may be considered to have persistently challenging behaviour to the people she lives with.

Responsive/challenging behaviours are a major source of distress both to the person who is presenting the behaviours and to those who experience them – the caregiver, the family members, and the primary health and community care service providers. In the community setting challenging behaviour and consequent caregiver 'burn-out' often precipitates a request for admission to a long term care home, sometimes in crisis. Ironically, a person with responsive behaviours can have great difficulty accessing placement in a long term care home or be delayed discharge from hospital to an appropriate place of care.

⁹ Gudgeon, E., Shirley, O. James, I. Downloaded from "Psychology Specialise Working with Older People" at www.psig.org on June 12, 2010.

TIERED LEVELS OF CONTINUOUS CARE

The intent of the BSS design is to develop a continuous care model that will maximize and maintain the older adults' highest level of functioning and independence for as long as possible. The model is based on creating the least restrictive and supportive physical and social environments to maintain well-being. The literature strongly supports this concept that with early supports from specialized geriatric community supports in place, the majority of older persons with responsive behaviours can be managed at home. In this model it is expected that as the person's needs change over time, the intensity of resources also changes and moves to a different 'tier' or level of care. A person may move up (more intense) or down (less intense) the levels of care.

In 2003 Brodaty and Draper developed a conceptual model of service delivery for people with behavioural and psychological symptoms of dementia (BPSD) into seven tiers according to symptom severity¹⁰. People with extreme behavioural and psychological symptoms of dementia are represented by Tier 7 in the Brodaty-Draper triangle and require tertiary level in-patient specialist mental health services (see Figure 1). Tiers 3 to 6 may require access to specialist expertise including individualized behavioural management strategies either in the community or in residential care settings. It is services for people that require Tier 3 to Tier 7 levels of care that are considered for this report. The Tiers are described in more detail below.

Tier 1 is comprised of the general population without dementia.

Tier 2 is comprised of the population of people with dementia with no BPSD. Prevalence¹¹: 40% of people with dementia.

Tier 3: Mild Mental Disorders, BPSD

Described as people with BPSD with night time disturbance, apathy, wandering, mild depression, anxiety disorders, repetitive questioning. Management through caregiver, and primary health care providers; education in liaison with psychogeriatric service; utilize psychosocial approaches and behaviour management technique, environmental modifications, general activity program, psychotherapy and pharmacology.

Prevalence: 30% of people with dementia

Tier 4: Moderate Mental Disorders, Moderate BPSD

Described as people with moderate BPSD – verbal aggression, sexual disinhibition, psychosis, depression, schizophrenia, bi-polar, Management through psychogeriatric consultation, pharmacotherapy, behavioural management or in collaboration primary care through shared care model. Prevalence: 20% of people with dementia

¹⁰ NSW Department of Health. 2006. Summary Report: The management and accommodation of older people with severely and persistently challenging behaviours. North Sydney, Australia.

¹¹ Prevalence is expressed as estimated percentage of people with dementia who currently fall into this category based on clinical observations.

Tier 5: Complex Mental Disorders, Severe BPSD

Described as people with BPSD with aggression or agitation and carer stress, chronic depression, schizophrenia with co-morbidity or suicidality. Case management by multidisciplinary psychiatric outreach team, specialist medical and psychiatric review or institutional setting. Prevalence:10% of people with dementia

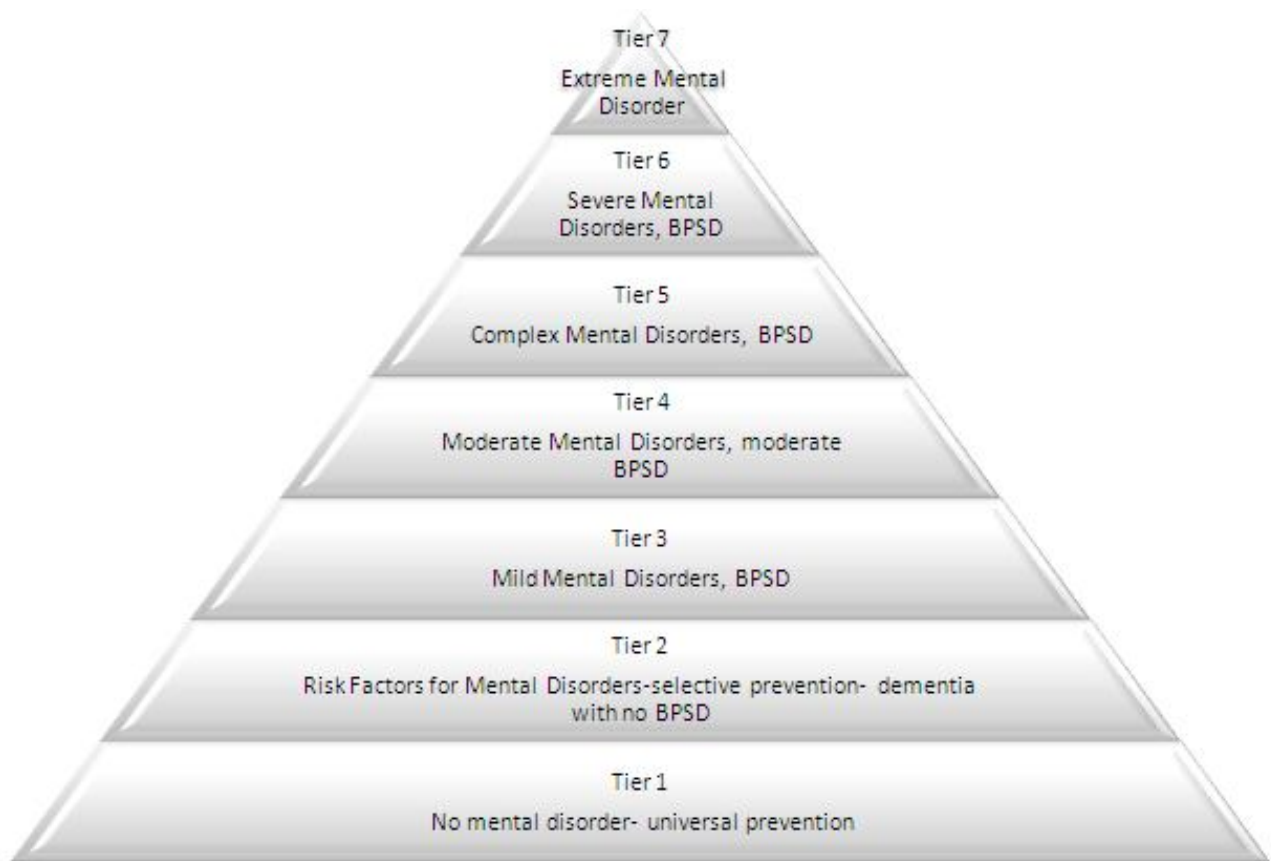
Tier 6: Severe Mental Disorders, BPSD

Described as people with dementia and delirium best managed in acute care; people with dementia and psychiatric conditions (i.e. suicidality) best managed in acute care psychogeriatric unit; dementia with severe behavioural disturbance best managed in specialist psychogeriatric residential behavioural support unit (interim facility) with specially trained staff. Prevalence: <1% of people with dementia

Tier 7: Extreme Mental Disorder

Described as people with dementia who manifest violent behaviour that is best managed in a high security residential unit (e.g. tertiary care hospital). Prevalence: Rare.

Figure 1: Brodaty-Draper Seven-tiered model of service delivery for mental health disorders in old age



SYSTEM DESIGN:

REGIONAL BEHAVIOURAL SUPPORT SYSTEM

The overall purpose of the BSS Model is to improve the quality of life of older adults with responsive behaviours associated with cognitive impairment which interferes with their ability to function independently and adversely affects their relationship with others. Implementation of the Behavioural Support System requires a clearly articulated philosophy that puts the consumer in the centre and focuses on mental health and well-being.

Philosophy

Central to the success of a behavioural support service is ensuring that people are treated with respect in an environment that supports prevention and safety for all and is based on high quality and evidence-based practice delivered by knowledgeable, skilled and compassionate staff.

A familiar Ontario model to borrow from is the learning initiative called “P.I.E.C.E.S.” First implemented in Ontario in 1998, this education program was established to create a foundation for a common vision, a common language and a common system-wide approach for thinking through problems to enhance the ability of staff in long term care homes to care for individuals with complex physical and cognitive/mental health needs and associated behavioural changes. (A companion curriculum developed for caregivers and community health and social service providers is called U-First!; it includes the basic concepts of P.I.E.C.E.S. and offers a practical method for shared problem-solving and shared care planning.)

P.I.E.C.E.S. offers an interdisciplinary shared care framework for understanding the older person with behavioural issues and the importance of the persons’ physical, intellectual, emotional health, capabilities and environment (physical and social) on the well-being and quality of life for them and their caregivers.¹²

The P.I.E.C.E.S. initiative was developed to enhance direct care at the individual level for people with complex needs; however, the founding tenets of the philosophy for this holistic approach to care are strongly applicable to a behavioural supports system model.

The P.I.E.C.E.S. holistic philosophy of care is adopted for the BSS Model and espouses the following beliefs:

- Person-centred, evidenced-based and humanistic care is critical to well-being
- Health is beyond the absence of disease, and includes quality of life, independence, and self-determination
- Prevention of problems and early intervention is preferable to late

¹² For additional information go to www.piecescanada.com.

- Care and service should be available where the older person resides, and relocation should be avoided; failing this, every effort made to return the older person to their place of residence through effective, timely intervention.

GUIDING PRINCIPLES

There are seven guiding principles that incorporate the philosophy that underlies the BSS Model. These values-based principles guide the development of health care services for people with responsive behaviours and direct the implementation goals of the model.

1. **Behaviour is communication:** The foundational underlying assumption within the BSS Model is that one can minimize challenging behaviour by understanding the person and by adapting the environment or care to better meet the individual person's unmet needs.

Rather than assume that difficult behaviours are a natural progression and expected symptom of dementia, or a lack of inhibition due to an acquired brain injury, this principle is based on the belief that behaviours are an attempt to express distress, problem-solve or communicate unmet needs, and that most often challenging or responsive behaviour is not meaningless, unpredictable, or only manageable through chemical or physical restraints.

2. **Person-centred Care:** All persons must be treated with respect and accepted 'as one is', regardless of age, health status, behaviour, etc. Individual feelings, needs and wishes are valued and compassionate care is expected. Practitioners must know the person to better understand the presenting behaviours and triggers.¹³

Respect and trust should characterize the relationships between staff and clients and between providers across systems.¹⁴ The older person and caregiver/family/social supports have an equal voice and is to be regarded as a partner in personal care and life goal decisions.

3. **Diversity:** The cultural diversity of people being served requires culturally competent approaches to be effective. Practices must value the language, ethnicity, race, religion, gender, beliefs/traditions, and life experiences of the person to be relevant to the individual being served.¹⁵
4. **Collaborative Care:** The development of meaningful relationships must be encouraged to incorporate the broadest range of information, skills and expertise available to synergistically influence the client/patient care provided.. Accessible, comprehensive assessment and

¹³ Kitwood, T. (1999). "Dementia Reconsidered: The Person Comes First (Rethinking Ageing)". *BMJ* 318 (7187).

¹⁴ Health Canada. "Principles of the National Framework on Aging: A Policy Guide, 1998.

¹⁵ Canadian Mental Health Association Ontario. "The Windows of Opportunity for Mental Health Reform in Ontario, 2010.

intervention requires an interdisciplinary team approach that recognizes that separate skills are complementary and functions of members are interdependent. A collaborative care approach is based upon professionals from different disciplines cooperatively assessing the client and family needs and developing a joint single plan of care to address them.

- 5. Safety:** The creation of a culture of safety and well-being is promoted where older adults and families live and where staff visit and work.

The promotion of least restrictive and supportive physical and social environments, including the use of non-pharmacological psychosocial interventions whenever possible, that continuously adapts in response to changing needs, will allow seniors to take manageable risks and remain as independent as possible without placing undue burdens on families.

- 6. System Coordination and Integration:** Systems are built upon existing resources and initiatives and develop synergies among existing and new partners to ensure access to a full range of integrated services and supports; the provision of supports is flexible and based on need – not funding/mandate silos.

- 7. Accountability and Sustainability:** Accountability is a critical component of excellent service delivery. The service system is accountable to the people being served; health and social service providers are accountable to each other and to the funder to define performance expectations and fulfill responsibilities; the funder is accountable to the system to provide policy direction and adequate resources.

BEHAVIOURAL SUPPORT SYSTEM CONCEPTUAL MODEL

There are no conclusive performance benchmarks or research-based best practice models for behavioural support systems of care for older adults with cognitive impairments found in the systematic review of the literature conducted for this project. Despite the limited evidence concerning the effectiveness of specific models, there are several core concepts inherent to optimal care derived from the literature that were considered in developing this model.

CORE CONCEPTS

- Person and family-centred care
- Single plan of care developed with user and family/significant others and interdisciplinary team
- Provincially consistent core service functions at both local and regional levels to ensure equitable access and availability
- Functions build, where possible, on current infrastructure and services - coordinated care reflects current and readily accepted access pathways and relationships
- Collaboration in community assessment and shared care through interdisciplinary teams
- Supported referral, inquiries, intake, admission, discharge and monitoring processes that are transparent to users and health and social service providers
- Supported transitions across systems/sectors/services (including case management)
- Consistent approach to assessment and data collection
- Continuous improvement and capacity-building through education, specialty consultation and continuous quality improvement service development strategies

Incorporating the core concepts into an integrated system-wide approach creates three foundational “pillars” that are fundamental to the BSS Model: System Coordination, Specialized Service Delivery and Knowledgeable Care Teams and Capacity-building. Each of the three pillars or constructs that build the BSS Model is described in more detail below.

Three Pillars Foundation for an Older Adults' Behavioural Support System



System Coordination

Coordinated cross-agency, cross-sectoral collaboration and partnerships based on clearly defined roles and processes to facilitate 'seamless' care.



Interdisciplinary Service Delivery

Outreach and support across the service continuum to ensure equitable and timely access to the right provider for the right service.



Knowledgeable Care Team and Capacity-building

Strengthen capacity of current and future professionals through education and focused training to transfer new knowledge and best practice skills for continuous quality improvement.



PILLAR I

System Coordination across Service Continuum of Care

System coordination is a pre-requisite to ensure a 'seamless' system experience for the older adult and their family – one does not have to integrate the services but the *experience* of integrated delivery should be felt by the client. System coordination means that core service elements are readily accessible, flexible, and responsive to changing needs within a comprehensive service continuum that is well integrated within the broader continuum of care provided by health and social services.

Clients and families receive transition support to move across the continuum – step-up and step-down – and in and out of different level of care. The movement of service users is facilitated according to need and service availability in a timely manner.

System coordination is envisioned as a regionally managed network administered through a lead agency that has formal linkages created with participating partners to facilitate support from the most appropriate provider at the most appropriate level of care in the timeliest manner. This requires a commitment to a shared vision and values, explicit goals, shared responsibility and consistency for the delivery of care and shared accountability for the outcomes.



PILLAR II

Interdisciplinary Service Delivery

Interdisciplinary service delivery is comprised of three core concepts supported by the literature:

i) Collaborative/Shared Care Service Delivery:

Services are organized and coordinated to facilitate a shared care approach to meeting the needs of older adults with responsive behaviours through interdisciplinary teams.

Shared service approaches utilize the following strategies:

- Clearly defined roles and responsibilities of team members to avoid duplication, fragmentation or gaps in service;
- Identification of the individual who will provide consistent support to the client/family as he or she moves through different settings (including in and out of hospital);
- Collaborative treatment planning and a single plan of care;
- Learning and development education to caregivers and staff in a variety of disciplines.

ii) *Bio-Psychosocial Environmental Model: design and delivery of care*

“Often behaviours such as agitation, restlessness, aggression, and combativeness are an expression of unmet needs (e.g. hunger, thirst, pain, or toileting need).”¹⁶ Behaviours may also be an expression of emotional needs (e.g. loneliness, anxiety, or fear). The bio-psychosocial environmental approach proposes that the biological, psychological and social factors and the environment *all* play a significant role in one’s health and well-being. This is in contrast to the traditional biomedical model of medicine that suggests that illness is a result of disease, genetic abnormality or injury.

Working from a bio-psychosocial environmental model requires a more in-depth comprehensive assessment process. This is best provided through interdisciplinary teams of professional services to address all four components of the individual’s needs.

iii) *Least restrictive and least intrusive approach – strengths-based*

Behavioural approaches utilize psychosocial interventions and environmental adaptations prior to introducing pharmacological approaches or restraints. When behaviours are effectively addressed the person may move to a less intrusive level of intervention.¹⁷



PILLAR III
Knowledgeable Care Team and Capacity-building

Highly specialized services need highly skilled people to provide appropriate assessment and care of older adults with challenging behaviour. People working across the service continuum need to understand and value that “behaviour is communication” and have skills related to appropriate response and de-escalation when someone is showing signs of behavioural disturbance to keep the person and themselves safe. Supporting the development of the knowledge, skills and attitudes associated with compassionate and competent assessment and care will enable appropriate mitigation of responsive behaviours. As such, support for continuous quality improvement through the translation of knowledge into practice is integral to ensuring continued capacity in the ability to serve this high needs population.

¹⁶ Canadian Journal of Geriatrics 9(2) p.60.

¹⁷ There is broad consensus on using non-pharmacological approaches and psychosocial interventions as a first approach in France, Switzerland, Ireland, Italy, Germany, United Kingdom, Spain – see www.alzheimer-europe.org/EN.

BEHAVIOURAL SUPPORT SYSTEM MODEL: ESSENTIAL ELEMENTS

The BSS Model seeks to build on the best evidence and experience within a local region to increase the capacity of mental health and long term care and to provide appropriate care for older adults with responsive behaviours associated with cognitive impairment.

The three pillars in the BSS Model embody eight essential service elements that must be put in place for full implementation that include:

1. System Management/ Accountability
2. Centralized Collaborative Intake and Referral
3. Mobile Interdisciplinary Seniors Behavioural Support Outreach Team(s)
4. Case Management and Transitional Supports
5. Enhanced Day Treatment and Respite Care
6. Specialized Residential Treatment (Behavioural Support Units) – short stay
7. Specialized Residential Treatment – long stay
8. Knowledge Exchange Capacity Enhancement

Essential Elements of the Best Practice BSS Model

Pillar #1: System Coordination across Service Continuum of Care

1. *System Management/ Accountability*

The first essential key element for the implementation of a successful model that facilitates system coordination is a governance structure that provides leadership both top-down and bottom-up.

- Governance: Provided through an umbrella regional (LHIN-wide) organizational structure such as a Lead Agency Network model; membership to include system-thinkers from a wide range of individuals/organizations/sectors with strong interest in improving services for older people with responsive behaviour; act as a Steering Committee with system oversight and decision-making authority guided by interagency protocols; support effective collaborative working; maintain accountability for outcomes to LHIN and MOHLTC
- Program Level Coordinated Network (Operations Committee) with membership from agencies providing direct services to older adults with responsive behaviours; responsible for maintaining links with local health and social services, community groups and other resources; ensure joint/collaborative planning and operational implementation; oversee training; measure progress

**Essential
Element
#1**

towards shared goals; support targeted issue areas to provide seamless care and enable service integration and efficient service delivery.

- Regional System Coordinator: Employ 1 FTE position with function to liaise between partners, create new linkages, be the 'go to' person for health and social service providers; develop formal relationships between psychogeriatric services, home and community care services, tertiary care.

2. Centralized Collaborative Intake and Referral

The second essential element required to enable system coordination across a continuum of services is supported referral processes for timely access. The Older Adults BSS may receive referrals from hospitals, family physicians, long-term care facilities or community agencies seeking active linkages to the appropriate level of care for an individual with complex needs. The interdisciplinary BSS model responds to inquiries and facilitates connections to care in the community, in acute care, in long term care, and in specialized residential sites.

- Front door to BSS; single entry point from any service site across the continuum to a system of supports – able to target resources according to individual needs; gather information, deploy team to conduct assessment, use assessment information to engage geriatric psychiatrist or geriatrician
- The intake and referral process allows for a triage function whereby referrals to the most appropriate level of services can occur
- Need to develop clear eligibility protocols e.g. situation is complex; several services already involved; history of difficulty clarifying a diagnosis or determining effective intervention
- An intake assessment for eligibility is separate from the needs assessment for service
- Utilize standardized procedures (e.g. intake and referral forms); shared information systems

Essential
Element
#2

Framework Pillar #2: Interdisciplinary Service Delivery

In a national evaluation of innovative dementia pilot projects in Australia¹⁸ it was found that many people were precluded from accessing services due to severe behavioural and psychological symptoms and that they were more likely to avoid a change in their place of residence when they were able to access psychogeriatric services for diagnosis, medication review and behaviour management intervention. The BSS model of comprehensive service delivery is envisioned as an active therapeutic bio-psychosocial environmental model with ongoing assessment and appropriate medical, psychiatric and intervention that will enable older adults to “age in place” and remain in their own homes longer.

The BSS Model depicts tiers in ascending order of severity and decreasing levels of prevalence. Interventions are increasingly intensive as the severity of the symptoms increases. The objective is to maintain the older adult’s level of independence and functioning in their current living environment and to limit movement “up the tiers” as much as possible. After each intervention consideration is given to whether the older person can move to a less intrusive, less restrictive and more mainstream health care service. Transitions between the service elements are fully supported.

The essential elements for the optimal delivery of specialized behavioural supports for older adults across the continuum include:

Mobile Interdisciplinary Seniors Behavioural Support Outreach Team(s)

Case Management and Transitional Supports

Enhanced Day Treatment and Respite Care

Specialized Residential Treatment (Behavioural Support Units) – short- stay

Specialized Residential Treatment – long-stay

Other System Players:

Family Physicians/Family Health Teams/Primary Care providers

Community Mental Health Crisis Response services

Community Mental Health Case Management

Community geriatric medical services

Hospital inpatient/day/outpatient

Hospital emergency department (including Geriatric Emergency Nurses)

Community Care Access Centres

Tertiary care hospitals

Emergency medical services

Service providers from acquired brain injury, developmental, mental health, addictions, seniors, social service sectors

¹⁸ Hales,C, Ross, L, Ryan, C. 2006. Aged Care Series Number 10, National evaluation of the Aged Care Innovative Pool Dementia Pilot: Final report. Australian Institute of Health and Welfare, Canberra,

Each of the essential elements for BSS service delivery are described in ascending order of intervention from least restrictive (lower tier and community based) to most restrictive (highest tier and facility-based specialized geriatric unit).

Mobile Interdisciplinary Seniors Behavioural Support Outreach Teams (SBSOTs)

SBSOTs are the third essential element and are the **central hub** of the BSS service delivery model and function as an integral resource at all levels of care (representative of Brodaty-Draper levels 3 to 6). The SBSOT act as both an individual and system resource through two discrete functions:

Essential
Element
#3

- i) To provide a range of clinical service delivery to support older individuals with chronic and complex conditions including specialized psycho-geriatric assessment, consultation, development of treatment plans, short term treatment, rehabilitation, and short-term specialty case management (70% of role); and
 - ii) To provide learning and development opportunities through consultation, direct teaching and coaching to build local capacity and sustainability; facilitate partnerships and linkages for shared care; create linkages with acute care, CCAC, LTCHs, community mental health, primary care (30% of role).
- Utilize collaborative shared care interdisciplinary teams with expertise in care of the elderly to cooperatively evaluate the care requirements and to develop a joint plan of action with the client and family
 - Assessments are understood to be a comprehensive, ongoing process that includes screening to detect medical, psychiatric and behavioural symptoms and a structured investigation to identify the factors precipitating, maintaining or exacerbating the responsive behaviours and leads to a person-centred, evidence-based management plan
 - Assessments are conducted in the place that the person with responsive behaviours is living; look to prevent aggressive behaviours through early identification of medical, psychological or environmental triggers
 - Individuals are reassessed on a regular basis and their individual care plan is revised as necessary
 - Provide back-up/on-going consultation support to a range of environments/residential sites (including LTCHs), consult to family physicians, hospital emergency departments, community seniors services, community mental health services, CCAC
 - Provide brief (time-limited) direct treatment intervention
 - Manage transitions between hospital admission/discharge and living place of origin
 - Provide pre-discharge assessment and post-discharge follow-up and monitoring

- Extensively linked pre, during and post access to transitional Behavioural Support Residential Treatment (short stay)

Team Membership:

The SBSOT membership may vary in size, structure, and partnerships across the province depending on the available resources within the local region and the local context. There is not a consensus on the optimal mix of expertise or scopes of practice. Every interdisciplinary team should reflect a mix of professionals that are skilled and knowledgeable in the care and treatment of older adults with complex needs; include medicine, psychiatry, nursing, psychology, social work, behaviour therapy, occupational therapy, neurology.

The SBSOT may be created by drawing together local professionals to form an interdisciplinary team and to champion the BSS Model or there may be an existing geriatric outreach team that is willing to take on an enhanced role and lead implementation of the BSS Model in their locale.

Core membership:

At least one expert practitioner: i.e. Behaviour Therapist, Social Worker, Psychiatric Nurse, or Occupational Therapist

At least one physician support member with behavioural health expertise: i.e. Geriatrician, Geriatric Psychiatrist

Case Manager*

*Ideally the role of the Case Manager is a core member of the team or the function may be a contracted service through a community mental health agency.

To enable a person-centred approach and continuity of care with timely transitions across the system it is strongly suggested that the same medical health care professionals consult to both the SBSOT *and* the Specialized Residential Treatment site (BSU). This also facilitates a more efficient use of scarce resources.

Case Management and Transitional Supports

There is extensive research on the vital need for individuals and their families to have access to someone who can ‘help them get help’ as required or requested within our complicated, confusing, and often fragmented system of care. Hollander¹⁹ suggests that individuals are best served if they continue to have the same professional coordinate their care over time, even when the needs change and the older adult may require admission to an acute care hospital or behavioural support unit. In a person-centred approach where the case manager or care coordinator truly knows and understands the older adult with responsive behaviours and family, there can be a better match between the needs of the client and the appropriate level of care.

¹⁹ Hollander, M., Prince, M. 2008. Organizing healthcare Delivery systems for Persons with Ongoing Care Needs and Their Families: A Best Practices Framework. Healthcare Quarterly 11 (1), 45-54.

This, in turn increases system efficiencies by not allowing clients to deteriorate from lack of regular monitoring.

Essential
Element
#4

- System Navigator/Case Manager/Care Coordinator – person with highest level of involvement with client; oversee care process regardless of setting; remain in regular contact during admission and discharge to hospital or specialized unit; call regular interdisciplinary meetings to review care package; are consistent point of contact for client, family, other professionals
- Assigned at intake and remain with client throughout all levels of care (e.g. throughout all living environments)
- As client needs change the Case Manager ensures a continued match between the needs/goals and the appropriate intensity of services
- Case manager Provides caregiver education and on-going support

Resources for Transitional Supports

- Similar to the High Intensity Needs Fund available to LTCHs for additional staffing to maintain an older adult with responsive behaviours in their placement, the case manager should have access to discretionary monies through a *Community High Intensity Needs Fund* to provide additional supports (if required) to maintain a person in their own home or to support them during a transition from one level of care to another.
- Access (through purchase of service agreements or sub-contract) to a skilled group of Personal Support Workers with enhanced training in behaviour management strategies based on person-centred care may be deployed in the home of the older adult to maintain their living situation.

Enhanced Day Treatment and Respite Care

Respite care has emerged as a central tenet of service delivery and is the fifth essential element in the BSS Model. In consultation with caregivers throughout the province, the project team was told that access to someone who understands the daily stress and demand of caring for an older adult with responsive behaviours and who they can entrust to help care for their family member is absolutely critical to ability to cope.

Essential
Element
#5

- Consultation and education is provided to community respite and day program service providers from SBSOT
- SBSOT provides education and back-up support to respite and day program service providers

- Provide flexible respite care with high weekly hours of care, high level of caregivers support (education, counseling and referral)
- Offer combination of in-home, day, overnight respite and out-of-home respite in settings such as a specialized adult day program, day hospital, or planned respite care in short-stay Transitional Behavioural Support Unit with experienced respite care workers able to manage resistant, sometimes unpredictable clients
- SBSOT provides education and back-up support to existing community mental health crisis response services and peer support agencies
- Transportation is provided to out-of-home programs

Specialized Residential Treatment (Behavioural Support Unit -BSU) – short- stay

People with severe BPSD (less than 1% of the population of people with dementia in the Brodaty-Draper pyramid) may be most safely managed in a residential setting outside their own home to access specialized psycho-geriatric assessment and medical treatment resources. The sixth essential element, the Behavioural Support Unit (BSU), is a regional resource (LHIN-wide) for those people whose behaviour is beyond the capacity of SBSOT and primary care health services to manage in the community. The BSU is designed with a minimum of 10 to a maximum of 20 beds with the expectation that individuals will be discharged within 90 to 180 days.

Based on an examination of the relevant literature, people with dementia benefit from an environment that is set up as small-scale living units that are home-like and offer a daily structure and an opportunity to engage in meaningful activities (e.g. gardening, cooking, household chores).²⁰ Offering this more intrusive and restrictive level of care in a residential setting may help promote its acceptance by clients and their families, as it preferable to going to a LTCH for assessment and treatment. Alternative locations (other than a LTCH) also offer more flexibility and timeliness for admission and discharge because they are not subject to the LTCH placement regulations.

Essential
Element
#6

- Referrals are received from hospital, LTCHs, and primary care providers that are unable to appropriately manage the complex and challenging behaviours of the older adult even with support of specialized seniors behavioural support outreach team
- BSU is closely inter-related with the interdisciplinary SBSOT and share specialized professional resources such as geriatric psychiatrist, geriatrician, psychiatric nurse

²⁰ Verbee, H. et al. (2009). "The effects of small-scale, homelike facilities for older people with dementia on residents, family caregivers and staff: design of a longitudinal, quasi-experimental study", BMC Geriatrics, Vol 9(3).

- Ideally the BSU would be a separate residence that is set up as small-scale living units but may also be created as a separate wing within a LTCH
- BSU has minimum 1:3 staffing ratios (regulated and unregulated) to ensure staff have the opportunity to spend 1:1 time with individuals and not be “rushed”

Note: The Ontario Ministry of Health and Long Term Care currently funds separate “home-like” behavioural units with high staffing ratios and various lengths of stay on hospital grounds to provide specialized dementia care (Dorothy Macham Home, Toronto; and T. Roy Adams Regional Dementia Centre, St. Catherines) or acquired brain injury (Oakville) and the Ontario Ministry of Community and Social Services has funded high intensity behavioural homes throughout the community for people with a dual diagnosis (developmental disability and mental illness) and challenging behaviours.

Specialized Residential Treatment – long-stay

More than 65% of the residents in LTCHs have dementia and at any one time more than 15% of them manifest moderate to severe BPSD. To this end, every LTCH must ensure a welcoming, safe and secure environment for older adults with responsive behaviours.

- Specialized units in LTCHs – long stay over 180 days
- High staffing ratio; trained staff and special care environment
- Specialized units should be specifically designed for older adults with cognitive impairments and behavioural challenges rather than mixing this population with others as they are often frail with chronic medical conditions as well

Essential
Element
#7

Additional Elements:

Hospital

Hospital in-patient specialized geriatric unit is one component of coordinated service continuum. Every Schedule 1 hospital emergency department should have minimum 1 FTE GEM nurse 7 days/24 hours per week.

Community Mental Health Crisis Response

Emergencies or crisis situations can happen in any part of the service system. It is vital to families and caregivers to have 24/7 access to mental health crisis response services in every region. This may be telephone support; mobile crisis, safebeds, and access to medical assessment. Mental health mobile crisis response teams can often divert a person from an emergency visit and link individuals to ongoing supports.

Note: In Australia there is a National Dementia Behaviour Advisory Service confidential telephone advisory service for families, caregivers and respite staff who are concerned about the behaviours of people with dementia offered 24/7 (see www.alzheimers.org.au).

Ontario Behavioural Support System Model

OUTCOME	High performing person-centred health system through active interdisciplinary collaboration with equitable access to comprehensive and safe services and supports for persons with responsive behaviours anywhere in Ontario.		
CORE ELEMENTS OF SERVICE DELIVERY MODEL	<p>1. System Management/Accountability</p> <ul style="list-style-type: none"> • Governance structure • Organizational Coordination • Regional System Coordinator role <p>2. Centralized Collaborative Intake & Referral</p>	<p>3. Mobile interdisciplinary Seniors Behavioural Supports Outreach Teams (SBSOTs)</p> <p>4. Case Management and Transitional Supports</p> <p>5. Enhanced Day Treatment and Respite Care</p> <p>6. Specialized Residential Treatment (Behavioural Support Units) short stay</p> <p>7. Specialized Residential Treatment – long stay</p>	<p>8. Learning and Development</p> <ul style="list-style-type: none"> • at point of care • at organizational level • at system level <p>for continuous quality improvement and built capacity through a skilled workforce</p>
POLICY ENVIRONMENT/ IMPLEMENTATION	LHIN-based Integrated Accountability Agreement Funding through Lead Agency	Person-centred care Integrated vertically & horizontally Mental Health Strategy Long Term Care Home Act Excellent Care for All	Incent culture change through public reporting QI-OHQC, CHQI, QIIP Evidence-informed Health Human Resources
PILLARS	System Coordination	Specialized Service Delivery	Knowledgeable Care Team & Capacity-Building
PRINCIPLES	Behaviour is Communication System Coordination and Integration Accountability and Sustainability Person-Centred Care Diversity Collaborative Care Safety		
VISION	An Ontario Behavioural Support System that demonstrates an integrated cross-sectoral comprehensive system of supports and services designed to meet the needs of people with responsive behaviours associated with complex mental health issues, dementia or other neurological conditions.		

Framework Pillar #3: Knowledgeable Care Team and Capacity Building

Building knowledgeable care teams and capacity for practice change is dependent on timely access to quality knowledge – this knowledge can stem from research, clinical or other professional practice or the lived experience of the person, families and service providers. Strategies for translating knowledge into practice must be fluid and dynamic and enable continuous quality improvement while simultaneously leveraging specific opportunities as they arise in Ontario or elsewhere across Canada. Learners involved in these knowledge translation strategies should encompass all people involved in care, including but not limited to:

- Person and caregiver
- Point of care clinician
- Interdisciplinary care team
- Service providers
- Senior leaders
- Provincial decision makers

In order to address the learning needs of all people involved in caring for persons with responsive behaviours and to further build on and sustain the current capacity of the system, a knowledge translation or learning strategy must be applied at the point of care, at the community or organizational level, and system-wide.

At the point of care, learners need:

- **Clinical** knowledge, skills and attitudes related to prevention and management of responsive behaviours at the point of care
- **Self-management** knowledge, skills and attitudes that enable the person and family to make informed choices regarding care and be better able to care for themselves at home
- **Caregiver support** knowledge, skills and attitudes for service providers with a mandate to provide support for unpaid and/or family caregivers

At the organizational level learners need:

- **Capacity-building** knowledge, skills and attitudes for services providers, organizations, agencies and networks to develop supportive learning infrastructures (human and technological) and to enable appropriate human resource allocation and timely access to information to support quality care
- **Collaboration** knowledge, skills and attitudes applied within and between individuals, teams, organizations and systems to better leverage existing knowledge, innovation and resources

Across the system learners need:

- **Capacity-building** knowledge, skills and attitudes within and across systems to develop supportive learning infrastructures (human and

- technological) and to enable appropriate human resource allocation and timely access to information to support quality care
- **Innovation-generation** knowledge, skills and attitudes that enable the generation of cutting edge research and the implementation of new technologies to deliver a more sustainable system to support responsive behaviours
 - **Resource investment** knowledge, skills and attitudes to support the effective and efficient use of scarce health resources and evidence-based resource allocation decisions

The learning strategy should integrate and leverage existing resources already available in the system including (but not limited to):

- human resource investments such as the role of the Psychogeriatric Resource Consultants and Public Education Coordinators in Ontario,
- knowledge translation infrastructures such as the Alzheimer Knowledge Exchange (www.akeontario.org), and
- learning and development programs such as:
 - P.I.E.C.E.S.TM (www.piecescanada.com)
 - Gentle Persuasive Approach
 - U-First!
 - Montessori
 - Dementia Education Needs Assessment (www.dena.org)

SUMMARY

Ensuring a healthy and safe environment and effective system of care for older adults with responsive behaviours associated with cognitive impairments poses a major challenge for care providers and for the health system as a whole. This report offers a comprehensive, evidence-based, collaborative care Behavioural Support System Model that builds upon the local and regional specialized geriatric mental health services available across Ontario.

REFERENCES

- Andrews, G. (2006). Managing challenging behaviour in dementia. *BMJ*, 332(7544):741 downloaded from www.ncbi.nlm.nih.gov/pmc/articles/PMC1420764 on May 10, 2010.
- Canadian Coalition for Seniors' Mental Health (2006). "National Guidelines for Seniors' Mental Health – the Assessment and Treatment of Mental Health Issues in Long Term Care Homes", *Canadian Journal of Geriatrics*, 9(Supplement 2).
- CIHI (2008) "Caring for Nursing Home Residents With Behavioural Symptoms: Information to Support a Quality Response".
- Day, P., Rasmussen, P. (2004). What is the evidence for the effectiveness of specialist geriatric services in acute, post-acute and sub-acute settings? New Zealand Health Technology Assessment, Department of Public Health and General Practice, Christchurch School of Medicine, University of Otago, Christchurch, New Zealand.
- Draper, B. (2000). "The effectiveness of old age psychiatry services. *Int J Geriatric Psychiatry* 15:687-703.
- Draper, B., Low, L. (2004). What is the effectiveness of old-age mental health services? Copenhagen, WHO Regional Office for Europe Health Evidence Network (HEN).
- Hales, C., Ross, L., Ryan, C. (2006). National evaluation of the Aged Care Innovative Pool Dementia Pilot Final report, AGED CARE SERIES Number 10, Australian Institute of Health and Welfare, Canberra.
- Health and Welfare Canada. Guidelines for comprehensive services to elderly persons with psychiatric disorders. Ottawa: Supply and Services Canada; 1988.
- Hollander, M. and Prince, M. 2008. Organizing Healthcare Delivery Systems for Persons with Ongoing Care Needs and Their Families, *Healthcare Quarterly*, 11(1), p. 44-54.
- Lesage, A. et al. (2006) Seven Oaks and South Hills Projects: Year 2 Assessment Report, Department of Psychiatry, Faculty of Medicine, University of Montreal, Quebec.
- LTC-MH Framework Implementation Committee (2008) Final Report submitted to MOHLTC, Toronto, ON.
- MacCourt (2008). "Promoting Seniors' Well-Being: The Seniors' Mental Health Policy Lens Toolkit", for the BC Psychogeriatric Association.
- Mental Health Policy Wales Implementation Guidance: The Care Programme Approach for Mental Health Service Users, (2003). NHS Wales/Welsh Assembly Government.

NSW Department of Health (2006). Summary Report: The management and accommodation of older people with severely and persistently challenging behaviours. New South Wales, Australia.

Putting the P.I.E.C.E.S. Together – A Learning Program for Professionals Providing Long Term Care to Older Adults with Cognitive/Mental Health Needs 6th Edition. 2nd printing (February 2007). Pieces Canada.

Psychosocial Interventions – European Collaboration on Dementia (last updated August 2009) downloaded from www.alzheimer-europe.org/EN/Our-Research/European-Collaboration-on-Dementia on May 7, 2010.

Policy Planning Plus Inc. (2000) Summary Report of The Expert Panel on Specialized Geriatric Services (SGS) submitted to the MOHLTC, Hamilton, ON.

Dudgeon, S. 2010. Rising Tide: The Impact of Dementia on Canadian Society, Alzheimer Society of Canada.

Roundtable on Future Planning for People Affected by Alzheimer Disease and Related Dementias (2007) TOOLKIT: A Self-Assessment Tool, Ontario Alzheimer Strategy, Alzheimer Society of Ontario.

Sullivan, M.P. et al. (2004). “Defining Best Practices for Specialty Geriatric Mental Health Outreach Services: Lessons for Implementing Mental Health Reform. The Canadian Journal of Psychiatry.

Tierney, M. and Tuokko, H.(2002) “Issues Paper: Issues in the Delivery of Mental Health Services to Older Adults”, Canadian Association on Gerontology, Vol. 21.

Trochluck. October, 2004. Specialized Geriatric Mental Health Outreach Teams Program Policy and Accountability Framework MOHLTC Mental Health and Rehabilitation Reform Branch.

Verbee, H. et al. (2009). Small, homelike care environments for older people with dementia: a literature review. International Psychogeriatrics, 21:2, 252-264.

Victorian Dementia Reference Group (2004). Dementia Framework for Victoria, 2005 and Beyond Consultation Paper. Aged Care Branch, Victorian Department of Human Services, Melbourne, Victoria, Australia.

(2003) Working Together for Mental Health: A Proposed Mental Health Services Strategy for Newfoundland and Labrador Discussion Document, Department of Health & Community Services, Government of Newfoundland and Labrador.