



## The Balance of Care

Many older persons prefer to age “in place,” living in their own homes and communities, as independently as possible, for as long as possible. However, for some older persons, particularly for those with multiple chronic needs requiring a range of medical and social supports, residential long-term care (LTC) may be the only viable option.

This In Focus reports on research conducted in the United Kingdom (UK), and more recently in a series of projects in Ontario, Canada. These projects use the Balance of Care (BoC), a policy planning tool, which seeks to set evidence-based benchmarks for the most appropriate mix of community-based and institutional resources needed at the local level to support an aging population. The BoC asks,

*“What proportion of older persons eligible for residential LTC could be maintained safely and cost-effectively at home if given appropriate home and community care (H&CC)?”*

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The BoC was pioneered in the UK by Dr. David Challis and his colleagues at the Personal Social Services Research Unit (PSSRU), University of Manchester. While conventional projections of care needs often assume that a growing population of older persons will demand a proportionately greater number of residential LTC beds, the BoC emphasizes that the need for such beds will be determined as well by supply-side factors such as the availability of safe, cost-effective community-based care. Other things being equal, where H&CC options are more accessible, additional older persons will be able to

age in place and fewer will require residential LTC.

The BoC also emphasizes that the population of older persons is not homogeneous; needs vary considerably. For the vast majority of older persons, relatively minimal levels of care will be required to allow them to age in place. For a small minority of frail, often isolated older persons with heavy, ongoing care needs there will be no reasonable, safe, cost-effective alternative to residential LTC. However, between these two clear-cut groups there will be some number of older persons who qualify for residential LTC, but whose care needs could potentially be met in the community if appropriate H&CC were available (Department of Health, 2005). By using actual assessment data to measure the needs of older persons “at the margins” of losing independence, and matching these needs to available or potential community-based care at the local level, the BoC estimates the proportion of at-risk older persons that could be safely and cost-effectively supported in the community with existing resources, as well as the proportion that could be supported given different resource mixes. Such “real world” assessments thus aim to identify “the correct mix and provision of institutional and community based services in any given geographical area.” (Challis & Hughes, 2002; Hughes and Challis, 2004; Williams et al., 2009).

A particular strength of the BoC is that it is not merely a statistical exercise: it brings together the best available assessment data and the most experienced decision-makers and front-line case managers who understand the needs of older persons in their communities, as well as the local capacity to meet these needs. BoC projects convene panels of experts from across the care continuum to review the characteristics and needs of older persons “at risk” of losing independence

and to construct care packages that would allow them to age successfully in the community. The BoC is, in effect, an “in vivo” simulation of how care decisions are actually made, and how they could be made under different circumstances.

## Targeting “At-Risk” Seniors

As noted, the BoC model focuses on seniors “at the margins” - those at risk of losing independence and requiring residential LTC. This is consistent with the current policy focus in the UK and other industrialized countries on groups with the highest need. The first reason for this focus is ethical; vulnerable, disadvantaged groups should have access to available care as a matter of equity. A second reason relates to care utilization and costs: in all countries, a relatively small number of very high needs individuals uses a disproportionately large share of health care resources. In the UK, for example, it has been estimated that just 5% of hospital inpatients, many with long-term care conditions, account for 42% of all acute care bed days and a high number of hospital emergency visits (Department of Health, 2005). By improving care for these individuals, it is hoped that health system accessibility and sustainability can also be improved.

## Care/Case Management

The BoC model also points to the crucial role of care/case managers in designing, delivering and monitoring care packages for “at risk” older persons. While many older persons and their caregivers need relatively little assistance to “navigate” available services and manage their own care, frail seniors with complex, multiple long-term conditions are the least likely to be able to access the care they need without help. In its model “for improving care for people with long term care conditions,” the UK Department of Health (2005) stresses the importance of using case management “to anticipate, co-ordinate and join up health and social care” for individuals with the highest need both to ensure the best outcomes for individuals, and to ensure the best use of available resources. Case managers use flexible, decentralized budgets, with clear spending limits, to integrate care from the

“bottom-up” by building innovative, personalized care packages around the individual’s care needs (Challis et al., 1990).

## Balance of Care Findings – Care Management Demonstration Projects

The earliest application of the Balance of Care took place in the 1970s, through a series of care management demonstration projects in the UK (Challis et al., 1990). These demonstrations, called the Thanet Community Care Project (Challis et al., 1990); the Gateshead Health and Social Care Scheme (Challis et al., 1990); the Lewisham Scheme (Challis & Hughes, 2002); and the Darlington Project (Hughes & Challis, 2004), targeted individuals at risk of residential LTC placement or long stay hospital utilization. The overall goal was to prevent premature admissions to these institutionalized environments, through the provision of case managed community-based care packages (Challis et al., 1990).

The case managers were given small caseloads, and flexible budgets with expenditure limits set at 2/3rds of the cost of residential LTC. The care managers used this budget to design client-centered packages with the goal of safely sustaining individuals in the community. The care managers provided ongoing assessments; supported the community care providers (General Practitioners, Community Nurses, and Bath Attendants), and a group of social care providers called “helpers” who were employed specifically for these demonstration projects to provide social care. The helpers, engaged in the provision of companionship, meal preparation, and managing medication(s). Small day care groups were provided in the homes of some of the helpers to provide congregate dining and social engagement opportunities for housebound seniors. The allotted budget also allowed for such amenities as smoke alarms, kettles, and vacuum packed meals to enhance the safety and flexibility of the care packages.

Overall, the findings from these projects suggest that when appropriately targeted to individuals at risk of residential LTC placement or

hospitalization, active care management and a flexible array of health and social care services can lead to psychosocial improvements (improvements in well-being and reductions in caregiver stress); and decreases in residential LTC placement or long-stay hospitalization, at similar or lower costs to the health care system (Challis et al., 1990; Challis & Hughes, 2003; Phillips, 1996).

## Balance of Care Findings – Policy Planning Tool

In addition to the care management schemes, the BoC has been applied as a policy planning tool using a series of methodological steps. The BoC steps below are used to determine the extent to which a community-based package can be a safe and cost-effective alternative to another setting (e.g. hospital or residential LTC home) for a group of vulnerable older persons.

## Balance of Care Methodology

The BoC method includes the following steps:

1. Identify “at risk” older persons (e.g. those living in or eligible for residential LTC).
2. Use assessment data to stratify these at-risk older persons into relatively homogeneous sub-groups. To do this, PSSRU studies have used measures including activities of daily living (Barthel scale- low, medium, high); confusion (MDS cognitive performance scale- intact, mild impairment, severe impairment); and presence of an informal caregiver (yes, no). Ontario BoC studies add ability to perform instrumental activities of daily living (IADL) including housekeeping, meal preparation, phone use and medications management.
3. Determine how many at-risk seniors fall into each sub-group. At the low end of the needs stratification are individuals who are cognitively intact, can perform activities of daily living and instrumental activities of daily living independently, and have a caregiver

living with them; at the high end are individuals who are not cognitively intact, who cannot perform activities of daily living or instrumental activities of daily living themselves, and who have no caregiver living with them.

4. Use assessment data to create “vignettes” (detailed profiles) for typical individuals in sub-groups populated with sufficient numbers of individuals to warrant analysis and protect individuals from being identified. These vignettes are written to simulate the notes that case managers use when making actual care decisions.
5. Convene “expert panels” of the most experienced case managers from across the care continuum (including acute care, primary health care, residential LTC, community support services, and housing) to review case vignettes and construct appropriate community-based care packages.
6. Estimate the costs of the care packages using local government cost data.
7. Determine which sub-groups of at-risk older persons (and how many individuals in total) could be maintained safely and appropriately in the community at less or equal cost to residential LTC.

One such application of the BoC in the UK led by Challis & Hughes (2003) targeted a sample of older persons admitted to a residential LTC home (n = 330). Findings revealed that 21% of the overall group and 36% of those categorized into case types could safely and cost-effectively be cared for in a home and community-based setting. Over half (60%) of the divertible residents were considered to have low care needs (low levels of dependency and low levels of cognitive impairment); and had access to a family caregiver in the home), thus were deemed to be the least appropriately placed (Challis & Hughes, 2003).

In the UK, the BoC has been shown to provide a powerful tool for guiding resource allocation at the local level and testing different investment scenarios (Tucker et al., 2008).

However, note that the BoC does not attempt to determine how the needs of any particular individual should be met; other factors including individual and family preferences must also be considered.

There is extensive BoC literature, much of which can be accessed through the PSSRU website (<http://www.pssru.ac.uk/>).

## Balance of Care Findings – Ontario Application

To date, a multidisciplinary research team based at the University of Toronto and Ryerson University in Toronto, has conducted BoC projects, (targeting individuals waiting for residential LTC placement) in 9 of Ontario's 14 health planning regions:

- Waterloo-Wellington
- Toronto Central
- North West
- Central
- North East
- Central West
- South West
- North Simcoe Muskoka
- Champlain

These projects have documented considerable regional variation in terms of both demand (needs of individuals) and supply (local system capacity). For example, considerable differences have been observed between urban, rural and remote areas, and between established and emerging cultural communities. However, some common patterns have emerged:

- Significant proportions (generally between 20% and 50%) of individuals on residential LTC waiting lists could potentially be

“diverted” safely and cost-effectively to the community if given access to the necessary mix of health and social care services.

- Assistance with instrumental activities is critical to daily living. Difficulty in these activities was evident among the majority of individuals waiting for residential LTC placement in each region of study. Problems in coordinating IADL care appears to be a contributing factor to placement on residential LTC facility waiting lists. As noted, IADLs include everyday activities such as transportation, nutrition, ability to use the telephone, and medications management.
- While the presence of H&CC services is a necessary condition for supporting older persons at home, coordination of services appears even more crucial. In Ontario, there have been few mechanisms to construct and manage integrated H&CC packages, particularly for individuals with multiple needs (including cognitive deficits) who do not have caregivers living with them. For example, while home care case managers have been able to refer individuals to community supports, like transportation and meals-on-wheels, they have had little capacity to direct those services, guarantee access, or monitor outcomes. Similarly, case managers in community support agencies have had authority only over services provided directly by their agencies. Lacking coordination, the default option has often been residential LTC.
- There is no standard assessment, eligibility requirements, intake procedures, or core basket of services for supportive housing sites in Ontario. Therefore, it is difficult to estimate with precision the extent to which they may be cost-effective options for individuals at different levels of assessed need in different local areas. Nevertheless, data from across Ontario suggest that supportive housing offers considerable potential to serve high needs individuals and achieve cost efficiencies as compared both to line-by-line services in the community and residential LTC.

The Community Care Access Centres (CCAC) and Local Health Integration Networks (health planning regions in Ontario) who have

participated in the BoC projects are using these results to guide local planning in their respective regions. For example, the North West CCAC and Central CCAC have used these data to guide initiatives funded through Ontario's Aging at Home Strategy, allowing individuals who would otherwise be placed in residential LTC facility to age at home.

Additional details on the BoC approach and the results of BoC projects across Ontario can be found at [www.crncc.ca](http://www.crncc.ca). See particularly [http://www.crncc.ca/knowledge/events/documents/Balance\\_of\\_Care\\_Sept11\\_2009.pdf](http://www.crncc.ca/knowledge/events/documents/Balance_of_Care_Sept11_2009.pdf) and [http://www.crncc.ca/documents/LR\\_vol7\\_no1\\_Williams.pdf](http://www.crncc.ca/documents/LR_vol7_no1_Williams.pdf)

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