Building Specialized Geriatric Services in Acute Care Hospitals: the Business Case and Toolkit

Updated March 2012
Introduction to this Template

This Business Case Template has been prepared by the Regional Geriatric Program of Toronto with assistance from PricewaterhouseCoopers LLP. The target audience for this document is staff in acute care hospitals who are considering introducing specialized geriatric services or expanding their current scope of specialized geriatric services.

The aim of the template is to support staff in acute care hospitals in making a compelling case to senior decision-makers for investment in specialized geriatric services. While each hospital’s business case will contain some unique elements, there will also be many commonalities in terms of the approach to preparing the business case, the analysis conducted and the evidence presented.

Recognizing that many hospitals are facing resource pressures, this template provides an efficient approach to business case development that will minimize the time required by hospital staff and physicians to prepare a comprehensive and credible business case. The template may also serve as an educational tool that supports knowledge transfer of best practices in specialized geriatric services and helps to build capacity in business case development.

If you have any questions about this template, please contact Marlene Awad, Director of Operations, at the Regional Geriatric Program of Toronto at marlene.awad@sunnybrook.ca.
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1. **Executive Summary**

The executive summary:

- Provides the reader with a clear understanding of the “Why, What, When, Who and How” of the proposal
- Provides a summary of the existing problem/issue/opportunity, including the impact that the issues are currently having or may have on the organisation.
- Outlines the proposed initiative, providing a summary of the objectives of the project/initiative and how it will address the business problems.
- Highlights degree of alignment with strategic directions and priorities of the hospital, the LHIN and the Ministry of Health and Long-Term Care

- *The Executive Summary should not contain any information that is not contained in the body of the business case*
- *The Executive Summary should not exceed two pages, if possible*
- *The readers should be able to treat the Executive Summary as a stand-alone document.*
2. **Background**

**Overview of the issue and purpose of the business case**

The purpose of this chapter is to set the context for the reader by briefly outlining the purpose of the business case, why the issue is important and how the case that is being made aligns with both the hospital’s vision for geriatric services and LHIN priorities.

Part of the overview will include an overview of the size of the local senior’s population. Below is data for the six LHINs covered by the RGP network. New data can be used if available.

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Central LHIN</td>
<td>11.1%</td>
<td>52.4%</td>
</tr>
<tr>
<td>Central East LHIN</td>
<td>13.0%</td>
<td>15.4%</td>
</tr>
<tr>
<td>Central West LHIN</td>
<td>8.8%</td>
<td>67.0%</td>
</tr>
<tr>
<td>Mississauga Halton LHIN</td>
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<tr>
<td>North Simcoe Muskoka LHIN</td>
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<tr>
<td>Toronto Central LHIN</td>
<td>13.3%</td>
<td>16.6%</td>
</tr>
<tr>
<td>Ontario</td>
<td>12.7%</td>
<td>39.9%</td>
</tr>
</tbody>
</table>

Source: Provincial Health Planning Database, MOHLTC. Extracted from the Central LHIN Integrated Health Service Plan

Seniors account for [insert LHIN specific data from table above]% of the population in the ____ LHIN and represent one of the fastest growing segments of our community. By 2016 our LHIN will see a [insert LHIN specific data from table above]% increase in seniors aged 65 years and over. The size and growth of the seniors population in our LHIN underscores the need for a comprehensive range of specialized geriatric services and general hospital services that seniors can access closer to home.

The focus of specialized geriatric services is the frail older person whose health, dignity and independence are at risk due to:

- Multiple and complex medical and psycho-social problems
- A recent unexplained breakdown in health and function (or high risk for such breakdown).
- Risk of losing the capacity for independent living.

Since it is challenging to accurately estimate the size of this target population, the population of persons age 75 and older is often used as a proxy for the frail seniors’ population. However, older adults may present with geriatric issues at a younger age.

In order to better meet the growing and increasingly complex needs of the aging population, our hospital must assess its current approach to organizing and delivering geriatric services relative to best practices that have been identified by the Regional Geriatric Programs of Ontario and the needs of our LHIN. The organizational assessment must be guided by reliable quantitative data and input from key stakeholder groups.
The output of this process is an evidence-based business case to inform future decision-making by senior leaders. The business case includes:

- evidence-based case for change
- the results of an organizational assessment of our hospital
- high-level program design (including human resource and financial implications) for areas where gaps in service/support exist
- a three to five year implementation plan and recommended next steps.

**Vision for geriatric services in acute care hospitals**

Our vision for geriatric services mirrors the vision of the Regional Geriatric Program of Toronto: **“Better health outcomes for frail seniors”**.

To build on this vision a visioning session was held with hospital leaders to articulate our desired future directions for geriatric services and services for seniors. The results are summarized below:

**The Business Case Toolkit includes:**
- A sample agenda for the Visioning Session
- A sample presentation slide deck
- A sample scorecard for participants to identify which factors are most important in making decisions about future investments in geriatric services

**Alignment with LHIN priorities**

The purpose of this section is to identify your local LHIN priorities that have been articulated in their Integrated Health Services Plan (IHSP) and demonstrate how the enhancement of specialized geriatric services and services for seniors are consistent with LHIN priorities and therefore more likely to be supported by the LHIN.

The toolkit includes a summary of how seniors issues have been addressed in LHIN Integrated Health Service Plans across the province.

Information on each LHIN’s IHSP can be accessed through the LHIN website at: [http://www.lhins.on.ca/](http://www.lhins.on.ca/)
3. The Case for Change

This chapter presents the business case for investment in specialized geriatric services designed to:

- Assure decision-makers that specialized geriatric services are grounded in best practices and have been proven effective through research
- Provide a frame of reference for assessing the hospital’s existing basket of geriatric services

It contains:

- A summary of the main messages that should be emphasized for decision-makers
- Sample text for a synopsis of best practices in specialized geriatric services
- A generic cost analysis that can be used by all hospitals. Using the approach described in this section, hospitals may wish to conduct the analysis for their specific organization. Case costing data is required to utilize the methodology.

Main Messages

Seniors are our main “customers” – a hospital that is truly “patient-centered” must have a strong focus on the seniors population

- Seniors make up only 13% of Ontario’s population yet they account for 40% of hospital discharges, 57% of all acute inpatient days and 43% of all provincial health expenditures.

Specialized Geriatric Services improve the quality of care and outcomes for seniors

- Functional decline occurs in 25% to 60% of older persons after entering acute care compromising their return to independence.

- There are clinical impacts of hospital admissions. For example, falls, and the fractures that often result, can lead to serious complications for frail seniors, including death. CIHI’s “Health Indicators 2007” report states that “about 7% of seniors admitted with hip fractures in 2005/06 died in hospital within 30 days of admission.”

- The RGP supports a network of health care providers in the delivery of interdisciplinary, senior-friendly, and evidence-based care that optimizes the function and independence of seniors and supports aging in place. Care is provided to frail seniors through the following basket of services: Acute Geriatric Units, Internal Consultation Teams, Geriatric

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Rehabilitation Units, Psychogeriatric Services, Geriatric Emergency Management, Geriatric Day Hospitals, Outpatient Geriatric Clinics and Outreach Teams.

- Specialized geriatric services offer several benefits including: decreased acute readmissions, reduced rate of emergency department admission, decreased length of stay, improved survival and improved functional status.

**Specialized geriatric services contribute greatly to financial sustainability of the health care system from both an operational funding and a capital funding perspective**

- It costs more to provide acute care treatment to elderly patients than for the general patient population.

- SGS have the potential to reduce unnecessary health care resource utilization among the frail elderly; examples are included in this chapter which demonstrate that:
  - SGS can reduce the incidence of hospital-acquired delirium which can prolong length of stay; the model demonstrates a potential reduction of 720 patient days for every 1,000 frail seniors that experiences hospitalization for a hip fracture when SGS is made available

- The model demonstrates that a health care system where frail seniors do not have access to SGS can extend length of stay. This has extremely important implications for hospitals where rising ALC days are already placing extreme pressure on bed availability; lack of bed availability is a key concern for hospitals struggling to respond to aging, chronic disease and population growth.

**Specialized geriatric services support improved patient safety, increased integration, better access and improved patient satisfaction**

- The effects of insufficient beds in our health system are well known – back-ups in the emergency department, cancellations of elective surgery, long wait times, patient dissatisfaction, safety risks, negative publicity and the inability to achieve utilization targets which may, over the long-term, affect funding levels.
Seniors’ Are Our Main Customers

The proportion of seniors in our population is growing. Census 2006 data shows that seniors represent 13.6% of Ontario’s population, an increase over the 12.8% reported in the 2001 Census. Population aging has begun to accelerate in 2011, and will increase until 2031 as individuals belonging to the large baby-boom cohorts reach age 65.²

As expected, seniors use a significant share of health care resources. The first chart below shows that although Ontario seniors make up only 13.6% of the population they account for 40% of discharges from hospital. When seniors are admitted to hospital they stay longer and require more resources. The second chart illustrates that seniors account for 57% of total length of stay³ in Ontario hospitals.

³ Total length of stay is similar to total patient days.
The length of time that seniors spend in hospital increases dramatically by age. In 2006, the average length of stay for the population as a whole was 6.3 days. For seniors aged 65 to 69, the average length of stay was 7.3 days. For seniors aged 75 to 79 the figure rises to 9 days and for seniors age 90+ the average length of stay was 11.6 days.

Seniors account for 43% of all provincial health expenditures in Ontario. The cost of providing health care to this portion of the population continues to increase. The graph below, based on Ontario case costing data, demonstrates that it costs more to provide acute care to an elderly patient than it does for the general patient population.

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Best Practices in Meeting the Needs of Seniors

The fact that seniors utilize more health care resources than younger people once hospitalized is only part of the story. Because of their multiple co-morbidities and the effects of hospitalization, they appropriately require longer lengths of stay in hospital and use additional hospital resources before they can be safely discharged.

Primary concerns when caring for the elderly are atypical presentations of disease, co-morbidity and adverse outcomes not common in the younger population. Since many elderly persons admitted to hospital are experiencing multiple health concerns, they may not fit typical clinical patterns. Some may fall off clinical pathways particularly if the pathways have been designed for healthy adults or single disease entities.

Hospitalization, and its outcomes, can be pivotal in a senior’s life, especially if services are not aligned with their unique health needs. Functional decline occurs in 25% to 60% of older persons after entering acute care. The loss of strength and muscle mass begins within 24 hours and may occur at a rate of 1% to 1.5% per day.

Seniors face a two-fold risk for adverse events and surgical complications, have 50% of all nosocomial infection, and 15-20% will develop hospital acquired delirium. They experience increased lengths of stay, high rates of re-admission and loss of the capacity for independent living.

The needs of the seniors’ population are not uniform. Seniors require a variety of different services depending on their needs, resources and location.

“Providing care to frail elderly patients is one of the biggest health challenges facing health care. Although most seniors are healthy, about 15% are frail. The health care system that this frail group requires is different from one that would be adequate for healthy older adults.”

Responsive health care organizations must recognize both the general health care needs of all seniors and the special needs of the frail senior. The remainder of this chapter presents a synopsis of best practices for both approaches.

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6 Aging Matters: Maximizing the Health of Older Adults in the South Shore Health District. South Shore Health. 2005
Best Practices in General Health Care Services for Seniors

Just as hospitals have recognized that providing health care to children requires a different approach, there is growing recognition around the world that services for seniors also require a different approach to address the quality concerns identified earlier.

“It is no longer appropriate to have a “geriatric unit” within the hospital as the sole location for senior friendly care. The senior patient and caregiver are now receiving care throughout the entire hospital. In recognition of this need, the World Health Organization has identified this issue as one of the key areas of work in their document describing policy for health and ageing as” implementing age-friendly standards e.g. “age-friendly” health care centres.” By creating a “Senior Friendly” hospital, emergency departments, acute care and general service areas of a hospital can facilitate timely recovery and discharge to the seniors’ pre-admission living environment, thus reducing care costs.”

Best practices have been identified for the “Senior Friendly Hospital” (SFH) to achieve better patient and health system outcomes. The RGPs of Ontario have developed a framework to guide the development of senior friendly hospitals in order to optimize the health of seniors and the use of health systems resources. A Senior Friendly Toolkit can be accessed on the RGP’s website: http://www.rgp.toronto.on.ca/senior_friendly_hospitals. The table below describes the five key elements that need to be in place in a Senior Friendly Hospital.

In addition, the following summary report provides a set of recommendations based on evidence-informed SFH practices, a survey of provincial SFH activities, and expert opinion provided by the RGPs of Ontario SFH Steering Committee.


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7 O’Keeffe, J. Creating a Senior Friendly Physical Environment in our Hospitals. Regional Geriatric Assessment Program of Ottawa
<table>
<thead>
<tr>
<th>Processes of Care</th>
<th>Does the care and treatment of seniors take into account research and evidence regarding the physiology and pathology of aging, as well as social science research? e.g.</th>
</tr>
</thead>
</table>
|                  | - Adoption of practice guidelines for care of the elderly  
|                  | - Emphasis on avoiding hazards of hospitalization  
|                  | - Use of aids to compensate for sensory losses |
| Emotional & Behavioural Environment | Do staff interact with older patients in a respectful, supportive and caring way? e.g. |
|                                | - Anti-ageist rather than anti-aging attitudes  
|                                | - A respectful pace of care  
|                                | - Senior sensitive communication  
|                                | - Cultural and gender sensitivity |
| Ethics in Clinical Care & Research | Do care providers, researchers and others ensure that ethical issues are fully addressed with elderly patients or research subjects? e.g. |
|                                | - Access to care regardless of age  
|                                | - Respect for capacity to inform care  
|                                | - Equitable resource allocation  
|                                | - Age segregated data in clinical research |
| Organizational Support | Does the organization show its support for being a Senior Friendly Hospital in its' organizational structures and processes? e.g. |
|                        | - An aging focus in planning & development activities  
|                        | - Ageing issues integrated in human resources hiring and development  
|                        | - Seniors focus in terms of references for all patient outcome groups  
|                        | - Readiness to commit to senior friendly accreditation |
| Physical Environment | Is the physical environment sensitive to the capacities of elderly patients and visitors? e.g. |
|                     | - Lighting and signage supporting aging vision  
|                     | - Hallways, parking lots and stairways supporting seniors mobility  
|                     | - Furniture, beds and bathroom fixtures to reduce falls risk  
|                     | - Transportation, wheelchairs and mobility aids |

Specialized geriatric services (discussed below) are a component of a Seniors Friendly Hospital that targets the frail elderly -- a subgroup of seniors population. An important link between SGS and the delivery of general health care services for seniors is the knowledge transfer and capacity building that specialized geriatric resources can facilitate. Specialized geriatric experts are available to support staff in all areas of the hospitals in enhancing the delivery of services to seniors.
Best Practices in Specialized Geriatric Services

Research has shown that health care professionals with specialized expertise and experience in geriatric care are better positioned to respond to the complex health issues of frail seniors in a safe and effective manner. Specialized Geriatric Services (SGS) can play a critical role in ensuring that the system responds in a cost-effective and efficient way to ensure that resources are also available for other population needs.

Specialized Geriatric Services are:

- A range of health care services, which diagnose, treat and rehabilitate frail elders with complex and multiple medical, functional and psychosocial problems
- Provided on a consultative basis by an interdisciplinary team of health professionals
- Provided in a variety of home, ambulatory, acute care, long-term care and rehabilitation hospital settings
- Aimed at reducing the burden of disability by detecting and treating reversible conditions and recommending optimal management of chronic conditions.

The focus of specialized geriatric services is the frail older person whose health, dignity and independence are at risk due to:

- Multiple and complex medical and psycho-social problems
- A recent unexplained breakdown in health and function (or high risk for such breakdown).
- Risk of losing the capacity for independent living.

Research has identified that the availability of specialized geriatric services offers several benefits to patients and to hospitals including the following:

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Evidence-Based Outcomes</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved Patient Outcomes</td>
<td>Improved survival</td>
<td>Rubenstein 1984; Stuck 1993</td>
</tr>
<tr>
<td></td>
<td>Reduced loss of function associated with hospitalization</td>
<td>Baztan 2009; Caplan 2004; Cohen 2002; Stuck 2002.</td>
</tr>
<tr>
<td></td>
<td>Increased likelihood of living at home</td>
<td>Baztan, 2009; Challis, 2004; Mion 2003.</td>
</tr>
<tr>
<td></td>
<td>Improved physical and mental health, vitality, social function</td>
<td>Counsell 2009; Caplan 2004; Cohen 2002; Bernabei 1998.</td>
</tr>
<tr>
<td></td>
<td>Improved continuity of care</td>
<td>McCusker 2006.</td>
</tr>
<tr>
<td></td>
<td>Improved diagnoses</td>
<td>Challis 2004.</td>
</tr>
<tr>
<td></td>
<td>Improved functional status</td>
<td>Hogan &amp; Fox, 1990; Landefeld, 1995; Nikolaus, 1999; Rubenstein, 1984; Stuck, 1993</td>
</tr>
<tr>
<td>Increased</td>
<td>Reduced hospital days</td>
<td>Thorsten 1999; Brymer 1995.</td>
</tr>
</tbody>
</table>

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8 Regional Geriatric Program of Toronto

14 | SGS Business Case
<table>
<thead>
<tr>
<th>Benefits</th>
<th>Evidence-Based Outcomes</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Improved clinical decision-making</td>
<td>Challis 2004;</td>
</tr>
<tr>
<td></td>
<td>Decreased acute readmissions</td>
<td>Caplan, 2004; Hogan, 1990; Thomas, 1993</td>
</tr>
<tr>
<td></td>
<td>Reduced rate of emergency department admission</td>
<td>Caplan, 2004; Gagnon, 1999.</td>
</tr>
</tbody>
</table>

Based on evidence, the Regional Geriatric Program of Toronto, has identified a basket of SGS where, “together these services should provide a seamless continuum of care to treat acute illness and return a frail senior to the highest possible level of independent functioning fully linked with the services provided by their primary care physicians, community support services, and CCACs”. SGS can be provided in range of settings including inpatient units, emergency departments, outpatient settings and in the community. The recommended basket of services include:

**INPATIENT SERVICES:**

**ACUTE GERIATRIC UNITS (AGU)**
Inpatient hospital units in an acute care setting for persons who require short-term diagnostic investigation and treatment. Acute Geriatric Units are also referred to as “Geriatric Assessment Units” or GAUs.

**INTERNAL CONSULTATION TEAMS (ICT)**
Inter-disciplinary teams provide consultation and assessment of patients in the participating organizations.

**GERIATRIC REHABILITATION UNITS (GRU)**
Inpatient units in chronic hospitals for persons who require an individualized assessment and rehabilitation program for a period of one to three months.

A few of the hospitals in the RGP of Toronto network use the term “Geriatric Assessment and Treatment Unit (GATU)” to describe their specialized inpatient unit for persons with complex medical conditions who require an individualized assessment and rehabilitation program for a period of four to six weeks.

**EMERGENCY DEPARTMENT SERVICES:**

**GERIATRIC EMERGENCY MANAGEMENT (GEM)**
Consultation by a specialized geriatric health professional in the emergency room providing: assessment, diagnosis, identification of “at risk” elderly, initiating appropriate treatment, and linking with community and primary care.
OUTPATIENT SERVICES:

GERIATRIC DAY HOSPITALS
These hospital-based ambulatory programs provide diagnostic, rehabilitative or therapeutic services to persons living at home or in a long-term care facility. Attendance is usually two days per week for several months.

OUTPATIENT GERIATRIC CLINICS
Clinics are used to assess, treat and monitor elderly persons who can travel to the hospital. Some persons receiving RGP Outreach visits may have their first contact with a geriatrician in a clinic setting.

OUTREACH
Comprehensive assessments in the older person’s home or long-term care home are conducted by one or two health care professionals in geriatric medicine, nursing, social work, psychiatry, physiotherapy or occupational therapy. Other health professionals in psychology, pharmacy, recreation therapy, nutrition and speech language pathology may be involved if needed.
4. **Analysis of Cost**

Ontario’s acute care hospitals are challenged to find new and creative ways to reduce hospital expenditures while maintaining the highest quality of patient care for the growing patient population. Given that seniors account for the majority of acute inpatient days and a significant share of provincial health expenditures overall, cost-effective interventions that can reduce service utilization by this segment of the population offer tremendous potential benefit to hospitals and the health care system.

The purpose of this section is to illustrate potential cost avoidance resulting from patient access to specialized geriatric services (SGS) in the acute care setting. This section describes the methodology used to analyze costs and benefits and the results based on the application of a patient scenario.

**Methodology**

**The Cost Analysis Model**

The model is based on the hypothesis that investment in specialized geriatric services (as defined by the RGP) can lead to patient and health system benefits which result in cost avoidance. Costs avoided are available to be re-invested in SGS or other health care services. The model will demonstrate how investment in specialized geriatric services can yield patient benefits that “free up” scarce resources for use by other patients.
Methods

The methodology maps geriatric patients who a) have access to SGS and b) those who do not, in a hypothetical journey through the acute care hospital system using a scenario. The generic model is depicted below:

The scenario chosen for this analysis reflect common condition that geriatric patients might present with, or experience, in the acute care setting:

- Delirium acquired during hospitalization

Delirium is one of the “geriatric giants”\(^9\). They are significant drivers of acute care utilization by the frail elderly. For in-hospital episodes of delirium, the model assumes that the SGS group has access to SGS while in the hospital and that these services impact the incidence of hospital-acquired delirium.

The purpose of this exercise is not to recreate an actual patient pathway, but rather to provide an illustrative model of where geriatric services can have an impact on operating costs in the acute care setting.

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\(^9\) The geriatric giants are falls, confusion/delirium, cognitive impairment, depression, polypharmacy, incontinence and immobility.
Data Sources

1. Published literature, administrative data and expert interviews were used to provide data on the incidence and health service utilization to estimate the proportion of patients that move along each pathway in the model.

2. Cost data are based on Ontario Case Costing Initiative (OCCI) 2005/06 acute inpatient and ambulatory data for patients aged 70+ for the conditions specified. The database used for the costing and length of stay data is called the Costing Analysis Tool (CAT). It generates reports based on Case Mix Groups for diagnoses and procedures. Each case represents one patient visit. The patient's cost is determined by costs incurred within the patient's admit and discharge dates in the functional centre. Physician costs are typically not included in the database with the exception of physicians on salary and hospitals billing fee-for-service in areas such as Diagnostic Imaging and/or Cardiovascular Services. Total costs include direct and indirect costs. Direct costs are costs that are directly related to the provision of care to the patient and include Nursing, Diagnostic Imaging, Pharmacy and Labs. Indirect costs are overhead expenses relating to running of hospitals and include admin, finance, human resources and plant operations etc. A case may appear in more than one functional centre and will be included in the data for only those functional centres where care was given. Because of privacy concerns CMG, DPG’s, diagnosis or procedure codes with five or fewer cases are not released and an FOI (freedom of information) is displayed in its place. More information about the OCCI can be found at: www.occp.com.

Limitations of the Data Sources

- There is ample evidence of the advantages of specialized geriatric services. However, some of the evidence-based literature for specific services has mixed outcomes, partly as a result of design limitations and the use of various methodologies.
- There is limited published research that quantifies the costs and benefits of specialized geriatric services provided in acute care settings.
- There are very few credible sources of reliable hospital cost data for specific patient groupings (e.g. elderly patients).
  - Data provided by the RGP on SGS expenditures in funded hospitals is limited to the cost of providing the SGS but does not reflect the full cost of the patient’s acute care episode.
  - The most reliable, readily available source of cost data that allows a focus specifically on elderly patients (70+) is the Ontario Case Costing Initiative. Through OCCI, cost data is available by Case Mix Group.
Analytical Approach

For the analysis of operating cost impacts, the cost, incidence and utilization data are applied using a basic probability model. Starting with a patient group of 1000 in each of the SGS and control group, basic patient flow is illustrated based on the available data and estimates. Overall operating costs are derived based on the proportion of the elderly with a particular ailment and their health service utilization.

Results

The following pages describe the analysis of the cost and utilization of services for a patient scenario.
Patient Scenario: Hospital-acquired Delirium

The following describes the care pathways of 1000 frail elderly with and 1000 without access to inpatient SGS services who experience delirium while in hospital, based on a synthesis of the available information.

The studies considered in estimating the frequency of hospital-acquired delirium were based on a number of different SGS services that were instrumental in lowering the frequency of delirium among the intervention group. The SGS services include proactive geriatric consultation, multidisciplinary preoperative comprehensive geriatric assessment (CGA) with post-operative follow through, the application of standardized protocols focusing on risk factors and staff education. Four studies are summarized below.

<table>
<thead>
<tr>
<th>Study Author</th>
<th>Study Population</th>
<th>Intervention</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marcantonio (2001)</td>
<td>126 patients, 65+ yrs, admitted emergently for surgical hip fracture</td>
<td>Proactive geriatrics consultation or usual care. Visit by geriatrician within 24 hrs post operatively, and then daily visits for the duration of the hospitalization.</td>
<td>Delirium developed in 32% of the intervention group, and 50% of the control group ($p=0.04$). Severe delirium was 12% in the intervention group, and 29% in the control group ($p=0.02$). Length of stay did not differ significantly between groups (median = 5 +/- 2 days in both groups) likely because protocols and pathways predetermined LOS.</td>
</tr>
<tr>
<td>Harari (2007)</td>
<td>83 elective surgical patients, 65+ yrs,</td>
<td>Multidisciplinary preoperative comprehensive geriatric assessment (CGA) with post-operative follow through</td>
<td>Delirium developed in 6% of intervention group, and 19% of control group</td>
</tr>
<tr>
<td>Inouye (1999)</td>
<td>852 patients, 70+ yrs, admitted to general medicine service at a teaching hospital.</td>
<td>Standardized protocols for the management of six risk factors for delirium: cognitive impairment, hearing impairment, sleep deprivation, immobility, visual impairment, and dehydration.</td>
<td>Delirium developed in 9.9% of intervention group and 15% of the control group ($p=0.02$). Total number of days with delirium was 105 in the intervention group, and 161 in the control group ($p=0.02$). Estimated cost of US$6341 per case of delirium (in 1996 dollars)</td>
</tr>
<tr>
<td>Lundstrom (2005)</td>
<td>400 patients admitted to the department of general medicine, 70+ years old</td>
<td>Staff education focusing on the assessment, prevention, and treatment of delirium and on care-giver patient interaction</td>
<td>Delirium was equally common in both groups at admission. By day 7 fewer patients remained delirious 30.2% vs. 59.7% ($p=0.001$). Mean length of hospital stay was also lower in the intervention group 9.4 days vs. 13.4 days.</td>
</tr>
</tbody>
</table>
The diagram below summarizes the patient journey. The analysis is explained in further detail on the pages which follow. The red arrow highlights those steps in the patient journey that contribute costs to the cost analysis.
# Analysis of Operating Cost Impact

<table>
<thead>
<tr>
<th>Patient Journey</th>
<th>SGS Cases</th>
<th>Control Cases</th>
<th>SGS Cost</th>
<th>Control Cost</th>
<th>Cost Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Treatment – Admit to Acute Care Hospital</strong></td>
<td>1000 patients</td>
<td>1000 Patients</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>• The analysis begins with 1,000 seniors experiencing an inpatient stay in an acute care hospital</td>
<td></td>
<td></td>
<td>-</td>
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</tr>
<tr>
<td>• It is assumed that the reason for the hospital stay is surgical intervention for a hip fracture (the Marcantonio study focused on seniors recovering from a hip fracture)</td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Short-Term Results – Complications</strong></td>
<td>320 patients with delirium</td>
<td>500 patients with delirium</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>• Based on the Marcantonio study, the model assumes that 32% of SGS patients will develop delirium compared to 50% of the control group</td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Short-Term Results – Extended Length of Stay</strong></td>
<td>1280 additional patient days</td>
<td>2000 additional patient days</td>
<td>$1,016,320 ($794/day x 1,280 days)</td>
<td>$1,588,000 ($794/day x 2,000 days)</td>
<td>$571,680</td>
</tr>
<tr>
<td>• Several studies have found that hospital-acquired delirium increases length of stay</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>• The Inouye and Lundstrom studies cited above report that patients who develop delirium have lengths of stay 42% to 53% greater than patients who do not</td>
<td></td>
<td></td>
<td>-</td>
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</tr>
<tr>
<td>• The model conservatively assumes a length of stay differential of 30% for patients who develop delirium</td>
<td></td>
<td></td>
<td>-</td>
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<td>-</td>
</tr>
<tr>
<td>• Based on OCCI data the average length of stay for a patient aged 70+ with a hip fracture is 13 days; a 30% increase in length of stay results in an additional 4 days in hospital</td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>• The cost for each additional day is estimated using case costing data for cases where delirium is the most responsible diagnosis; the average cost per case is $14837 and the average length of stay is 18.7 days for an average cost per day of $794</td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td>$1,016,320</td>
<td>$1,588,000</td>
<td>$571,680</td>
</tr>
</tbody>
</table>
5. **Methodology for an Organizational Assessment**

The purpose of this chapter is to briefly outline the methodology that was used to developing the business case. It should describe how quantitative and qualitative data was gathered and analyzed.

A key component of this section is the description of the internal and external stakeholders that were consulted. The involvement of key stakeholders will enhance the credibility of the business case and increase the probability of gaining support for the business from the hospital and potentially the LHIN.

Internal stakeholders should include: clinical and administrative leaders in seniors services (e.g. geriatricians, geriatric psychiatrists, program directors with responsibility for complex continuing care, managers of seniors inpatient and outpatient programs), clinical and administrative leaders for emergency services, family practice, orthopaedics, mental health and other areas highly used by seniors; senior leaders who will be decision-makers on the business case. Consideration might be given to also gathering input from board members.

External stakeholders should include representatives of: the LHIN, the CCAC, other hospitals in your LHIN, public health, community support agencies that serve seniors, and long-term care homes in the LHIN.

The Business Case Toolkit includes a template for collection of hospital utilization statistics (in an Excel spreadsheet), a sample interview guide and interview guidelines.

Sample text for the methodology description is provided below.

**Phase 1 – Start-up and Information Collection**

The purpose of this phase was to confirm the objectives and expectations for the business case development process and to identify information sources and internal and external stakeholders to be involved.

A data request was submitted to [Decision Support] outlining the hospital data required to support the project.

A meeting was held to clarify the hospital’s vision for specialized geriatric services.

**Phase 2 – Organizational Assessment**

The purpose of this phase was to build the case for acknowledgement of seniors/geriatrics as a specific target population that is essential to achieving the hospital’s vision, to inform program design and to understand the magnitude of the proposed change by describing the baseline. There were four key components to this phase – best practices review, an internal scan, an external scan and analyzing the results of the assessment to inform program design and the business case.
The best practices review was based on guidelines, literature and other information provided by the Regional Geriatric Program of Toronto.

Through documentation review, hospital data analysis and interviews, the internal scan gathered in-depth information on: current resources and programs that support the geriatric population and how they are organized, current service utilization by the geriatric population and organizational readiness for development of a comprehensive and cohesive geriatric service.

Interviews were held with the following individuals at the hospital:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The external scan drew on documentation review and interviews with community partners to gather information on demographics, service availability, referral/usage patterns, service provider perspectives on needs, issues and gaps with respect to geriatric services, potential linkages and relevant provincial policies and directions.

Interviews were held with the following external stakeholders:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Once the best practices review, internal scan and external scan were finished all of the information was analyzed and consolidated to complete the organizational assessment. The assessment identified internal strengths and areas for improvement as well as external opportunities and threats that need to be considered. A meeting was held to present the results of the organizational assessment and gather input from our internal stakeholders on the interpretation and implications of the findings.

**Phase 3 - Program Design**
The organizational assessment identified gaps in service offerings and supports that are barriers to delivery of an accessible, comprehensive, high-quality specialized geriatric service. This phase provided a high-level program design for new/redesigned service offerings and supports. Benchmarks and other information required for program design were gathered from documentation provided by the Regional Geriatric Program, internet research on approaches in place at other hospitals and from discussions with other hospitals. The results of the program design phase were compiled and a meeting was held to present this draft program design report to hospital representatives for validation and suggestions for input.

**Phase 4 - Prepare Business Case**

In this phase all of the information gathered in previous phases was consolidated to prepare a business case for specialized geriatric services at our hospital.
6. **Environmental Scan**

**Internal Scan: current situation in the hospital**

The purpose of the Internal Environment Scan is to describe the current situation at the hospital in terms of the delivery of services to the geriatric population. It will be the basis for the identification of gaps and program improvement opportunities.

Components of this section might include:

**Corporate Overview**
The hospital’s vision, mission and values

**Overview of Services for Seniors**
A list of the range of inpatient and outpatient services the hospital currently offers that are geared specifically to seniors as well as general health care services that are utilized by seniors.

A description and an assessment of each service listed in this section are provided in Section 5.

**Utilization of Hospital Services by Seniors/Older Adults**

The Business Case Toolkit includes a data collection template for use in capturing the data required to complete this section. This template is provided in Excel format for ease of use.

Sample text and guidance are provided below:

Older adults utilize a significant share of hospital resources. The purpose of this section is to highlight trends in service utilization by older adults in order to illustrate the potential impact of service delivery approaches, such as specialized geriatric services, that could reduce hospital use and improve the quality of care for older adults.

**Notes and Limitations of the Data:**

- List any limitations of the data (e.g. some hospitals may not include mental health or complex continuing care data in their inpatient statistics)
How many older adults were hospitalized?

- Separations are a measure of the number of inpatients that left the hospital in a given time period whether it be by discharge, transfer to another facility or death.
- About __% of the hospital’s inpatients are seniors and the numbers are growing faster than the inpatient population as a whole.
- While the total number of inpatients in all age groups grew by __% over the past three years, the total number of inpatients over age 60 increased by __%.
- Over the last three years, the proportion of inpatients over the age of 60 grew from 23% to 26%.
- Significant growth in inpatient volumes was consistently seen in all of the older age groups (60-64, 65-74, 75-84 and 85+).
- Include a graph showing the percentage increase in inpatient separations for older adults by age group.

What were the top reasons for the hospitalization of older adults?

Below is a summary of the Top CMGs for older adults by age group for [fiscal year]. The top 5 CMGs were identified based on the number of inpatient separations where the CMG was the most responsible diagnosis. The data shows that …

<table>
<thead>
<tr>
<th>Top 5 CMGs (Fiscal Year)</th>
<th>Age 60-64</th>
<th>Age 65-74</th>
<th>Age 75-84</th>
<th>Age 85+</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMG #1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMG #2</td>
<td></td>
<td></td>
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<tr>
<td>CMG #3</td>
<td></td>
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<tr>
<td>CMG #4</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>CMG #5</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

How have admissions to specific inpatient units changed?

Older adults are most often admitted to medical units. Trends by age groups are outlined below.

60-64 Age Group:
- Separations for patients in the 60-64 age group increased by __% over the past three years.
- The greatest increase was seen in __________ unit (__%).

65-74 Age Group:
- Separations for patients in the 65-74 age group increased by __% over the past three years.
- The greatest increase was experienced in the _________ unit (__%).

75-84 Age Group:
- This age group experienced the greatest increase in separations – __% over the past three years.
- The largest increases were seen in __________.

85+ Age Group:
- Separations for this age group increased by __% over the past three years. The greatest increase was seen in the __________ unit (__%).
How much time do older adults spend in the hospital?

- The average length of stay for a patient at our hospital has increased/decreased by ___% over the past three years from ___ days to ___ days.
- The average length of stay for older adults has increased/decreased by ___% over the past three years from ___ days to ___ days.
- The largest change was in the ________ age group which experienced a drop/increase in length of stay from ___ days to ___ days over the last three years.
- Approximately ___% of all patient days can be attributed to older adults.
- Over the past three years, the percent of patient days for individuals age 60 and older has increased from ___% to ___%.
- The total number of patient days for patients of all ages has increased/decreased over the past three years by ___%.
- The number of patient days for individuals age 60 and older has increased/decreased (___%) over the same period.

Include a line graph showing the change in average length of stay over a three year period
Include a line graph showing the change in the percentage of patient days for older adults over a three year period

Where do older adults go when they are discharged from the hospital?

- The majority of older adults (___%) are discharged to their homes but, as expected, this decreases significantly with age.

Include a bar graph showing the percentage of older adults discharged home by age cohort.

To what extent are older adults remaining in hospital to await placement in another level of care?

ALC days are a significant concern for hospitals and health system planners across the province.

- Overall, for all age groups, ALC days represent ___% of all patient days.
- Among older adults, ALC days represent ___% of total patient days.
- ALC days for all age groups have increased by ___% over the past three years but ALC days for older adults have increased even more significantly by ___%.
- Older adults account for the vast majority of ALC days (______ days in [fiscal year]).
- In [fiscal year], ___% of ALC days were attributed to patients over the age of 60.
- ___% of ALC days were attributed to patients over the age of 75; the population aged 75+ is often used as a proxy for the frail elderly/geriatric population; services geared to this target population have the potential to impact ALC days.

How often do older adults return to the hospital after they have been discharged?

The literature shows that specialized geriatric services have the potential to reduce unplanned readmissions among the elderly.
• Overall, for all age groups, unplanned readmissions represent about ___% of all hospital admissions.
• **Include a graph showing the unplanned readmission rate for each of the older adult age cohorts.**
• Over the past three years, the unplanned readmission rate has increased/decreased for older adults and for all patients as a whole.
• **It will be useful to understand the drivers behind the increase in readmissions for older adults, when planning for the future needs of seniors and the impact specialized geriatric services could have on this trend.**

**What are the reasons for readmissions?**
The chart below outlines the top CMGs for readmissions for patients in [fiscal year], by age group. The reasons for readmission are …..

<table>
<thead>
<tr>
<th>Related to initial admission</th>
<th>Unplanned from Acute Care (&lt;7 days)</th>
<th>Unplanned from Acute Care (8-28 days)</th>
<th>Unplanned from Same Day Surgery (&lt;7 days)</th>
<th>Unplanned &gt;28 days or unrelated to initial admission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 65-74</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Age 75-84</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Age 85+</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>

The table above provides data on unplanned readmissions. There were also a number of planned readmissions. Planned readmissions often related to ….

**Consideration should be given to exploring specific conditions in more detail depending on the pressures in the hospital. For example, falls and resultant hip fractures might be an area for detailed analysis given the provincial wait time strategy.**

**How many older adults had same day surgery?**
• The volume of same day surgery performed has increased/decreased from ______ surgeries to_______ – a rate of increase of ___%.
• Over the same time period, same day surgeries for older adults have increased/decreased at a more rapid pace.
• Same day surgeries for older adults increased by ___% from _____ to _____.

**How many older adults visited the Emergency Department?**
• Over the past three fiscal periods ED visits for older adults have increased/ decreased by ___% from ______ visits to ______ visits.
• In [fiscal year], ___% of ED visits by older adults were triaged as semi-urgent (level 4) or non-urgent (level 5). For the ED population as a whole, ___% of visits were triaged as level 4 or level 5
• Semi-urgent and non-urgent visits can sometimes be looked after in other settings (e.g. primary care physician’s office).
Where did older adults go after discharge from the ED?

- ED Discharge Disposition for geriatric patients has................ over the past three years.
- Include a graph showing the percentage of older adult visits to the ED where the patient went home.
- The top ED Discharge Dispositions and their respective amounts for [Fiscal Year] by age group are highlighted below:

60-64 Age Group:

65-74 Age Group:

75-84 Age Group:

85+ Age Group:

Where do the hospital’s older adult patients reside?

- Over the past three years the highest proportion of ED Visits, Inpatient Separations and Same Day Surgeries are from patients residing in ________.
- The second most common place of residence is ________.
- Include a chart that shows the distribution of place of residence for ED Visits, Inpatients, Same Day Surgeries and Total Patient Activity for the hospital over the past three years.

Summary

- Summarize the key findings in this chapter.
- Include a bar graph showing the percentage of the utilization by seniors for inpatient, day surgery and ED services
- The table below shows utilization volumes for older adults by age group. These statistics, particularly the age 75+ figures, highlight the potential target market for many of the hospital's specialized geriatric services.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Inpatient Separations</th>
<th>Day Surgery Visits</th>
<th>ED Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>60-64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65-74</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75-84</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>85+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Age 60+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal Age 75+</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

- In the last calendar year, the geriatricians provided ____ internal consults to both inpatient and outpatient departments. This represents about ____% of the number of inpatient visits for people over 75+.
- The GEM Nurse reports seeing ____ emergency department patients in the past year or roughly ____% of total ED visits by patients age 75+.

These figures may demonstrate that there is room to achieve greater penetration of the target market for specialized geriatric services.
External Scan: Local Health Integration Network

The purpose of this section is to describe the community served by the hospital and the LHIN to which the hospital relates. Features most relevant to the seniors population should be highlighted.

Demographic Overview of Our LHIN

Include statistics, graphs and descriptive text related to:

- Geographic size of the LHIN
- Population size
- Population growth (including growth in the senior’s population by age group)
- Urban/Rural mix
- Major population centres
- Education
- Immigration
- Language
- Ethnicity

The most significant statistics for your LHIN should be compared to the provincial average and to other LHINs.

Although statistics on the population of children and youth in the LHIN should not be a major focus, the proportion of children and youth and anticipated growth rates may highlight a LHIN that will be challenged to respond to a rising demand for services from both ends of the age spectrum.

Health Status

Include statistics, graphs and descriptive text related to:

- Prevalence of common chronic diseases (e.g. Arthritis/Rheumatism, High Blood Pressure, Asthma, Diabetes, Heart Disease, Chronic Bronchitis)
- Health behaviours
- Prevalence of risk factors for chronic disease
- Hospitalization rates compared to the provincial rate
- Self-rated health status of seniors
- Self-rated mental health of seniors

The most significant statistics for your LHIN should be compared to the provincial average and to other LHINs.
**Level of Health Care Resourcing for the LHIN**

Include statistics, graphs and descriptive text related to:

- Level of overall funding per capita compared with the other 13 LHINs
- Use of health care services outside of the LHIN
- Number of physicians and the physician to population ratio (for family physicians and specialists) relative to other LHINs
- Number and distribution of geriatricians and psychogeriatricians in the LHIN
- Number of nurses and the nurse to population ratio
- Total number of health service providers funded by the LHIN and broken down by:
  - Community Support Services
  - Long Term Care Homes
  - Mental Health and Addiction
  - Public Hospitals
- Role of other hospitals in the LHIN in the delivery of geriatric services

Communities with relatively low levels of funding per capita will be challenged in terms of responding to population aging.

High use of health care services outside of the LHIN may be a sign of barriers to accessing local services.

**Planning for Seniors in the LHIN**

- A description of the planning process the LHIN has established for seniors services including the Aging at Home strategy.
- Highlight how your hospital is involved in this planning process

**Relevant Provincial Policy and Directions**

The purpose of this section is to highlight any provincial policies or directions that are particularly relevant to the delivery of care to seniors. For example, provincial Senior Friendly Hospital, Chronic Disease Prevention and Management. Sample text for CDPM is provided below.

**Chronic Disease Prevention and Management**

A large proportion of seniors and the frail elderly in particular, have at least one chronic disease. Chronic disease prevention and management (CDPM) is a priority focus for the MOHLTC. It is a pro-active, population-based approach that addresses chronic diseases before they commence through health promotion or early in the disease cycle to prevent or reduce the rate of disease progression and reduce potential health complications. This approach reduces or delays the need for acute interventions in the future and allows people to maintain their independence and remain healthy for as long as possible. The importance of CDPM has long been recognized as a significant aspect of primary health care, health promotion and disease prevention activities.
The Ontario CDPM framework is built on evidence-based models, but modified to reflect the rich experience of organizations in Ontario and around the world in chronic disease prevention and management. It also reflects this province’s commitment to keep people well, take an individual and family-centred approach, and encourage community involvement.

The CDPM Framework represents a systems approach that will lead to more productive interactions and relationships among individuals and their families, health care organizations, and the community that will, in turn lead to better individual health outcomes, better population health outcomes, and better use of health resources. This approach includes both prevention and management of chronic disease, and incorporates health promotion for everyone including: people who are healthy, people at risk of developing a chronic disease, and people with one or more chronic conditions.
7. Consultation with Stakeholders

The purpose of this chapter is to present the qualitative information gathered from internal and external stakeholders. While this information is not as organized for analysis as quantitative data, the comments typically present powerful messages for change. This is a useful vehicle for involving stakeholders and building consensus and relationships; the freshness and relevance of the results usually captures executive management's attention. The data should be grouped in ways that make it more organized or meaningful. The results should be analyzed for consistent or inconsistent answers and repeating themes across departments and/or different stakeholder groups. Only key themes should be reported in the body of the business case but more detail can be included in an appendix. The Business Case Toolkit includes guidelines on how to prepare for, conduct and report qualitative information.

Internal Stakeholder Consultation

This section should include:
- An overview of who was consulted (titles/roles not names)
- Brief description of the consultation methodology (e.g. one-on-one interviews or focus groups; use of a common, pre-circulated interview guide, etc.)
- Topics covered in the consultation
- Synopsis of findings from the consultation grouped according to key themes. Examples of themes that may arise from the internal consultation include:
  - Awareness of services
  - Access to services
  - Coordination
  - Integration across departments
  - Roles
  - Resourcing
  - Interdisciplinary approaches
  - Quality and Outcomes
  - Satisfaction (provider and patient)
  - Challenges
  - Gaps
  - Opportunities for Improvement

External Stakeholder Consultation

This section should include:
- An overview of who was consulted (organizations/titles/roles not names)
- Brief description of the consultation methodology
- Topics covered in the consultation
- Synopsis of findings from the consultation grouped according to key themes. Examples of themes that may arise from the external consultation include:
  - Awareness of services
  - Access to services
  - Coordination across organizations
  - Integration with other organizations
  - Roles within the LHIN
  - Resourcing
  - Quality and Outcomes
  - Satisfaction (provider and patient)
  - Challenges
  - Gaps and Unmet Needs in the LHIN
  - Opportunities for Improvement
  - Opportunities for Partnership/Collaboration
8. **Assessment of Current Specialized Geriatric Services**

The purpose of this section is to present the results of the assessment of existing specialized geriatric services at the hospital relative to best practices. An assessment of the hospital’s organizational structure in terms of geriatric services should also be considered.

**Overview of Specialized Geriatric Services**

The table below can be used to provide a summary of the assessment of the hospital’s specialized geriatric services. Examples have been provided to illustrate the intended use of the table.

<table>
<thead>
<tr>
<th>Specialized Geriatric Services Based on RGP Best Practices</th>
<th>Summary Assessment of Services Currently Available</th>
<th>Gaps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Geriatric Unit / Geriatric Assessment Unit</td>
<td>Example: ▪ Not available; patients looked after on general medicine unit or ▪ Geriatric Assessment Unit in Place but long waiting list for access</td>
<td>▪ Insufficient capacity to meet community needs</td>
</tr>
<tr>
<td>Internal Consultation Team</td>
<td>Example: ▪ The multidisciplinary team approach recommended by best practices is not in place</td>
<td>▪ Team Nurse ▪ Pharmacy involvement</td>
</tr>
<tr>
<td>Geriatric Rehabilitation Units</td>
<td>Example: ▪ Available and well staffed</td>
<td>▪ None</td>
</tr>
<tr>
<td>Psychogeriatric Services</td>
<td>Example: ▪ Lack of coordination due to loose linkages to SGS</td>
<td>▪ Formal linkages to SGS</td>
</tr>
<tr>
<td>Geriatric Emergency Management</td>
<td>Example: ▪ Coverage during business hours only</td>
<td>▪ After-hours coverage</td>
</tr>
<tr>
<td>Geriatric Day Hospital</td>
<td>Example: ▪ High percentage of inappropriate referrals</td>
<td>▪ Clear eligibility criteria ▪ Education of health providers</td>
</tr>
<tr>
<td>Outpatient Geriatric Clinics</td>
<td>Example: ▪ Access difficulties ▪ Lack of coordination</td>
<td>▪ Central intake and referral function</td>
</tr>
<tr>
<td>Outreach Teams</td>
<td>Example: ▪ Available on an ad-hoc basis</td>
<td>▪ Enhanced resources and improved coordination</td>
</tr>
</tbody>
</table>
**Detailed Assessment of Specialized Geriatric Services**

This section would include a detailed assessment of the extent to which the seven specialized geriatric services recommended by the RGP are available at the hospital and provided in a manner consistent with best practices.

For each service, the following information should be provided:

- **Definition of the service**
- **Best practices for the service**
- **Description of the hospital’s current service**
- **Current level of investment (if available)**
- **Assessment of the current service relative to best practices (the assessment should also be informed by the perspectives of stakeholders and local realities)**

*Definitions and best practices for each recommended SGS are provided in section 7, “SGS Descriptions, Guidelines & Projected Activity”.*

**Assessment of the Organizational Structure**

This section would include an assessment of the extent to which the hospital’s organizational structure supports the delivery of specialized geriatric services and the integration of SGS with other areas of the hospital.

Considerations should include:

- **The programmatic structure in place and the positioning of SGS**
- **Profile of SGS**
- **Leadership and decision-making processes**
- **Resource allocation processes**
- **Existence of integrating mechanisms**
- **Extent to which the organizational structure supports organizational strategy**

**Relevant Developments at the Hospital**

The purpose of this section is to briefly describe any changes underway in other areas of the hospital that will have an impact on geriatric services and identify the potential implications and opportunities.
9. **Overall Organizational Assessment Results: summary of environmental scans**

The purpose of this section is to:

- Provide a summary of the detailed findings reported in the internal and external environmental scans
- Identify the implications of the findings for the hospital and the seniors’ population served

This section consolidates both quantitative and qualitative assessment findings.
This chapter outlines the recommendations for improvement arising from the results of the organizational assessment.

Recommendations should be grouped according to themes. The outcomes of the visioning session can be useful in determining the themes, particularly if the scorecard questionnaire was used at the session to identify the most important criteria for the success of the business case. Examples of themes that might be relevant include:

- Improve Provider and Public Access
- Improve Patient-Centred Care
- Promote Aging at Home
- Improve Hospital-Wide Integration
- Create a Centre of Excellence in Seniors Care
- Improve System-Wide Integration (Regional Initiatives)

The recommendation should include:

- A description of what is to be done
- Identification of the gap/issue/risk/problem the recommendation will address
- Staffing implications
- Cost implications (operating and capital)
11. **SGS Descriptions, Guidelines & Projected Activity**

For those areas where there are gaps in the current service offerings relative to best practices, this section provides a high level description of how the various specialized geriatric services should be designed.

Sample text for SGS’ recommended by the Regional Geriatric Program of Toronto is provided below. Program design information includes:

- **Definition of the Service**
- **Best practices in the delivery of the service** (see Lewis D. (editor) Organization of Specialized Geriatric Services: An Evidence-based Approach. (under revision for University of Toronto Press) at [http://www.rgp.toronto.on.ca/PDFfiles/RGPhandbookFINAL.pdf](http://www.rgp.toronto.on.ca/PDFfiles/RGPhandbookFINAL.pdf) and “Clarifying the Complexities of Inpatient Geriatric Rehab”, by the GTA Rehab Network).
- **Guidelines for resourcing of the service** (Where possible, benchmarking information on resourcing from the RGP has been included but this type of data is not uniformly available. Please note that the benchmarking data on staffing resources reflects current realities at specific hospitals and not necessarily the ideal.)

Each hospital will be able to select the specific services for which program design is required at their particular hospital.
**Acute Geriatric Units**

**Definition:**
Inpatient hospital units in an acute care setting for persons who require short-term diagnostic investigation and treatment. These units are often referred to as Geriatric Assessment Units.

**Best Practices:**
Acute geriatric units focus primarily on assessment and the medical management of geriatric syndromes generally within a two week length of stay.

Components of a comprehensive geriatric assessment include:

- Medical assessment
- Assessment of functioning
- Psychological assessment
- Social assessment
- Environmental assessment

Acute geriatric units should be staffed by an interdisciplinary team trained in the care of the elderly, with attention to medical, psychosocial, and functional issues. Treatment plans are established and reviewed in regular team meetings with therapeutic and rehabilitative goals. These units are designed to approach the medical evaluation of the frail elderly from an interdisciplinary perspective. Attention is given to medical illnesses, as well as to the preservation and restoration of functional status. The emphasis is on medical treatment and evaluation, and rehabilitation goals are usually short term.

Pharmacists play an important role in the assessment of the frail elderly. A medication review by the team physician and pharmacist is considered a standard component of a geriatric assessment. Its role is to reduce drug interactions and complications in frail older persons. Recommendations from a pharmacist have been shown to help with discharge planning, to reduce the total number of medications, and to reduce readmission to hospital because of medication complications.

Acute Geriatric Units require onsite access to diagnostics in order to support their assessments.

**Guidelines for Resourcing and Expected Activity:**

The following benchmarks have been identified:

The Acute Geriatric Unit should provide the following service volumes per year for a 7 bed unit:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inpatient Days</strong></td>
<td>1770</td>
</tr>
<tr>
<td><strong>Total number of Admissions</strong></td>
<td>123</td>
</tr>
<tr>
<td><strong>Total number of Separations</strong></td>
<td>123</td>
</tr>
<tr>
<td><strong>ALOS</strong></td>
<td>15 days</td>
</tr>
<tr>
<td><strong>LOS range</strong></td>
<td>12-20 days</td>
</tr>
</tbody>
</table>
**Internal Consultation Team**

**Definition:**
Multi-disciplinary teams provide consultation and assessment of patients in the participating organizations. The team assesses the physical, emotional and cognitive function of an older patient. The types and comprehensiveness of assessments are variable. Geriatric consults can be used to provide recommendations for care, manage current care problems, assess a patient’s readiness for transfer (to a specialized geriatric service, or to rehabilitation), or plan for post-discharge care. Geriatric consults often reveal cognitive impairment in patients that were previously undiagnosed.

**Best Practices:**
The evidence seems to suggest that comprehensive geriatric assessments which target frailty and involve follow-up and/or outpatient care are more likely to produce favourable clinical effects.

Effective consultations require: a targeting or screening system; quick response to referrals; identifying goals and recommendations immediately; planning for follow-up consults; and tracking the outcomes. Standardized assessments which include a structured history, functional assessment, and measured cognition are recommended.

At a minimum, geriatric consults should involve a geriatrician and a nurse (usually a clinical practice nurse, nurse practitioner or other advanced-degree nurse), and often other allied health professionals as well.

**Guidelines for Resourcing and Expected Activity:**
The following benchmarks have been identified:

- Internal Consultation Team
  - 200 patients seen per FTE
  - 400 visits per FTE
  - Average number of visits per patient ranges between 1-4

The Internal Consultation Team should provide the following service volumes per year for a **2.8 FTE team:**

<table>
<thead>
<tr>
<th>Patients seen (new consults)</th>
<th>560</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Patient visits</td>
<td>1120</td>
</tr>
</tbody>
</table>
Geriatric Rehabilitation Units

Definition:
Geriatric Rehabilitation Units (GRUs) are inpatient units, typically found in CCC/Rehab hospitals, for persons who require an individualized assessment and rehabilitation program for a period of one to three months.

GRUs are designed to optimize the elderly and often pre-morbidly frail individual who has experienced a loss of independence due to acute illness or injury. This is often superimposed on chronic functional and medical problems. Geriatric rehabilitation provides evaluative, diagnostic and therapeutic interventions to restore functional ability or enhance residual functional capacity in elderly people with disabling impairments.

Sometimes inpatient geriatric rehabilitation units are part of general rehabilitation units that also serve a younger age group. Dedicated geriatric rehab has been distinguished by the fact that its services are provided by an interdisciplinary rehab team with expertise in geriatric assessment and treatment. Geriatric rehabilitation includes assessment and treatment of the geriatric syndromes- including instability or falls, isolation or depression, cognitive impairment including delirium and dementia, incontinence, immobility, polypharmacy and inadequate nutrition.

Rehabilitation units that accept elderly patients may have different names and particular areas of focus. For example, the Geriatric Assessment and Treatment Unit (GATU) is an inpatient unit for persons with complex medical conditions who require an individualized assessment and rehabilitation program for a period of four to six weeks.

Best Practices:

Nearly half (47%) of all patients admitted to inpatient rehab in 2003-2004 were over 74 years of age (CIHI, 2005) and as the population ages, there will likely be an increasing need for geriatric rehab. In the current rehab landscape, acute care and rehab providers outside of specialized geriatric services are often not knowledgeable about the principles of geriatric care, the needs of the elderly or the use of screening instruments appropriate for this population. As a result, the potential for improved function in older rehab patients may not be well understood and acknowledged.

There is much support in the literature for an interdisciplinary team approach to geriatric rehabilitation. GRUs provide rehabilitation with an interdisciplinary team trained in the care of the elderly, with attention to medical, psychosocial, and functional issues. GRUs are designed to approach the medical evaluation of the frail elderly from an interdisciplinary perspective and treatment plans are established and reviewed in regular team meetings with therapeutic and rehabilitative goals. Interdisciplinary teams increase patient satisfaction, lower length of stay in hospitals, lower hospital costs, and reduce declines in functional health. The evidence supports the following recommendations:

- the team should be trained in care of the elderly and managed by a physician
- the physician and pharmacist should complete a medication review
- strong nursing involvement

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In GRUs, there is emphasis on rehabilitation and achieving maximal function. Small gains in several areas may result in improved functional status. Attention is given to medical illnesses, as well as to the preservation and restoration of functional status.

Best practices recommend that patients be screened for rehabilitation potential before admission to a unit. Medical assessment should be an essential component of preadmission screening. Assessing cognition, motivation and depression are important factors in determining rehabilitation potential. Comprehensive assessments should also include a nutritional assessment. Further research is needed to determine specific screening criteria for geriatric rehabilitation.

Well-defined, patient-focused goals for rehabilitation should be established prior to admission/transfer. These improve the likelihood of positive outcomes and possibly reduce net costs. Despite the support for geriatric rehabilitation the practices that account for enhanced outcomes are not well described and there is no gold standard for rehabilitation of geriatric patients. It has been suggested that there is a greater need for more research in geriatric rehabilitation to address best practices, as well as consensus on interventions and outcome measures.

Hip fracture often results from falls which is one of the “geriatric giants”. The literature recommends that frail older patients with hip fracture receive geriatric rehabilitation. Models of interdisciplinary care for orthopaedic patients have been developed to shorten hospital stay and reduce institutionalization. For patients over the age of 60, collaborative supervision of geriatric rehabilitation beds by an orthopaedic surgeon and a geriatrician has been shown to reduce length of stay. Similarly, a study of older women with proximal hip fracture postoperatively randomized to either routine orthopaedic care or to geriatric care showed that the geriatric care patients were significantly more independent in activities of daily living (ADLs), had shorter lengths of stay, and fewer discharges to institutional care.

Early discharge with outpatient rehabilitation may be one method to meet the needs of some older patients with hip fracture. A recent Canadian pilot study found that early rehabilitation in a day hospital was appropriate for the needs of women aged 59 to 91 years who were discharged from acute care.

Although some acute care hospitals have GRUs, they are most often found in CCC/Rehab hospitals. The typical length of stay is 2 to 8 weeks but some rehab units located in acute care hospitals have 3 to 14 day length of stay.

**Guidelines for Resourcing and Expected Activity:**

According to a February 2007 report by the GTA Rehab Network, “to date there is no information in the literature identifying optimal staffing ratios.” Consequently, we have estimated the range of staffing for a “35 bed unit” based on the present practice of three Geriatric Rehab programs in the GTA**. There are differences among the three programs. For example, in one of the programs 40% of the beds are for patients who require dialysis, in another 50% are geriatric assessment and treatment beds and 50% are geriatric rehab beds and in the third program 25% are geriatric assessment and treatment beds and 50% provide diagnosis specific rehab beds and 25% provide general geriatric rehab beds.
<table>
<thead>
<tr>
<th>Staffing</th>
<th>Staff /35 Beds (average FTEs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician</td>
<td>.5</td>
</tr>
<tr>
<td>Geriatrician</td>
<td>.2</td>
</tr>
<tr>
<td>Nursing – RN and RPN required for days, evenings and nights</td>
<td>20</td>
</tr>
<tr>
<td>Physical and/or Occupational Therapy</td>
<td>7</td>
</tr>
<tr>
<td>Recreational Therapy</td>
<td>1</td>
</tr>
<tr>
<td>Social Work</td>
<td>2</td>
</tr>
<tr>
<td>Speech Language Pathologist on consult</td>
<td>.5</td>
</tr>
<tr>
<td>Dietician</td>
<td>.5</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>.5</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>32.2</strong></td>
</tr>
</tbody>
</table>

* GTA Rehab Network Report: Clarifying the Complexities of Inpatient Geriatric Rehab, Feb 2007

**source: Regional Geriatric Program of Toronto 2006-2007 activity and financial data, and GTA Rehab Network

The Geriatric Rehabilitation Unit should provide the following service volumes per year for a 35 bed unit:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Days</td>
<td>11,400</td>
</tr>
<tr>
<td>Admissions</td>
<td>328</td>
</tr>
</tbody>
</table>
Geriatric Emergency Management

Definition:
Consultation by a specialized geriatric health professional in the emergency room providing: assessment, diagnosis, identification of “at risk” elderly, initiating appropriate treatment, and networking with community and primary care.

Best Practices:
Targeting and screening of patients who are likely to benefit improves effectiveness. GEM is most effective in concert with other special programs for older adults at risk, including case management, home care, sub-acute units, geriatric hospital units, advance directives, and well organized, guideline driven primary care.

The GEM nursing staff have been developing their capacity building role across the community of GEM stakeholders, within EDs and across hospitals, in the community agencies and amongst seniors and their families. In the formative stages of GEM program development, a considerable investment in capacity building is required within EDs and across the host hospital organizations. There are also several key initiatives which are building linkages between GEM, long-term care facilities and Community Care Access Centres that are expected to grow as program development unfolds.

This pattern of capacity building at the host hospital and expanding out towards other hospitals, long-term care and community care might be considered a necessary pathway for GEM development that all new developers of GEM positions might consider.

Some of the capacity building activities include the following.

- The Emergency Department is the most important focus when GEM services are starting up (through Education and Training, Newsletters/rounds/presentations and posters in the ED Quality improvement initiatives).
- GEM nurses contribute to their hospital’s capacity for senior friendly care beyond the ED (through as Education and Training, Quality management and innovation).
- The GEM nurses help to build capacity for seniors care through participation in committees, task forces and working groups within their hospital and in the community at large.
- Long Term Care homes are an important focus for GEM capacity building. GEM nurses find ways to help homes manage issues without an ED transfer (through Education and Training, Quality management and innovation, System linkage).
- CCAC, Public Health and Primary Care are a focus for GEM capacity building (through Education and Training, Quality management and innovation, linkage).
- GEM nurses help to build future capacity by participating in the training of new health professionals in academic settings.
Guidelines for Resourcing and Expected Activity:

<table>
<thead>
<tr>
<th></th>
<th>Activity per GEM nurse in the second year</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEM nurse performs face to face or telephone assessment</td>
<td>690</td>
</tr>
<tr>
<td>% of FTE spent in patient care</td>
<td>60-70%</td>
</tr>
<tr>
<td>% of FTE spent in capacity building</td>
<td>20-30%</td>
</tr>
<tr>
<td>Other activities consuming more than 10% GEM Nurses’ time</td>
<td>10%</td>
</tr>
</tbody>
</table>

The role of the GEM Nurse is multi-faceted and includes clinical practice, consultation, education, research, leadership and liaison with the RGP of Toronto. A summary of the key roles is provided below:

**Clinical Practice**
- Provides appropriate assessments and pertinent clinical decision making in the identification of acute symptoms, underlying health conditions, physical, functional, emotional and cognitive status, home environment issues and required home supports for the frail elderly.
- In collaboration with others, develops innovative, goal oriented patient centered care plans.
- Provides ongoing support and leadership to the emergency department staff in developing elder-friendly emergency health care environments.
- Assists in the development of standardized protocols to screen and refer the high risk elderly in the emergency department.

**Consultation**
- Provides consultation regarding the complex care needs identifying issues of safety for the frail elderly to nurses, physicians, community agencies and other members of the health care team (as appropriate).
- Uses a consultative model.
- Assists nurses and other interdisciplinary team members to clarify issues, explore options and facilitate change. Areas of consultation may include clinical concerns, patient safety, psycho-geriatric or professional practice issues.
- Enhances partnerships with community agencies in facilitating smooth transitions to home.

**Education**
- Assess learning needs for professional development of nurses and other health care providers within the clinical practice areas of geriatric and emergency medicine.
- Identifies and creates effective learning environments for patients and families in the appropriate use of emergency services and community agencies.
- Collaborates with emergency nursing and QRP (quick response program) staff in identifying educational opportunities and service gaps with community agencies to assist in reducing admissions to the emergency department.
Research
- Contributes to others’ understanding and application of research and evidence-based practice.
- Participates in research and quality consultation as it relates to care of the frail elderly and the Geriatric Emergency Nurse role.

Leadership
- In consultation with health team members, participates in quality improvement initiative
- Anticipates future trends and change in the area of gerontology (technology, systems, professional development) and participates in providing recommendations.

Regional Geriatric Program (RGP)
- Provides annual reports to the RGP summarizing hospital implementation and community service issues for the frail elderly.
- Participates in provincial GEM Network activities.

Further information on GEM is available at: http://www.rgp.toronto.on.ca/gem.
**Geriatric Day Hospital**

**Definition:**
Geriatric Day Hospitals are hospital-based ambulatory programs that provide diagnostic, rehabilitative or therapeutic services to persons living at home or in a long-term care facility. Attendance is usually two days per week for several months. The intent is to serve as a bridge between acute care and community care. The core services are rehabilitative therapy, intended to reduce improve function and quality of life, maintain independence, and alleviate care-giver burden.

**Best Practices:**
- Ensure that geriatric day hospitals use screening and enrolment measures to target frail patients, to help avoid inpatient admissions and/or institutionalization.
- Control costs: maintain shorter mean lengths of stay, avoid redundant questions and tests, streamline assessment time, reduce clerical activities (e.g. charting) by specialized staff.
- Control heterogeneity and inappropriate enrolments: standards for determining a treatment plan should be developed and used consistently, with measurable goals. Enrolment criteria should be used to include only complex elderly patients with at least two health issues, one of which must be amenable to rehabilitation.
- Enhance education opportunities; for example, the treatment plan should be reviewed with patients and their caregivers, and
- Each interdisciplinary team should prioritize care plan issues and treatments so as to focus on the essentials (i.e. those with a high burden of illness and a reasonable prospect of change). Goal attainment scaling, for example, is used by many day hospital teams as an individualized goal-setting and measurement approach that enables users to individualize goals to the needs, concerns and wishes of a specific patient.

**Guidelines for Resourcing and Expected Activity:**
Detailed benchmarking information on resourcing of Day Hospitals is available through the RGPs of Ontario Geriatric Day Hospital Goal Attainment Scaling Study. Data on six hospitals is provided below. It is important to recognize that this information reflects currently realities and not necessarily best practice.

All six sites described have rehab teams composed of nursing staff, physiotherapists, occupational therapists and therapeutic recreation therapists – though there is variability in the FTE for these disciplines. Sites vary in the presence of other disciplines on the team.

A Day Hospital should provide the following service volumes per year for a service with 20 day hospital spaces:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Admissions (new patients)</td>
<td>180-220</td>
</tr>
<tr>
<td>Client attendances</td>
<td>3,000-3,500</td>
</tr>
<tr>
<td>ALOS</td>
<td>2-3 months</td>
</tr>
</tbody>
</table>
**Outpatient Geriatric Clinics**

**Definition:**
Clinics are used to assess, treat and monitor elderly persons who can travel to the hospital. Some persons receiving Outreach Visits may have their first contact with a geriatrician in a clinic setting.

**Best Practices:**
Research shows that seniors with complex health needs require staff that has specific training in geriatrics. However, those without complex needs may not. For those with complex needs, a staff mix that complements expertise in geriatrics makes good sense. The data suggest that the essential building block for staffing begins with a geriatrician and a gerontological nurse or – more commonly – a gerontological nurse practitioner. Many successful programs have other staff as well.\(^{11}\)

In order to maximize success, team members need to have clear role descriptions and effective communication strategies within the team. They also need to communicate outside the team, to coordinate care planning with family and community partners, and to operate with a well communicated “handing off” plan to health care providers. Treatment plans must be understood by patients/ significant others, and followed; strategies to ensure that this happens should be in place. Specific protocols and strategies to increase the likelihood that patients will adhere to the treatment regimen should be put in place.

Geriatric outpatient services must carefully target only those patients who are likely to benefit, combine assessment with sustained treatment and follow-up, and pay close attention to cost minimization strategies, perhaps including telephone follow-up.

“No review of the literature on how to organize geriatric outpatient care has been completed. It is not clear if there are optimal screening, assessment, staffing, treatment and/or follow up processes that maximize outcomes, effectiveness and efficiency in the outpatient setting.”

There are many different types of outpatient geriatric clinics that can be offered including:

- Fall prevention clinics
- Exercise programs
- Cognitive Assessment Resource Team
- Memory clinics
- Geriatric assessment clinics
- Pre-operative clinics

**Guidelines for Resourcing:**
There is research which describes the basic levels and mixtures of staff associated with interventions that were found to be effective. For example, research shows that seniors with complex health needs require staff that have specific training in geriatrics. However, those without complex needs may not. For those with complex needs, a staff mix that complements expertise in geriatrics makes good sense.

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\(^{11}\) Woo, P. Geriatric Primary Care, in Lewis D (editor) p 74
Geriatric Outreach

Definition:
Geriatric Outreach Teams provide comprehensive assessments in the older person’s home or long-term care home. Clients are visited by one or more health professionals in geriatric medicine, nursing, social work, psychiatry, physiotherapy or occupational therapy. Other health professionals in psychology, pharmacy, recreation therapy, nutrition, and speech language pathology may be involved if needed.

Best Practices:
The Geriatric Outreach Team provides interdisciplinary consultation and comprehensive geriatric assessment of frail homebound seniors or when a home assessment is needed to fully understand a patient’s functional status.

Evidence suggests that multidisciplinary outreach services are more effective than outreach by solo practitioners. The composition of the team may vary, but typically includes nursing, social work, occupational therapy, physiotherapy and geriatric medicine. The teams are interdisciplinary and dynamic, with the mix of health professionals involved with each case determined on an individual basis. The ideal team model and the definition of the functional roles of members are still evolving.

Outreach programs target frail seniors with complex medical, functional and psychosocial problems. Research indicates that service effectiveness seems more positive when patients are defined by the presence of frailty rather than by age alone. These seniors are at risk for losing their ability to live independently in the community.

Some examples of issues that might prompt a referral for geriatric outreach services include:

- cognitive impairment
- falls
- incontinence
- depression
- elder abuse
- medication-related issues
- nutritional issues
- “failure to thrive”
- decline in function or difficulty with activities of daily living
- social isolation
- environmental challenges
- caregiver stress

The Outreach Team should be involved early. If a frail, older patient has had an unexplained change in functional status or is requiring more help, the geriatric Outreach team can help to avoid a crisis. The outreach Team does not serve as a crisis intervention team.

Geriatric Outreach supports the provincial priority of “aging at home” and there may be an opportunity to identify funding for program expansion either alone or in collaboration with community partners.
**Guidelines for Resourcing and Expected Activity:**

Based on a review of service utilization in geriatric outreach teams located in RGP participating organizations, the following guidelines for resourcing are suggested. A core or minimum staffing requirement should include the following interdisciplinary team:

- Nurse
- Social worker
- Occupational Therapist
- Physiotherapist
- Geriatrician (for home visits and/or case review)

There should be between 3.0 and 4.0 FTE of staff allocated to above core disciplines. Other health professionals in psychology, pharmacy, recreation therapy, nutrition, and speech language pathology may be involved if needed.

The outreach team should provide the following service volumes per year based on this staffing ratio:

<table>
<thead>
<tr>
<th>Service Category</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Admissions</td>
<td>250-300</td>
</tr>
<tr>
<td>Total Visits</td>
<td>600</td>
</tr>
<tr>
<td>Active clients</td>
<td>400</td>
</tr>
</tbody>
</table>
12. **Implementation Plan**

The purpose of the implementation plan is to outline, in a structured way, what needs to happen to implement the recommendations identified.

*It includes estimated timelines for key activities and a summary of the estimated cost implications.*

**Timelines for Implementation**

*Sample text is provided below:*

The table below provides a high-level estimate of the timelines for implementation of the recommendations.

<table>
<thead>
<tr>
<th>Theme (Examples provided)</th>
<th>Recommendation (Examples provided)</th>
<th>To Mar 12</th>
<th>Q1 12/13</th>
<th>Q2 12/13</th>
<th>Q3 12/13</th>
<th>Q4 12/13</th>
<th>13/14</th>
<th>14/15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve Provider and Public Access</td>
<td>Create Central Intake and Referral Function</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improve Patient-Centred Care</td>
<td>Introduce Geriatric Advanced Practice Nurse Role</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Create Inter-Professional Geriatric Teams</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promote Aging at Home</td>
<td>Expand and Support Geriatric Outreach Team</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improve Hospital-Wide Integration</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Create a Centre of Excellence in Seniors Care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regional Initiatives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Summary of Estimated Cost Implications

Sample text is provided below:

The estimated annual incremental operating cost of implementing the recommendations described is $________. This is an investment of roughly $____ per inpatient visit for patients over the age of 75 (based on [fiscal year] statistics). Associated one-time costs are estimated at $______.

<table>
<thead>
<tr>
<th>Theme (Examples provided)</th>
<th>Recommendation (Examples provided)</th>
<th>Incremental Annual Cost Estimates</th>
<th>One-Time Start-Up Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve Provider and Public Access</td>
<td>Example: Create Central Intake and Referral Function</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improve Patient-Centred Care</td>
<td>Example: Introduce Geriatric Advanced Practice Nurse Role</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: Create Inter-Professional Geriatric Teams</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promote Aging at Home</td>
<td>Example: Expand and Support Geriatric Outreach Team</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improve Hospital-Wide Integration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create a Centre of Excellence in Seniors Care</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regional Initiatives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Barriers and Facilitating Factors

The proactive identification of potential barriers and facilitating factors will support successful implementation of the recommendations.

If a SWOT analysis was conducted as part of the organizational assessment it will be useful in identifying potential barriers and facilitating factors.

Examples of barriers and facilitating factors are outlined below.

<table>
<thead>
<tr>
<th>Potential Barriers</th>
<th>Potential Facilitating Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding constraints</td>
<td>Hospital in solid financial position; Injection of new funding into the LHIN through the Aging at Home strategy</td>
</tr>
<tr>
<td>Physical space constraints at the hospital</td>
<td>Physical space availability; plans for expansion of physical facility</td>
</tr>
<tr>
<td>Delays or slow pace of planning for seniors in the LHIN</td>
<td>Clear, well-developed LHIN strategy on seniors</td>
</tr>
<tr>
<td>Poor relationship or lack of involvement with the LHIN</td>
<td>Strong relationship with the LHIN</td>
</tr>
<tr>
<td>Poor relationship with other health service providers</td>
<td>Strong, collaborative relationships with other health service providers</td>
</tr>
<tr>
<td>Lack of a champion for seniors services</td>
<td>Strong champion for seniors services</td>
</tr>
<tr>
<td>Lack of leadership</td>
<td>Strong leadership</td>
</tr>
<tr>
<td>Unclear vision/direction for seniors services</td>
<td>Clear vision/direction for seniors services; seniors services are an organizational priority</td>
</tr>
<tr>
<td>Competing priorities</td>
<td>Opportunities to leverage synergies with other initiatives</td>
</tr>
<tr>
<td>Human resource shortages</td>
<td>Strong track record in recruitment</td>
</tr>
<tr>
<td>Lack of geriatric expertise</td>
<td>Access to geriatric expertise</td>
</tr>
<tr>
<td>Lack of linkages to a Regional Geriatric Program</td>
<td>Linkages to a Regional Geriatric Program</td>
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</table>
13. Conclusions

The purpose of this chapter is to provide a very high-level summary of the findings and recommendations.

Concluding remarks and next steps should also be identified.

This chapter should be brief (maximum one page).

Sample closing messages are provided.

The size and anticipated growth of the seniors’ population are significant
Our Local Health Integration Network is currently home to approximately ___ adults over the age of 65 which represents ___% of the population. In the next decade the number of older adults will increase ___% to over_______ which will be ___% of the population. This poses a significant challenge for a local health system that is already pressured to meet the needs of the community.

Specialized Geriatric Services offer a solution to the pressures of population growth, aging and resource constraints
Specialized geriatric services are designed to meet the specific needs of the frail elderly population. This target population requires more proactive management for many reasons and best practice research has identified that the availability of specialized geriatric services offers several benefits including the following:

- Decreased acute readmissions (Caplan, 2004; Hogan, 1990; Thomas, 1993)
- Reduced rate of emergency department admission (Caplan, 2004; Gagnon, 1999)
- Decreased length of stay (Gustafason 1991, Lipski, 1996; Nikolaus, 1999)
- Improved survival (Rubenstein 1984; Stuck 1993)
- Improved functional status (Hogan & Fox, 1990; Landefeld, 1995; Nikolaus, 1999; Rubenstein, 1984; Stuck, 1993)

Experience at our hospital shows that seniors use the majority of hospital resources
The current and forecasted quantitative data clearly demonstrates the imperative to concentrate on the 65+ population overall and the frail elderly in particular. The 65+ cohort, (approximately ___% of the our catchment population) is driving ___% of inpatient days, ___% of ALC days, ___% of day surgery services and these and most other utilization metrics (ED visits, readmissions, discharges, etc.) have shown a marked increase over the last three years for this population.

Based on comparison to best practice and stakeholder consultation, improvements to our current offerings of seniors services are required.
Key qualitative findings suggest that numerous opportunities exist to improve service delivery. Each of the Specialized Geriatric Services has been considered in light of best practices and the following are key findings that have framed the recommendations:
[Insert summary of findings for each geriatric service – aim for one bullet point per service]
Other key findings regarding geriatric services at our hospital include:
[Insert other general findings not specific to a particular service – topics might include level of awareness of seniors services by staff and the community, degree of integration between geriatric services and other hospital services, recognition of efforts already underway, level of collaboration in the LHIN]

It is important to move ahead with the recommendations in a timely manner
The recommendations contained in this report are of significant importance and thus must be followed through in a timely manner to ensure both the development of the internal capacity, as well as by improving linkages with community partners to reduce hospital utilization.

These recommendations have been designed to fulfill the following mandate:

- Increase access to all services, especially for the targeted population – at risk frail elderly;
- Increase the number of services being provided and the quality of all services;
- Reduce wait times and improve overall responsiveness;
- Reduce ALC utilization;
- Reduce unnecessary utilization of all hospital services associated with seniors on age adjusted basis;
- Further adoption of best practice approaches to service delivery;
- Enhance collaboration with other hospitals, long-term care facilities, primary care and community providers;
- Maximize the practice and expertise of each role within geriatric services; and
- Demonstrate that investment in Specialized Geriatric Services will support sustainability for the hospital and the health system.

The immediate next steps for the hospital must include……