

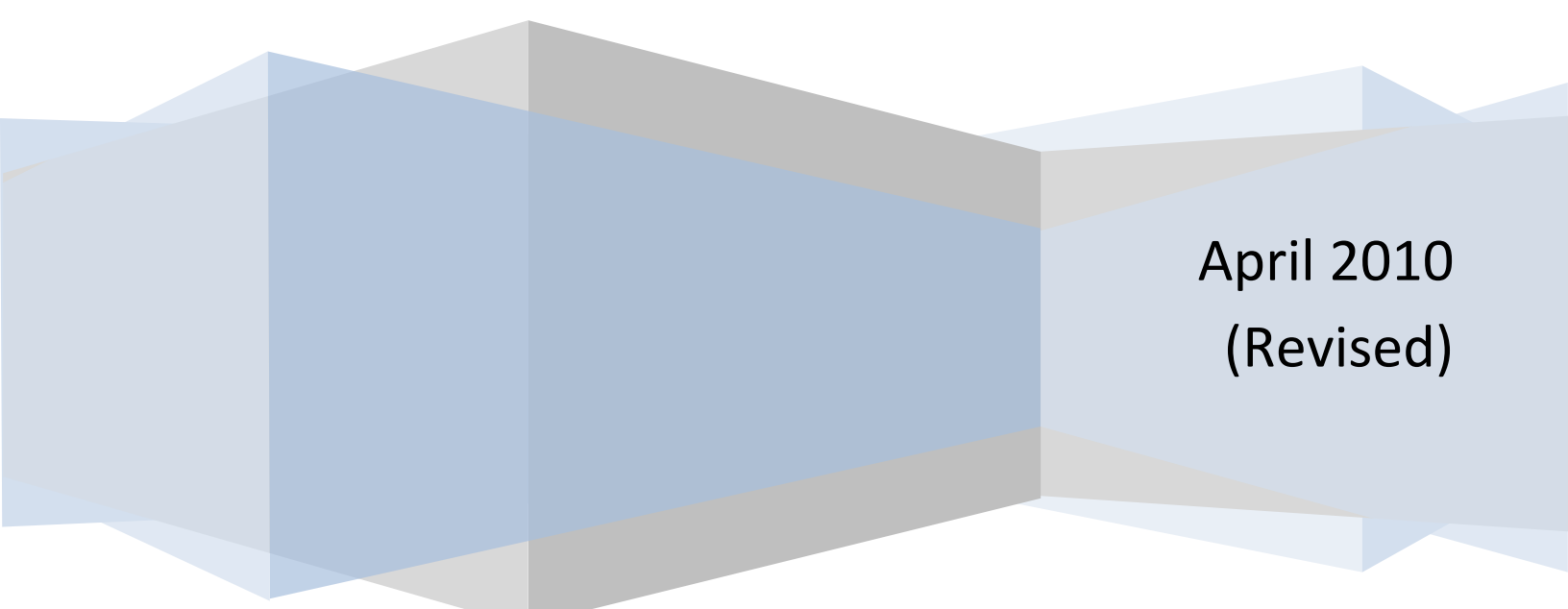
Setting the Balance of Care in Northwestern Ontario

Final Report

Kerry Kuluski, PhD Candidate

Department of Health Policy, Management and Evaluation

University of Toronto



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2.0 Abstract

The objective of this research was to determine the extent to which individuals waiting for long-term care (LTC) facility placement in Northwestern Ontario (NWO) could age at home if given access to an appropriate mix of health and social care resources in the community; and to document and analyze differences between Thunder Bay and the Region (all communities outside of Thunder Bay within the North West LHIN catchment area).

A comparative quantitative analysis was conducted using four key variables from the Resident Assessment Instrument for Home Care (RAI-HC) dataset: activities of daily living (ADLs), instrumental activities of daily living (IADLs), cognition and access to an informal caregiver in the home. Individuals were stratified into groups based on these data, and a case profile (vignette) was written for each group. The case profiles were presented to a group of care managers from Thunder Bay and the Region (n = 17) who designed community-based care packages for each group. Costs were calculated for each of the care packages using local government cost data and compared to the cost of a LTC bed. From here, the proportion of individuals that could potentially, safely and cost-effectively age at home was determined.

The results demonstrated that individuals waiting for LTC facility placement in Thunder Bay experienced higher levels of impairment than those in the Region; however in both areas, “lighter care” needs (e.g. housekeeping, meal preparation, etc) appeared to be key wait-list drivers. Majorities of individuals in both geographic areas did not have live-in informal caregivers. If given access to a community-based care package, 8% of those waiting in Thunder Bay could potentially be supported safely and cost-effectively at home compared to 50% in the Region.

Two broad conclusions were gleaned from this study. First, the data demonstrate that wait-lists for LTC are driven by both the needs of individuals as well as the capacity of the community to meet these needs. When capacity in the community is limited (as demonstrated in the Region), individuals tend to be at greater risk of LTC facility placement.

Second, there is considerable opportunity for individuals to age at home if given access to health and social care services in the community; however, for this to occur resources need to be accessible. In addition, care managers require the flexibility to appropriately integrate resources into care packages, including IADL support. Public policies in Ontario have historically precluded the opportunity to combine resources between sectors (health and social care) and organizations. The Balance of Care framework provides an estimate of how many individuals could age at home if such combinations of resources were possible.

3.0 Project Details

The study took place between June 2007 and August 2008, including project planning, data collection and analysis. The project-planning phase occurred in three steps:

First, partnerships were established between the researcher, the North West Community Care Access Centre (CCAC), and the North West Local Health Integration Network (LHIN). The North West CCAC agreed to support the project and provide the Resident Assessment Instrument for Home-Care (RAI-HC) data for all individuals waiting for LTC placement in Northwestern Ontario upon ethics approval from the University of Toronto Research Ethics Board.

Second, a cross sectoral Steering Committee was established to provide guidance and insight in the planning, development and interpretation of the methodological portion of the study. With the help of senior staff at the North West LHIN and North West CCAC, the Steering Committee for this study was recruited. Six Steering Committee meetings were held throughout the duration of the project. The first meeting took place in November 2007 and occurred at monthly or bi-monthly intervals thereafter until December 2008, following data collection and the preliminary analysis.

At the meetings, the committee discussed ways in which to keep the project grounded at the local level. Among many contributions to the design of the project, the Steering Committee encouraged the researcher to conduct a rural-urban comparison as opposed to examining Northwestern Ontario as a whole. The Steering Committee emphasized the importance of this distinction due to the significant impact that geography has on the ability to provide health and social care services for older persons across Northwestern Ontario. In addition, the Steering Committee took an active role in recruiting front line care providers from across the health and social care continuum. These individuals, referred to as the “Expert Panel” participated in simulation sessions, one of the main data collection components of this study.

Third, a visioning exercise took place in Northwestern Ontario, hosted by the North West LHIN, where the Balance of Care method was introduced to an interdisciplinary group of care providers, policy makers and community stakeholders, many of which were members of the Steering Committee for this project. This symposium held in November 2007 marked the official launch of the Northwestern Ontario Balance of Care project.

Following the project planning phase, Ethics approval was granted in December 2007. The data were received and analysed in March 2008, Expert Panel simulations took place over the course of three days in June 2008 and the final analysis was written by September 2009.

This paper outlines the key findings of this study including directions for future work.

4.0 Background

Population aging in an era of fiscal constraint has prompted policy makers and care managers to seek cost-effective ways in which to meet the care needs of older persons. Over the last several decades, there has been considerable debate in policy and academic circles as to whether or not homecare is more cost-effective than care in a long-term care (LTC) facility.

While historically, the cost-effectiveness of homecare was largely suspect, recent evidence suggests that when homecare is targeted to individuals who would otherwise be placed in a LTC facility, and the appropriate mix of health and social services provided, some proportion of these individuals can age at home at similar or lower costs to the health care system (Hollander, 2004; Hollander & Chappell, 2002; Hollander, Miller, MacAdam, Chappell, & Pedlar, 2009; Stuart & Weinrich, 2001; Weissert, Cready, & Pawelak, 1988). Despite such findings, many individuals with lower level care needs continue to age in LTC facilities despite the fact that their needs can be met in the community at lower system level costs (Challis et al., 2000; Williams, Challis et al., 2009).

Such findings suggest that other factors, beyond the needs of individuals, influence placement onto LTC facility wait-lists. The “Balance of Care” (BoC), a framework developed in the UK by Dr. Davis Challis and his colleagues at the Personal Social Services Research Centre (PSSRU), University of Manchester, UK, suggests that where individuals age is not only dependent on demand factors, (the characteristics and care needs of individuals), but by supply side factors (the capacity of the health care system to respond to the needs of individuals). Although not a lot can be done to change the demand side (e.g. an aging population with care needs) the supply side can be altered to allow better outcomes for both individuals and the health care system.

5.0 Methods

The researcher had two broad objectives: 1) to analyze and compare the characteristics of individuals waiting for long-term care (LTC) facility placement in Thunder Bay and the Region of Northwestern Ontario and 2) determine the extent to which a community-based care package could safely and cost-effectively substitute for care in a LTC facility for these individuals.

To meet these goals, three broad steps were taken (which will be described in greater detail throughout this report). First, a comparative quantitative analysis of key variables (activities of daily living, instrumental activities of daily living, cognition, and access to an informal caregiver in the home) of the Thunder Bay and Region wait- listed samples. Second, a simulation exercise took place where a group of care managers from health and social service sectors across NWO designed community-based care packages for these individuals. Third, costs of the care packages were calculated and compared to the cost of care in a LTC facility. From here, the researcher estimated the proportion of individuals in Thunder Bay compared to the Region who could potentially, safely and cost-effectively age at home as an alternative to LTC facility placement. Safety was based on the opinions of the care managers who participated in this study, while cost-effectiveness was defined as the care package being equal to or less the cost of facility based LTC.

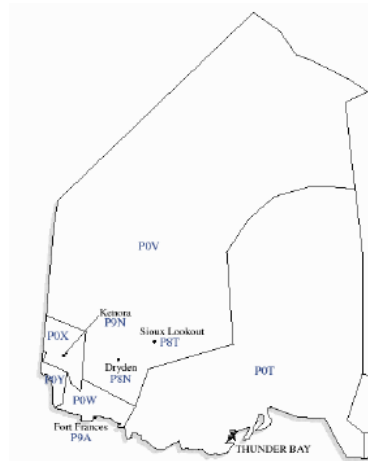
5.1 Sample

There were 892 individuals waiting for LTC facility placement in Northwestern Ontario (NWO) as of March 16, 2008. Most of these individuals ($n=864$), had a RAI-HC assessment completed and were included in this analysis. Of the 864 individuals, 55% were waiting in Thunder Bay, the city with the highest population density of the region, while 44% were waiting in the Region (various rural and remote communities outside of Thunder Bay). The remaining 1% did not have a postal code identified and as a result could not be included in the analysis.

Figure 5.1 provides a visual depiction of Northwestern Ontario including a breakdown of the communities in which individuals were waiting for LTC facility placement.

Figure 5.1 Location Waiting across Northwestern Ontario

$N = 864$ (2.7% of people 65+ in NWO)



**Thunder Bay (Urban NWO) = 475
(55% of wait-list)**

**The Region (Rural NWO) = 383 (45% of
wait-list)**

POT (Nipigon, Schreiber, Terrace Bay,
Geraldton, Marathon, etc) = 67

P8T (Sioux Lookout) = 28

P9N (Kenora) = 40

P0W (Rainy River) = 55

P9A (Fort Frances) = 54

P0V (Red Lake) = 29

P8N (Dryden) = 100

P0X (Keewatin, Sioux Narrows, Nester
Falls, Minaki) = 9

P8C
(unidentified region) = 1

No Postal Code Recorded = 6

With the Northwestern Ontario wait-list data in hand, a series of methodological steps from the Balance of Care Framework were followed.

5.2 “Balance of Care” Methodological Steps

Step 1: The characteristics of wait-listed individuals in Thunder Bay and the Region were analyzed and compared on four key variables extracted from the RAI-HC dataset. The variables and associated answer categories were; cognition (intact, not intact); activity of daily living impairment (no difficulty, some difficulty, great difficulty); instrumental activity of daily living impairment (no difficulty, some difficulty, great difficulty); and access to an informal caregiver in the home (yes, no).

Step 2: Individuals were divided into 36 relatively homogenous groups based on how they scored on these four variables. For example, one group consisted of individuals who were cognitively intact, had no ADL difficulty, no IADL difficulty, and a caregiver in the home. In this

study 16 of the 36 groups were populated with enough individuals to warrant further analysis. These 16 groups included 93% of the Thunder Bay wait-list and 92% of the Region wait-list.

Step 3: The 16 populated groups were turned into case “vignettes” and presented to a group of care managers from Thunder Bay and the Region of NWO. These Expert Panel members were selected with the assistance of the project Steering Committee to ensure broad representation of various sectors across the health and social care continuum. Here is an example of one of the sixteen case “vignettes” named “Davis” (fictional name).

Example Case Vignette (vignette name- Davis)

“Davis is cognitively intact and functionally independent in all ADLs with the exception of bathing (limited assistance is required). Davis has no difficulty using the phone, some difficulty with transportation, managing medications and preparing meals, and great difficulty housekeeping. Davis does not have a live-in caregiver. Davis’ caregiver is an adult child who lives outside of the home. This caregiver provides advice/emotional support and assistance with IADLs.”

- 1) Cognition- Intact (short-term memory recall is good; procedural memory is good (can perform all or most tasks in a multi-task sequence); makes consistent/reasonable/safe decisions; can express ideas without difficulty and understand others; does not display any behavioral/verbal problems- e.g. wandering)
- 2) ADL- No help required with most ADLs (locomotion inside the home, eating, toilet use and personal hygiene), client requires limited assistance when bathing (still highly involved in activity but requires some assistance/guided manoeuvring).
- 3) IADL- No difficulty using the phone; some difficulty with transportation, managing medications and preparing meals (needs some help, is very slow/fatigued); great difficulty with housekeeping (little or no involvement in the activity is possible).
- 4) Caregiver (in home?)- No. Has an adult/child caregiver living outside of the home who provides advice/emotional support and assistance with IADLs.

Step 4: The care managers designed care packages for each of the case vignettes if they felt that home and community-based care could (potentially) be a safe alternative to care in a LTC facility. The care managers from Thunder Bay designed packages for individuals wait-listed in Thunder Bay, while the care managers from the Region designed care packages for individuals wait-listed in the Region so that comparisons could be made.

Step 5: After the care packages were created, the costs of the care packages were calculated using regional cost data from the North West LHIN and NW CCAC¹. The costs were divided into

¹ **Community support services** for the NW LHIN were obtained from the Ministry of Health and Long-term Care (MOHLTC), Health Data Branch. The MOHLTC provided Ontario Health Reporting System (OHRS) Data for Local Health Integration Network (LHIN) and Ministry Funded Programs for Northwestern Ontario for the third quarter of fiscal year 2007-2008, the most up-to-date reporting period available at the time of this research. The community support services included: Adult Day Service (a supervised day program offering meals, social activities and transportation for individuals with cognitive impairment, frail seniors, or integrated programs serving both frail seniors and those with cognitive impairment); meals on wheels; congregate dining/wheels to meals; transportation; home maintenance and repair; security checks/reassurance; caregiver support-counselling; caregiver support- training and education; caregiver support- paid staff; caregiver support- volunteer; and emergency response system (installed into home). Multiple agencies provided these services across Northwestern Ontario. Because we were interested in making urban-rural comparisons we divided the CSS into two groups (those provided in Thunder Bay- urban NWO, and those provided in the surrounding region- rural NWO). Since multiple agencies reported for each service (e.g. Thunder Bay has multiple providers for day programs), we calculated the average weighted unit cost for each service in

Thunder Bay and Region categories to discern regional costs differences. From here, the costs of the Thunder Bay packages were calculated using the Thunder Bay cost data and the costs of the Region care packages were calculated using the Region cost data. Following this, the costs of the packages were compared to the government cost of a LTC facility bed (\$85.43 per bed per day at the time of the study).

Step 6: After the costs were calculated, the diversion rates (the proportion of individuals who could potentially, safely and cost-effectively age at home overall; in Thunder Bay; and in the Region) was estimated.

6.0 Findings

The findings are presented in two parts. First, the comparative characteristics of the Thunder Bay and Region wait-listed samples are outlined. Second, the diversion rates (the extent to which individuals in these samples could potentially, safely and cost-effectively age at home if given access to the necessary mix of health and social care services in the community) are listed.

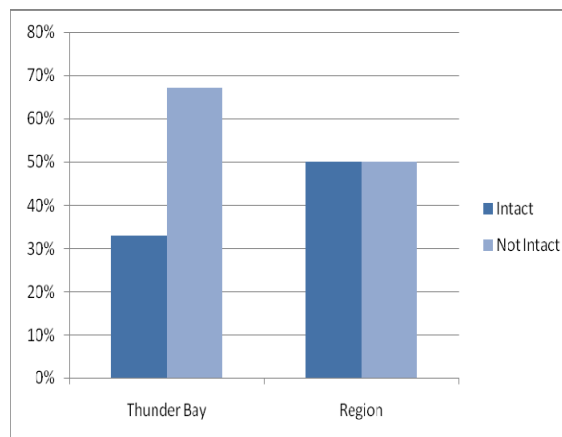
6.1 Characteristics of Individuals Waiting for Long-Term Care Facility Placement

Cognition

As demonstrated in Figure 6.1.1, individuals waiting in Thunder Bay were more cognitively impaired (67%) than their counterparts from the Region (50%).

Figure 6.1.1 Cognition

Short-term memory, decision-making ability, ability to make self understood, and eating self-performance



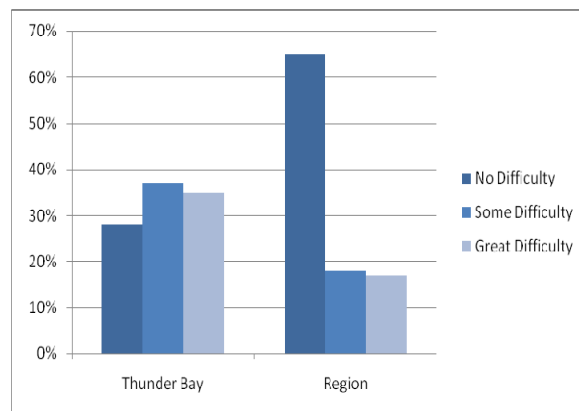
Thunder Bay and in the Region). The **CCAC costs**, provided directly by the North West CCAC consisted of average unit costs for homecare-contracted services including unit costs for nursing, personal support, occupational therapy, physiotherapy, speech pathology and social work for fiscal year 2007-2008. The costs provided were an average for the entire Northwestern Ontario region including travel costs. The **cost for LTC facility** placement was publicly available online through the MOHLTC website.

Accordingly, more individuals in the Thunder Bay sample were identified as having Alzheimer Disease or a related dementia (47%), compared to the Region sample (30%). Interestingly, among individuals who were impaired in both samples, the degree of impairment was generally mild-moderate, with fewer than 10% of cases falling into the “severe” category. Since cognitive impairment is a key risk for LTC facility placement (Bharucha, Pandov, Shen, Dodge, & Ganguli, 2004; Black, Rabins, & German, 1999; Gaugler, Duval, Anderson, & Kane, 2007; McCallum, Simons, & Simons, 2005; Wolinsky, Callahan, Fitzgerald, & Johnson, 1993), the level of decline in this population was lower than expected; however, these findings were consistent with past BoC studies conducted across Ontario where 50-70% of individuals had some level of cognitive impairment, with most cases falling into the mild-moderate range (Williams & Watkins, 2009).

Activities of Daily Living (ADLs)

As demonstrated in Figure 6.1.2, individuals waiting in Thunder Bay had greater activity of daily living impairment than their counterparts from the Region.

Figure 6.1.2 Activities of Daily Living
Personal hygiene, locomotion in the home, toileting, eating self-performance



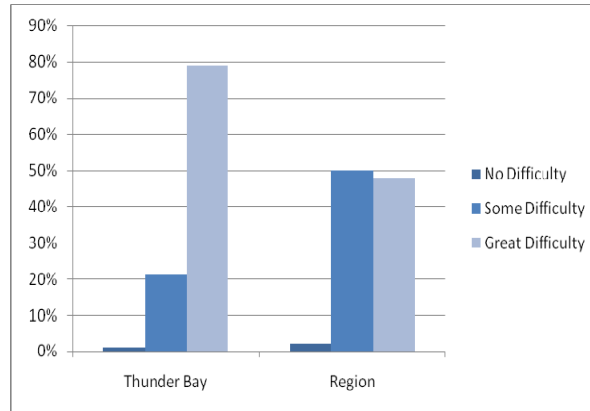
Although ADL impairment was significantly greater among the Thunder Bay sample, it is important to note that many individuals in both geographic areas (over one quarter in Thunder Bay and 65% in the Region) had no impairment in ADLs with the exception of minor difficulty when bathing. Such limited ADL impairment was surprising given that functional impairment is one of the main eligibility criteria for LTC facility placement (Wolinsky et al., 1993). This was also the case in other BoC studies conducted in Ontario where 30-50% of individuals on wait-lists had no difficulty with ADLs (Williams & Watkins, 2009). The minimal level of ADL impairment exhibited by these samples (particularly the Region sample) suggested that other factors influenced their placement onto the LTC facility wait-list. The findings suggested that impairment in instrumental activities of daily living (IADLs) was one such factor.

Instrumental Activities of Daily Living (IADLs)

As demonstrated in Figure 6.1.3, almost all individuals waiting in both Thunder Bay and the Region (98% in each sample) experienced impairment in IADLs (lighter care activities including medication management, meal preparation, housekeeping, and phone use); however there

were differences in the *degree* of difficulty experienced (significantly greater degree of difficulty among the Thunder Bay sample).

Figure 6.1.3 Instrumental Activities of Daily Living
Medications management, housekeeping, meal preparation, phone use

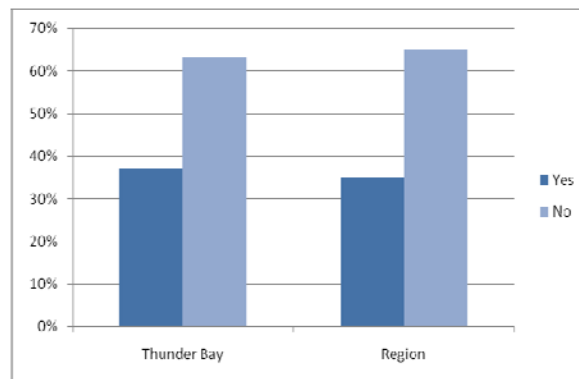


Widespread difficulty with IADLs among this population was consistent with previous Balance of Care studies conducted across Ontario (Williams, Challis et al., 2009; Williams, Kuluski et al., 2009; Williams & Watkins, 2009), suggesting that difficulty with lighter care activities may be a key risk factor for LTC wait-list placement across the province of Ontario (Williams, Challis et al., 2009).

Access to an Informal Caregiver in the Home

As demonstrated in Figure 6.1.4, access to an informal caregiver in the home did not vary by region (two thirds of both the Thunder Bay and the Region wait-list samples did not live with an informal caregiver).

Figure 6.1.4 Access to an Informal Caregiver in the Home?



This finding may have reflected heavy out migration trends of young adults (a well documented trend in this region) (North West Local Health Integration Network, 2006) or infrequent communal living arrangements typical of North American households (Liebig, 2001).

The low number of live-in caregivers found in this region was similar to a Balance of Care study conducted in the Toronto Central LHIN Region (Williams, Challis et al., 2009), but much lower than the ethnically diverse region of the Central LHIN (Central Local Health Integration Network, 2008). Trends of communal living among ethnically diverse populations may explain aspects of this difference (Liebig, 2001).

6.2 Stratifications

Based on these data, individuals were divided into relatively homogenous groups. There were thirty-six possible groups, sixteen of which were populated. To demonstrate trends in the stratifications, a summary of the low need stratifications (groups 1-6) and high needs stratifications (groups 31-36) are provided in the table below. The “low needs” groups capture individuals who have no ADL impairment, no cognitive impairment, but IADL impairment². The “high needs” groups capture individuals who have ADL impairment, cognitive impairment, and IADL impairment.

Table 6.2 Stratifications

	Thunder Bay n = 475	Region n = 383
Low Needs (Stratifications 1-6)	13.2%	40.0%
High Needs (Stratifications 31-36)	26.2%	13.0%

As can be seen in the Table 6.2, individuals waiting in the Region were disproportionately represented in the low needs stratifications, while individuals in waiting in Thunder Bay were disproportionately represented in the high needs stratifications.

The populated stratifications were turned into case vignettes and presented to the care managers (Expert Panellists). The care managers were divided into Thunder Bay and Region working groups to coincide with their location of practice. They were presented with the same vignettes, to allow for direct comparisons of the care packages upon completion. After the care packages were created, the costs of the care packages were calculated using the NW LHIN and CCAC cost data for services provided in the Region (for the Region care packages) and then for services provided in Thunder Bay (for the Thunder Bay packages). Once the cost of each package was calculated, they were compared to the cost of a LTC facility bed over an equivalent time period (13 weeks), a typical, planning and reporting period. From here the potential diversion rate was estimated (the proportion of individuals for which a community-based care package could be both safe and cost-effective).

² Note that IADL impairment was a constant among both samples (98% of both Thunder Bay and Region wait-lists had some level of IADL impairment).

6.3 The extent to which individuals could safely and cost effectively age at home

Overall, just over one-quarter of individuals on the LTC facility wait-list (26%) in Northwestern Ontario met this threshold, a result that is within the range of past Balance of Care studies conducted in the UK and Ontario (Challis & Hughes, 2003; Challis et al., 2000; Clarkson, Hughes, & Challis, 2005; Tucker, Hughes, Burns, & Challis, 2008).

Significant differences were noted when examining the Thunder Bay and Region samples separately. Half of the individuals waiting in the Region (50%) met the safety and cost-efficiency threshold compared to 8% of individuals waiting in Thunder Bay.

To determine the consistency of findings using the most conservative specifications, a sensitivity analysis was conducted by applying the Thunder Bay packages (which typically contained more units of service than the Region packages) and the costs in Thunder Bay (which were higher than the community support service costs in the Region) to the Region sample, which led to a Region diversion rate of 34% from 50%, still significantly higher than the Thunder Bay diversion rate (8%).

If the individuals represented in the case vignette were not “divertible”, two other outcomes were possible: 1) the care managers felt that the individuals represented in the vignette could safely remain at home but the care package was more expensive than LTC (“safe but not cost-effective”), or 2) the participating care managers felt that the individuals represented in the vignette had such high needs that LTC was the safest option. In the latter case no care package was created.

It was considered safe but not cost-effective for 79% of the Thunder Bay sample and safe but not cost-effective for 38% of the Region sample. A community-based option was considered unsafe for 13% and 12% of the Thunder Bay and Region wait-list samples respectively. Table 6.3 outlines the safety and cost-efficiency thresholds for the wait-listed individuals in Thunder Bay and the Region.

Table 6.3 Safety and Cost Efficiency Thresholds

	Safe and cost effective	Safe but not cost effective	Not safe
Thunder Bay Wait-list Sample* (n = 441)	8% of the Thunder Bay wait-list	79%	13%
Region Wait-list Sample* (n = 351)	50% of the region wait-list	38%	12%

*consists of individuals who stratified into groups that met the 2.5% threshold. In Thunder Bay 93% of the wait-list was retained in the analysis compared to 92% in the Region.

As noted above, the diversion rate among the Region sample was significantly higher (50%) than the Thunder Bay diversion rate (8%).

In the following section, details of these results are provided including key trends among the characteristics of individuals in these three outcome categories (safe and cost-effective; safe but not cost-effective; and unsafe), followed by a summary of key trends from the care packages.

6.4 Characteristics of individuals in each of the above specified thresholds

Characteristics of Divertible Individuals (care package safe and cost-effective)

Thunder Bay (n = 35)

Region (n =174)

Wait-listed individuals who were divertible (50% of the Region sample and 8% of the Thunder Bay sample) were independent in activities of daily living (ADL) with the exception of bathing, where limited assistance, such as guided manoeuvring, or supervision was required. Care managers suggested that grab bars, bath seats and other types of bathroom modifications would assist individuals with such limited impairments. Subsidies for this type of equipment were strongly recommended as individuals typically have to pay for or rent the equipment for limited time periods.

All divertible individuals exhibited great difficulty with housekeeping, and some or great difficulty with transportation, preparing meals, managing medications, and using the phone. Overall, IADL support was the main requirement among this group.

Characteristics of individuals for which a care package was safe but not cost-effective

Thunder Bay (n = 348)

Region (n = 134)

This group consisted of many individuals from the Thunder Bay wait-list (79%) and a smaller percentage of the Region wait-list (38%). This group showed greater signs of decline compared to the divertible group detailed above. More specifically, some of these individuals were cognitively intact while others were showing mild-moderate signs of cognitive impairment. Individuals in this group had significant IADL impairments, and were, at the very least, beginning to show decline in ADLs. Among these individuals, a range of impairment was evident, but generally, some level of assistance was required for eating, mobility, bathing, toileting, and personal hygiene activities, often requiring the assistance of someone else to complete, or at least, “set-up” the task at hand.

It is for this group of individuals that the traditional homecare model consisting of separate providers providing separate services started to falter. The packages, for these individuals, inevitably started to get busier and, as stated by the care managers, became “less

manageable.” In addition, discussion around the benefits of integrating housing with services (e.g. supportive housing); care coordination across health and social care sectors; and ongoing communication among providers, were identified as ways to provide care that would be coordinated and seamless.

Characteristics of individuals for which community-based care was deemed unsafe

Thunder Bay (n = 58)

Region (n = 43)

These individuals had such a high needs that a community-based care package was considered to be unsafe by the participating care managers, thus no package was created. Across both samples approximately the same percentage of wait-listed individuals (12% and 13% in the Region and Thunder Bay respectively) met this criterion.

These individuals had no caregiver in the home, were not cognitively intact and had significant impairments in both ADLs and IADLs. One group in the Region consisted of individuals who were intact, but had such high functional impairment that the care managers felt that there was no safe alternative to LTC facility placement. The decision making of the individuals who were not cognitively intact was consistently poor or unsafe requiring ongoing supervision. The functional impairments included supervision or set-up help when eating, partial dependence on others to complete personal hygiene activities, and in most cases, total dependence on others for mobility (locomotion in the home), toileting and bathing. Great difficulty preparing meals, medications management, transportation, housekeeping, and some or great difficulty with using the phone was also evident.

Although the perceived safety threshold appears to be the approximately the same for both the Thunder Bay and Region samples, it is actually higher in the Region. While the vignette “JJohns” was the only vignette which contained individuals for which a community-based package was deemed “unsafe” in Thunder Bay, three vignettes were considered unsafe in the Region (Rogers, D Daniels and JJohns). In the Region great impairment in activities of daily living, instrumental activities of daily living, and lack of an informal caregiver appeared to be the tipping point for facility based LTC, while the tipping point for the Thunder Bay care managers was not reached until these characteristics were combined with cognitive impairment. The different tipping points may relate to lack of services available in rural and remote communities as compared to urban areas.

In summary, individuals for which a care package was safe and cost-effective had relatively low levels of needs and care packages that were subsequently less costly. Individuals for whom a package was safe and not cost-effective tended to have greater levels of need, requiring more services. It was suggested by the participating care managers that housing with services such as supportive housing or an integrated homecare model would be better suited for individuals in this group. The last group consisted of individuals with very high levels of need and no access to a live-in informal caregiver. In the latter case, the care managers felt that LTC facility placement was the best and safest option.

In addition to trends among individuals, there were trends in the care packages. The following table details the services that were consistently drawn upon by both Thunder Bay and Region care managers. The highlighted services represent those that were not consistently available across all communities in NWO but considered important to foster opportunities to age at home.

6.5 Care Package Trends

Table 6.5 Services Consistently Drawn Upon by Thunder Bay and Region Care Managers

ADL Assistance	IADL Assistance
Personal Support - Bath Assistance (for all); assistance with toileting, personal hygiene, mobility, and eating (when needs were greater)	Transportation services
Occupational Therapy (OT) - Home assessment, and home modifications such as installation of a grab bar, bath seat, or raised toilet seat	Meal programs (e.g. meals on wheels, congregate dining, meal preparation by homemaker)
Physiotherapy (PT) - for activation and maintenance of physical functioning (recommended for individuals with ADL impairment)	Assistance with Housekeeping
	Adult day programs (ADPs) (meal, social activity, and transportation included) - care managers in the Region noted a shortage of ADPs, particularly for individuals without dementia
	Caregiver respite (if caregiver resided with client)- type of respite varied- in Thunder Bay (professional respite service); the Region (did not have professional community support respite service at the time of the study, tended to rely on volunteer program)
	Installation of Emergency Response System
	Social visit/social work (e.g. friendly visitor, community support counselling- the Region; CCAC Social Work- Thunder Bay)
	Medication assistance - (e.g. blister pack through local pharmacy; medication reminders via security checks or from a Personal Support Worker (PSW))

Care Package Similarities

Certain services were used in all packages (outlined in the table above) such as a meal service, transportation, bath assistance from a Personal Support Worker (PSW), Occupational Therapy (OT) for safety checks and home modifications, the installation of an emergency response system, and medication management. In order to minimize adverse outcomes (e.g. delirium,

falls, hospital or LTC admission), medication management was strongly emphasized by care managers in both this study and other Balance of Care studies conducted across Ontario.

Among individuals who were not cognitively intact and had a caregiver in the home, LTC respite was often recommended, in addition to caregiver support through a support group or a visiting volunteer. For individuals with functional impairments, Physiotherapy (PT) services were also drawn upon.

Documented frequently throughout this study were key services not available in all communities including: meal programs, transportation, caregiver respite (particularly professional respite care), adult day programs, and medication management programs (e.g. through a local pharmacy). Alternative housing options such as supportive housing were also rare. The care managers demonstrated that these services represented key gaps in the health care continuum across Northwestern Ontario (particularly in the rural and remote communities).

Care Package Differences

Differences were also noted. Differences related to the types of services available. For example, although caregiver respite was used in both Thunder Bay and the Region, the type of program drawn upon varied. While the care managers from Thunder Bay frequently drew upon a professional respite program, the care managers from the Region drew on volunteer run respite programs (volunteer visitor). Another example related to psychosocial support. While the care managers from Thunder Bay drew on Social Work services contracted through CCAC, the care managers from the Region tended to use community support counselling. The care managers from Thunder Bay also included security checks reassurance (a daily phone call check for care recipients), while this service was not utilized in the Region packages. PT and OT services were used in care packages in both Thunder Bay and Region; however heavier reliance was noted in the Region care packages.

In summary, despite some very minor differences in service choices, the overall finding from the Expert Panel sessions is that providing both health and social care to this vulnerable population is integral to enabling them to age safely at home. It is important to note that current homecare models in Ontario tend to preclude the combination of these services. Although public policies are relaxing barriers to the provision of both health and social care services (Ontario Association of Community Care Access Centres, 2009), persistent funding constraints and lack of services (particularly in rural areas) limit the extent to which these policies can be translated into practice.

6.6 Insights of Participating Care Managers

As the care managers constructed the care packages they engaged in ongoing dialogue about their experiences providing care in their respective regions and agencies. These “key insights” were collected by the researcher as the care managers constructed the care packages and then presented to them on the last day to ensure that the themes accurately reflected their views. The care managers, after making a few clarifications, agreed that these were insights that represented their experience as care managers in Northwestern Ontario.

Formal Care- Availability and Scope of Services

The care managers from Thunder Bay outlined that many great services existed in their communities, but long wait-lists precluded timely access to these services. In the Region, the issue was related to both availability and scope. More specifically, basic community support services did not exist in all communities including meal programs (e.g. meals on wheels, or congregate dining); transportation services (municipal bus services and transportation programs for the elderly), in-home caregiver respite programs; day programs (particularly for non-dementia populations); and pharmaceutical medication management assistance (e.g. blister pack set-up). Greater availability of service tended to be in the Kenora-Rainy River District (west), as compared to the North Shore (East). The aforementioned services were placed in most packages, resembling key components of the ideal mix of services for individuals at risk of LTC facility admission.

Formal Care- IADL Support

Both Thunder Bay and Region care managers spoke to the importance of instrumental activities of daily living (IADLs) - transportation, meal assistance, medication management, etc, in fostering opportunities to age at home. As noted earlier, IADL services were not consistently available in all communities. Particular emphasis was placed on medication management. The care managers felt that medication management (listed as an IADL on the RAI-HC) should be considered an activity of daily living given the detrimental effects of improper medication management (falls and hospitalizations).

Formal Care- Supportive Housing

Across NWO, particularly in the Region, housing with services (supportive housing) was few and far between. The care managers described supportive housing as an integral piece of the care continuum, not meant to replace LTC facilities, but rather a care environment that ideally situated itself between homecare and LTC for some older persons. The absence of this type of model, in their view, led to earlier admission to LTC facilities for some individuals. The care managers from the Region acknowledged that lack of population density, particularly in some areas of NWO, would likely render such a model cost ineffective. Thus, congregate living in a regular houses with a built in care team was suggested as a more flexible and potentially cost-effective way to provide housing with services.

Formal Care- Lack of Awareness

Care managers from both Thunder Bay and the Region felt that many individuals and their caregivers were unaware of available services. Educating clients and caregivers through the media, support groups and information sharing via videoconferencing were suggested as potential tools to increase awareness.

In addition to being a resource to clients and caregivers, the utilization of videoconferencing tools across the Region was identified as a mechanism for providers to share best practices and support to one another. The care managers from Thunder Bay felt that communication among providers was essential and could be facilitated through a “traveling binder” in the care recipient’s home, where multiple providers could provide ongoing updates to other providers to keep client care consistent, open, and safe.

Informal Care

Two key points were noted. First, the presence of a caregiver in the home determined, to a great extent, the ability of some older persons, particularly those with greater needs, to age safely at home. The care managers noted that heavy outmigration trends in this region of study may have limited the extent to which older persons could age at home. Second, the care managers noted that it was important to support both the care recipient and the informal caregiver. However, the extent to which this occurred was limited by stringent eligibility criteria for caregiver support services. For example, respite services (e.g. in a LTC facility, professional respite care services, and additional CCAC respite care hours) were unavailable if the caregiver and the care recipient lived in separate households.

Policy

Across NWO, care managers commented on the overall “lack of flexibility” experienced when serving older persons. For example, as mentioned above, eligibility for caregiver respite services was contingent on having a caregiver (e.g. family member) living in the home with the care recipient. Another frequently used example was the eligibility criteria for supportive housing, which in some cases excluded individuals with incomes above a specified income threshold. Even among those eligible for supportive housing, long wait-lists precluded access.

Overall, care managers felt that access to services to support IADLs had worsened since the onset of community-based reforms in Ontario in the 1990s and early 2000s, which limited the funding and availability of such services. The care managers noted that it was difficult to mobilize services due to stricter eligibility criteria, and lack of availability.

For example, in Ontario, policy has focused on the reduction of hospital costs via early discharges and reductions of Alternate Level Care (ALC) and Emergency Room (ER) utilization. This has placed greater strain on an already overtaxed home and community care (H&CC) sector. In the H&CC sector, greater focus on short-term post acute homecare has ensued leaving less room for the care of individuals with complex, ongoing long-term needs.

Given the focus on post-acute homecare, care managers from Thunder Bay described the health care system as reactive as opposed to preventive. They discussed that many individuals were hospitalized upon reaching their “breaking point” and subsequently proceeded to a LTC facility. These clients, largely unknown to the care providers beforehand, represented individuals who “fell through the cracks of the system,” a system they felt was designed to identify people when already quite frail.

In addition, the Region care managers indicated that services that were currently available did not always fit with “rural reality.” More specifically, the informal solutions established by the Region care managers such as “going the extra mile” to fill in the gaps of the formal care system were not always recognized on any formal grounds. The Region care managers indicated “programming clients to provider needs” was a common result when dealing with the structural limitations of the health care system.

Last but not least, the care managers felt that Northwestern Ontario remained under funded, acknowledging the small population base, but high demand for services and inadequate supply. To address this issue, the care managers felt that it was important to adequately compensate and support front line workers as well as provide care managers with caseloads that were more manageable.

7.0 Conclusions

Two broad conclusions were drawn from these results. First, the supply side matters. In addition to the characteristics and needs of individuals (demand side), the supply side (the structure and capacity of home and community care at the local level) plays a considerable role in determining whether an individual will age at home or be directed to a LTC facility. Second, the supply side varies across geographical settings. In rural and remote communities where H&CC is less accessible than in urban centers, opportunities to age at home become more constrained.

As noted in the results, individuals waiting for LTC facility placement in Thunder Bay had significantly greater levels of need compared to their Region counterparts; however, this does not suggest that older persons in Thunder Bay have greater needs as a whole. What these data demonstrate is that supply side factors (the different services mixes across jurisdictions and the extent to which services can be appropriately mobilized by care managers) predict where individuals age. Put another way, limitations in the availability of services in the Region, place individuals at risk of LTC facility placement at earlier stages of decline than their Thunder Bay counterparts. If given access to a mix of health and social care services, a significant proportion of individuals waiting for LTC facility placement in Northwestern Ontario, particularly in the Region, could potentially age at home longer.

Supplementing these findings were the insights provided by care managers (the Expert Panellists who participated in this study) who pointed to the limited scope and availability of services, and the structural limitations embedded within their agencies and broader systems in which they worked. These factors need to be addressed if individuals are to age successfully in their homes and communities. These barriers were particularly pronounced in the Region suggesting that LTC facility placement may become the default option.

8.0 Implications for Policy and Practice

The results of this study suggest that there is considerable opportunity for older persons at risk of LTC facility placement, to age in their own homes and communities. In order for this to happen resources need to be accessible and care managers require the flexibility to integrate resources into care packages, including much needed IADL support. Although the shift from LTC facilities to the home of individuals who met the “divertible” threshold could not happen today, this study provides an evidence base, outlining 1) what resources are needed to sustain older persons safely in their homes and 2) the tools the care managers require to make this happen.

8.1 What resources are needed to sustain older persons safely in their homes?

It is clear in this study as well as past BoC research that an integrated mix of health and social care services is required to safely sustain individuals at risk of LTC placement in their homes and communities. For many individuals, particularly in the Region, this can be a cost-effective alternative. In addition, services that support IADLs are crucial (transportation; medications management; adult day programs; meal support; home modification- bath seats, grab bars, etc to support bathing and personal hygiene activities; and caregiver respite). These services were recommended for nearly all wait-listed individuals across both regions. Paradoxically, these services or subsidies for these services (e.g. home modifications) were the most difficult to obtain due to long wait-lists (Thunder Bay) or lack of availability altogether (the Region).

Although building up service capacity in areas that lack critical mass is difficult to do, there is some evidence in the literature which suggests ways in which this can be accomplished. I provide two key examples.

The first example stems from a recent report written by the Canadian Homecare Association (2008) which provides insight into ways in which service capacity can be built up in rural and remote areas. They recommend the following best practices: greater reliance on e-technology (in areas where satellite reception can be obtained), the development and utilization of integrated delivery teams consisting of volunteers, providers (including locum support), and changes in staff workload to reflect longer distances in travel.

The second example is the Program of All Inclusive Care for the Elderly (PACE) which is currently being adapted to meet the needs of older persons who are risk of decline in rural and remote communities. The urban based, interdisciplinary day program model is changing its focus to home based support, with telecommunication between providers, the engagement of the local community (e.g. volunteers to provide transportation), and assistance from neighbouring urban communities (e.g. visiting providers) to increase the economic feasibility of the model in rural and remote areas (National PACE Association, 2002).

Solutions were also articulated by the care managers in NWO (detailed in this report) including adapting supportive housing for rural communities- smaller congregate living models; and providing support groups for care recipients and care providers through virtual means.

Although these examples provide insight into how current models of care delivery can be adapted, future research is required to establish ways in which solutions can be built “from the ground up.” While the study summarized in this report demonstrates “what” is needed in terms of services, future research can establish “how” to best deliver such services.

8.2 What “tools” are required to make this happen?

Care managers in both this study and other BoC projects conducted across Ontario consistently outlined that they did not always have the “right tools in their toolkit.” – the flexibility to provide the right mix of services to individuals (Williams, Kuluski et al., 2009). At times, constraints at the agency, policy, and funding levels precluded their ability to appropriately combine resources—that is, health care (services that support ADLs) and social care (services

that support IADLs). If resources were not available in the community, “upward substitution” occurred (reliance on expensive resources such as hospitals and LTC facilities in the absence of resources in the home and community care sector). The Balance of Care study provided the means to establish the extent to which “downward substitution” (providing more appropriate lower levels of care) could occur for individuals at risk of facility based LTC in Northwestern Ontario.

9.0 Future Directions

Ontario’s 1.1 billion dollar Aging at Home Strategy, an investment to sustain and support services to enable individuals to age in their own homes and communities (Ministry of Health and Long-Term Care, 2007) provides an opportunity to explore innovative ways to meet the needs of older persons. This in combination with changing legislation (e.g. revisions to the LTC Act) provides the means to focus on the long-term needs of older persons. Such changes have allowed the North West CCAC to use findings from this project to target individuals who could manage at home with the appropriate mix of resources. As per the writing of this report, the CCAC removed 100 individuals off of the LTC wait-list (with permission of the individuals) to provide them with a mix of health and social care services in the community. The CCACs will be targeting individuals across the region in an attempt to take additional individuals off the wait-list, allowing them to age at home with additional support.

To build on the evidence from the Balance of Care Part I (detailed in this report), The Balance of Care research group is now working on Balance of Care Part II in northwestern Ontario to determine the extent to which supportive housing can meet the needs of Northwestern Ontario’s aging population.

10.0 References

- Bharucha, A., Pandov, R., Shen, C., Dodge, H., & Ganguli, M. (2004). Predictors of nursing facility admission: A 12-year epidemiological study in the United States. *Journal of the M, 52*, 434-439.
- Black, B., Rabins, P., & German, P. (1999). Predictors of nursing home placement among the elderly public housing residents. *The Gerontologist, 39*(5), 559-568.
- Canadian Homecare Association. (2008). *A scan of options for delivering homecare in rural, remote and northern regions of Canada*. Ottawa, ON.
- Central Local Health Integration Network. (2008). *Caring communities- Healthier people: Making a difference 2007-2008 Annual report*. Brampton, ON.
- Challis, D., & Hughes, J. (2003). Residential and nursing home care- Issues of balance and quality of care. *International Journal of Geriatric Psychiatry, 18*, 201-204.
- Challis, D., Mozley, C., Sutcliffe, C., Bagley, H., Price, L., Burns, A., et al. (2000). Dependency in older people recently admitted to care homes. *Age and Ageing, 29*, 255-260.
- Clarkson, P., Hughes, J., & Challis, D. (2005). The potential impact of changes in public funding for residential and nursing-home care in the United Kingdom: The residential allowance. *Aging & Society, 25*(2), 159-180.
- Gaugler, J., Duval, S., Anderson, K., & Kane, R. (2007). Predicting nursing home admission in the U.S.: a meta-analysis. *BMC Geriatrics, 7*(13).
- Hollander, M. (2004). *Unfinished business: The case for chronic home care services: A policy paper*. Victoria, BC: Hollander Analytical Services, Ltd.
- Hollander, M., & Chappell, N. (2002). *Final report on the national evaluation of the cost-effectiveness of home care* (Synthesis report). Victoria: Hollander Analytical Services Ltd and Centre on Aging, University of Victoria.
- Hollander, M., Miller, J., MacAdam, M., Chappell, N., & Pedlar, D. (2009). Increasing value for money in the Canadian healthcare system: New findings and the case for integrated care for seniors. *Healthcare Quarterly, 12*(1), 38-47.
- Liebig, P. (2001). International perspectives on housing frail elders. *Journal of Architectural and Planning Research, 18*(3), 208-222.

- McCallum, J., Simons, L., & Simons, J. (2005). Patterns and predictors of nursing home placement over 14 years: Dubbo study of elderly Australians. *Australian Journal of Aging, 24*(3), 169-173.
- Ministry of Health and Long-Term Care. (2007, December 14, 2007). Ontario's Aging at Home Strategy. Retrieved April 8, 2008, from http://www.health.gov.on.ca/english/public/program/ltc/33_ontario_strategy.html
- National PACE Association. (2002). *Setting the PACE for Rural Elder Care: A Framework for Action*. Alexandria, VA: National PACE Association.
- North West Local Health Integration Network. (2006). *North West Local Health Integration Network Integration Health Services Plan: Summary*. Thunder Bay.
- Ontario Association of Community Care Access Centres. (2009). OACCAC News [Electronic Version]. *December announcement strengthens home care, 4*. Retrieved July 18, 2009, from <http://www.ccac-ont.ca/Upload/oaccac/General/OACCACNewsJan2009.pdf>
- Stuart, M., & Weinrich, M. (2001). Home and community-based long-term care: Lessons from Denmark. *The Gerontologist, 41*(4), 474-480.
- Tucker, S., Hughes, J., Burns, A., & Challis, D. (2008). The balance of care: Reconfiguring services for older people with mental health problems. *Aging & Mental Health, 12*(1), 81-91.
- Weissert, W., Cready, C., & Pawelak, J. (1988). The past and future of home and community-based long-term care. *The Milbank Quarterly, 66*(2), 309-388.
- Williams, A., Challis, D., Deber, R., Watkins, J., Kuluski, K., Lum, J., et al. (2009). Balancing institutional and community-based care: Why some older persons can age successfully at home while others require residential long-term care. *Longwoods Review, Health Care Quarterly, 7*(1), 95-105.
- Williams, A., Kuluski, K., Watkins, J., Montgomery, R., Lum, J., & Ying, A. (2009). *The Balance of Care*. Toronto, ON: University of Toronto.
- Williams, A., & Watkins, J. (2009). *The Champlain Balance of Care Project*. Toronto, ON: University of Toronto.
- Wolinsky, F., Callahan, C., Fitzgerald, J., & Johnson, R. (1993). Changes in functional status and the risks of subsequent nursing home placement and death. *Journals of Gerontology, Series A, Biological Sciences and Medical Sciences, 48*(3), S94-S101.