

# Valuing Home & Community Care

An examination of the economic value created  
by home and community-based healthcare in Ontario

*Why home and community care is an essential component  
of a financially viable publicly-funded provincial healthcare  
system*

Co-Sponsored by:  
The Community Provider Associations Committee (CPAC)  
and The Change Foundation



- This document has been prepared by The Community Provider Associations Committee (CPAC) based on material prepared by The Boston Consulting Group, Inc. as well as additional research and work conducted by the CPAC
- The Boston Consulting Group's *Valuing Economic Impact of Home and Community Care* report is available in the members' only section on our websites

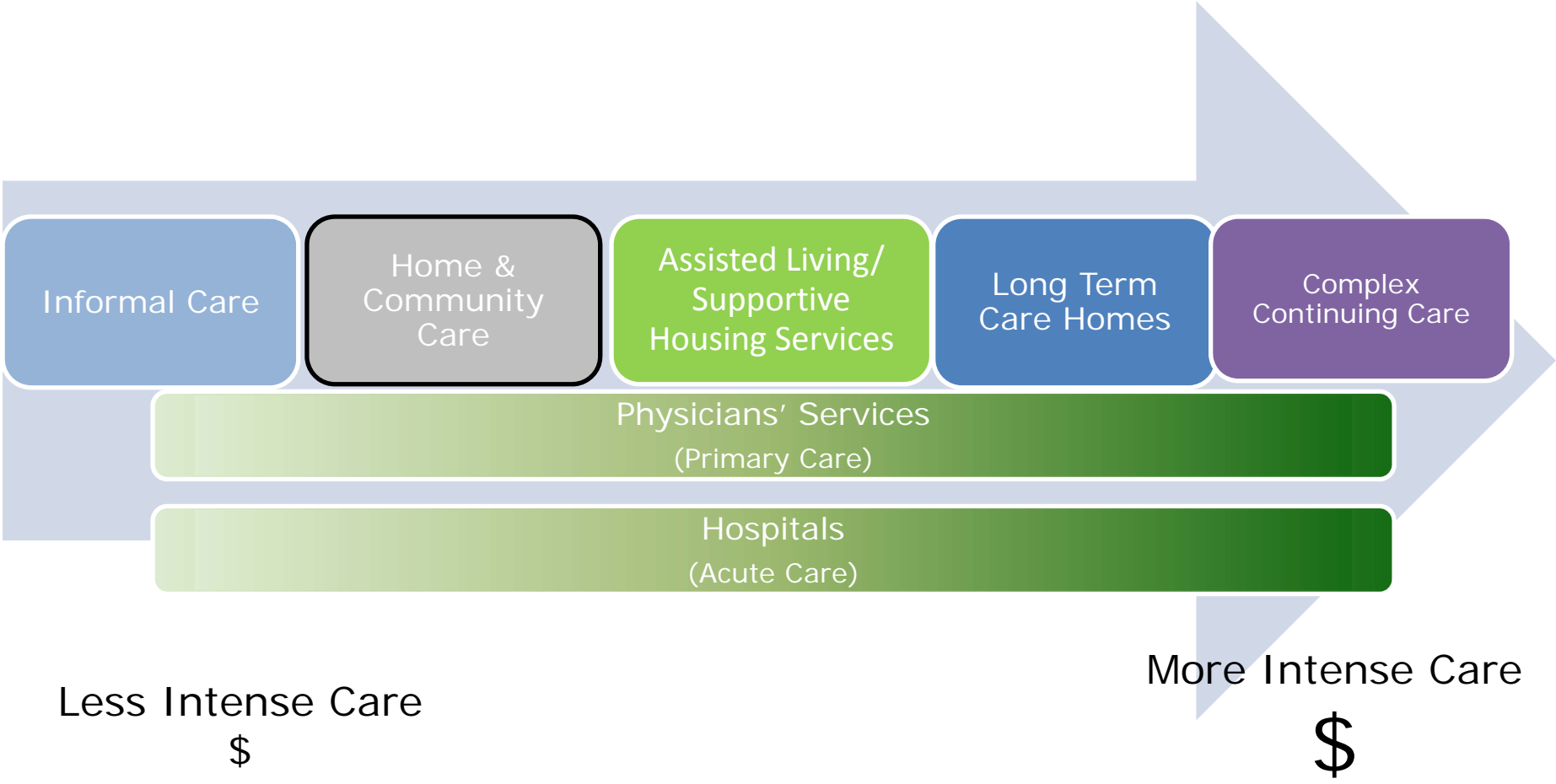
# Agenda

Introduction	<i>Margaret Mottershead</i>
Context & Objective of the Study	<i>Susan VanderBent</i>
Background & Methodology	<i>Boston Consulting Group</i>
The Value Created from Home & Community Care	<i>Margaret Mottershead</i>
Direct Economic Value Creation of Home & Community Care	<i>Boston Consulting Group &amp; Margaret Mottershead</i>
Human Value Creation of Home & Community Care	<i>Susan Thorning</i>
The Path Forward/Conclusion	<i>Margaret Mottershead</i>
Q & A	<i>Everyone</i>

# Provincial Context

- Provincial government policy goal and investment to provide health care closer to home and ensure that Ontarians receive the right care at the right time in the right place
  - Aging at Home Strategy
  - ER Wait Times/Alternate Level of Care Strategy
- Opportunity to strengthen of the roles of Community Care Access Centres (CCACs) and in turn, their community provider partners by demonstrating the value of home and community care
- While public spending on home and community care has recently been growing faster than overall health care expenditures, it currently makes up a smaller percentage of overall health care spending than it did 10 years ago

# Care Intensity on a Continuum for persons aged 75+ receiving maintenance and long stay supportive services



# Objective of the Study



# Objective – Demonstrating Value Creation in Healthcare

Boston Consulting Group, an independent third party, was retained via RFP to conduct an examination of what the Ontario health care sector looks like with – and would look like without – home and community care.

The objective of this project was to develop a methodology and determine the net and real value (savings) created by home and community-based healthcare services (Home & Community Care) in Ontario.

## Assumptions:

- Economic value creation will be spread across an impact spectrum
- Indirect impacts have value, including significant financial ramifications, whether immediate or future



Direct cost reductions to healthcare, whether by avoiding up-front costs, reducing demand or freeing up capacity

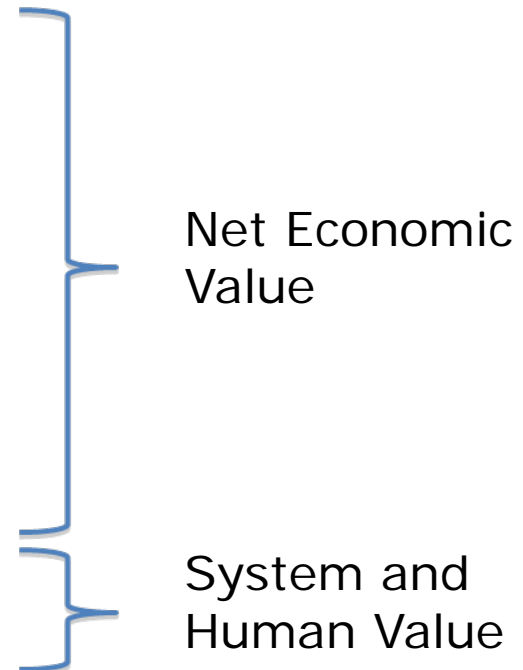
Indirect benefits to the healthcare structure and to the Ontario economy as a whole due to caregiver burden reductions or system improvements

Quality of life, reduction in pain and suffering, community engagement and other intangible societal benefits

# The Value Created from Home & Community Care

The study revealed 5 key elements that factor into the net value created by Home & Community Care:

1. Cost avoidance in Hospital (Acute) Care
2. Cost avoidance in Long Term Care Homes
3. Cost avoidance in Assisted Living  
and Supportive Housing Services
4. Impact on caregiver burden and productivity
5. Many intangible benefits – real but hard to quantify



# Calculating the Net Economic Impact of Home and Community Care

In this initial study, a model was developed around a representative sample of clients from the Hamilton Niagara Haldimand Brant CCAC who met the following criteria:

- Frail elderly 75 years and older
- Receiving Maintenance or Long Stay Supportive services from the CCAC, and may be receiving other community support services
- Living at home
- With mild or moderate MAPLe (Method for Assigning Priority Levels) scores on the RAI-HC

Costs Avoided		Costs Incurred	
~\$ 6M	in Hospital (Acute) Care	~\$ 5M	Impact on informal caregiver productivity
~\$42M	in Long Term Care Homes		
~\$18M	in Assisted Living and Supportive Housing Services	~\$48M	Cost of Home & Community Care
<hr/>		<hr/>	
~\$66M	Total Costs Avoided	~\$53M	Total Costs Incurred

~\$13 million in overall net savings

~\$18 million in healthcare savings if cost of caregiver contribution is included

**If extrapolated province-wide for all frail elderly living at home with Maintenance/Long Stay Supportive Services, this equals ~\$150 million in net savings**

# Background and Methodology



# Background and Methodology

The Hamilton Niagara Haldimand Brant (HNHB) CCAC – Ontario's largest CCAC – was chosen as the site for this study. This initial study focused on subset of the Home and Community Care client base. The sample, accounting for approximately 25% of the total spend for the HNHB CCAC, included clients who met the following criteria:

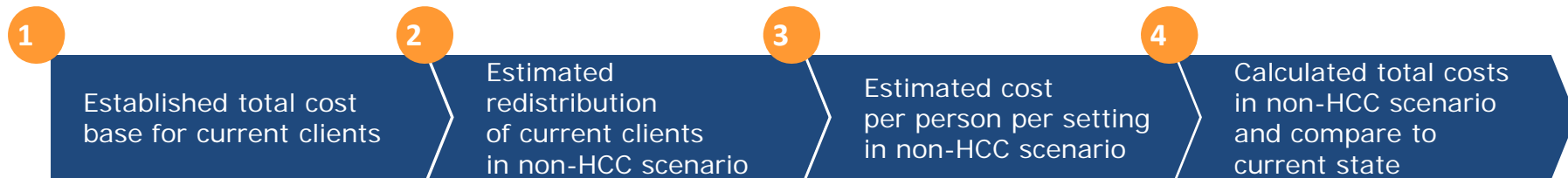
- Frail elderly 75 years and older
- Receiving Maintenance or Long Stay Supportive services from the CCAC, and may be receiving other community support services
- Living at home
- With mild or moderate MAPLe (Method for Assigning Priority Levels) scores

Data was provided by CPAC members, governmental and non-governmental organizations, and supplemented by interviews with clients, caregivers, service providers and other stakeholders

Data was sampled for the time period October 1, 2008 to September 30, 2009

# Background and Methodology

## How the Economic Value of Home & Community Care was Calculated



<b>Activities</b>	1	2	3	4
<ul style="list-style-type: none"> <li>▪ Gathered key cost data</li> <li>▪ OACCAC database</li> <li>▪ MOH and LHIN data</li> <li>▪ 45 Interviews</li> <li>▪ CSS survey</li> <li>▪ External sources</li> </ul>	<p>Established total cost base for current clients</p>	<p>For each client segment, estimated the proportion of clients who would:</p> <ul style="list-style-type: none"> <li>▪ Be able to remain at home with additional caregiver support</li> <li>▪ Receive assisted living / supportive housing services</li> <li>▪ Move to Long Term Care Homes</li> </ul>	<p>Estimated cost per person per setting in non-HCC scenario</p>	<p>Estimated total forecasted cost for each client segment in a scenario without HCC</p> <ul style="list-style-type: none"> <li>▪ Be able to remain at home with additional caregiver support</li> <li>▪ Receives assisted living / supportive housing services</li> <li>▪ Move to Long Term Care Homes</li> </ul>
<p>Estimate total costs for each client segment, per:</p> <ul style="list-style-type: none"> <li>▪ MAPLe score</li> <li>▪ Living arrangement</li> </ul>				<p>Calculated total costs in non-HCC scenario and compare to current state</p> <p>Multiplied the distribution of clients identified in step 2 with the cost per setting in step 3</p> <p>Compared with total cost identified in step 1</p>

**The Cost-of-Illness (COI) Approach**

- Widely accepted by policy makers globally, COI was used to establish the “with Home & Community Care” and “without Home & Community Care” scenarios as well as the cost for specific conditions, using:
  - Direct Cost to measure cost of resources used for treating a particular illness
  - Indirect Cost to measure the value of resources lost due to a particular illness
  - Intangible Cost to measure the cost of pain and suffering (though difficult to quantify monetarily)

# The Value Created from Home & Community Care



# The Value Created from Home & Community Care

The results of the project revealed clear value creation not only in direct, quantifiable systemic value, but also in economic terms and human value – areas often considered “intangible” and difficult to measure, but which offer financial and societal reward nonetheless:

**System Value** – Home & Community Care is not ‘brick and mortar’ based, makes the health care system more flexible

- Faster reaction time and greater flexibility to change, adapt and evolve
- Effective integration of a vast volunteer and informal caregiver (i.e. family) network allows sector workers to focus on client needs
- Low overhead / infrastructure investment allows for greater emphasis on delivery of service
- Matching care to client need

**Direct Economic Value** – Home & Community Care saves the healthcare system money

- Return on investment from home and community care due to:
  - The avoidance of more costly care in hospital (acute care) and long term care homes which more than offsets the increased economic impact on productivity loss for informal caregivers

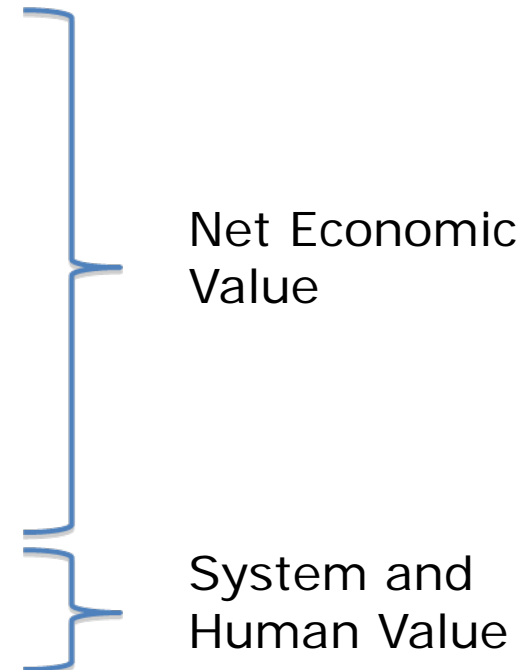
**Human Value** – Home & Community Care impacts health outcomes and quality of life

- Providing a home based care approach to care addresses client comfort, personal autonomy and more informal / family caregiver involvement
- Increasing community awareness, engagement and involvement
- Decreasing the overall impact on those caring for loved ones

# The Value Created from Home & Community Care

The study revealed 5 key elements that factor into the net value created by Home & Community Care:

1. Cost avoidance in Hospital (Acute) Care
2. Cost avoidance in Long Term Care Homes
3. Cost avoidance in Assisted Living  
and Supportive Housing Services
4. Impact on caregiver burden and productivity
5. Many intangible benefits – real but hard to quantify



# System Value Creation of Home & Community Care



# System Value Creation of Home & Community Care

The examination revealed the creation of system value from Home & Community Care:

## Adaptability

- Faster reaction time and greater flexibility to recognize and respond to changes in demand
- Programs can be launched or ended quickly based on success indicators or changing priorities
- Healthcare professionals can see the "true story" by going into client homes, then personalizing the care plan for optimal health outcomes
- Personalized plans ensures right mix of services, leading to better use of resources and better health outcomes
- Regular client/caregiver interactions enable the early detection and treatment of health issues

# System Value Creation of Home & Community Care

## Efficiency

- Low investment in “brick and mortar” overhead
- Effective integration of a vast volunteer and informal caregiver (family and friends) network decreases cost and pressure on the health care sector
- Quick response to changing client need and/or caregiver capacity
- As client care needs are adjusted – there are few physical or location moves to make & little equipment to remove, replace, upgrade or discard

# System Value Creation of Home & Community Care

## Responsibility

- Fundamental focus on early detection and prevention
- “On the ground” workers are better positioned to see possible health decline scenario and raise awareness / react / recommend before a crisis occurs
- Regular monitoring enables detection of change in client condition
- Communications with clients and their families is greatly improved

# Direct Economic Value Creation of Home & Community Care



# Calculating the Net Economic Impact of Home and Community Care

In this initial study, a model was developed around a representative sample of clients from the Hamilton Niagara Haldimand Brant CCAC who met the following criteria:

- Frail elderly 75 years and older
- Receiving Maintenance or Long Stay Supportive services from the CCAC, and may be receiving other community support services
- Living at home
- With mild or moderate MAPLe (Method for Assigning Priority Levels) scores on the RAI-HC

Costs Avoided		Costs Incurred	
~\$ 6M	in Hospital (Acute) Care	~\$ 5M	Impact on informal caregiver productivity
~\$42M	in Long Term Care Homes		
~\$18M	in Assisted Living and Supportive Housing Services	~\$48M	Cost of Home & Community Care
~\$66M	Total Costs Avoided	~\$53M	Total Costs Incurred

~\$13 million in overall net savings

~\$18 million in healthcare savings if cost of caregiver contribution is included

**If extrapolated province-wide for all frail elderly living at home with Maintenance/Long Stay Supportive Services, this equals ~\$150 million in net savings**

# Direct Economic Value Creation of Home & Community Care

## 1. \$6 million avoided in Acute Care

- Home & Community Care reduces acute care needs for those living at home, in part through early detection and treatment
- Without Home & Community Care, Hospital (Acute) Care usage of those staying at home increases 1.5X (50%)

### **Without Home & Community Care Support...**

Hospital (Acute) Care usage of current clients increases by 50% for those living at home:

- An estimated increase of 5-8 days in hospital per person vs. living at home with Home & Community Care
- Due to deteriorated health outcomes

A corresponding 10% increase in Assisted Living / Long Term Care Homes would also be seen, due to:

- A shift of burden from Hospital Care to Assisted Living / Long Term Care Homes
- A reduction in acute care visits due to the abilities of the Assisted Living / Long Term Care Homes to detect and address health care needs before Hospital care is needed

# Direct Economic Value Creation of Home & Community Care

2. \$42 million avoided in Long Term Care Homes
3. \$18 million avoided in Assisted Living/Supportive Housing Services
  - By enabling the identified frail elderly to remain at home longer
  - With corresponding care costs for Home & Community Care being approx. 1.5 to 3X lower than Assisted Living / Long Term Care Homes

## **Without Home & Community Care Support...**

An estimated 60% of current clients would have to leave their single family dwelling:

- For Mild MAPLe (Method for Assigning Priority Levels) scores: 27% of clients would move to Assisted Living, 20% to Long Term Care Homes
  - For Moderate MAPLe scores: 28% of clients would move to Assisted Living, 43% to Long Term Care Homes

Care costs for the same person are more expensive in Assisted Living or Long Term Care Homes than Home & Community Care in a single family dwelling:

- Assisted Living costs 1.2-1.8x more expensive
- Long Term Care costs 2.2-3.4x more expensive

# Direct Economic Value Creation of Home & Community Care

## 3. ~\$5 million increase in caregiver productivity costs (negative economic impact)

- Reflects a gain from the time commitment of informal caregivers\* when clients are able to live at home and receive Home & Community Care, versus the loss of productivity of those hours in the absence of Home & Community Care and/or the overall decrease of those hours after transfer to Assisted Living / Long Term Care Homes

### **Without Home & Community Care Support...**

60% of clients would leave home and go into Assisted Living or Long Term Care Homes, causing:

- 60-70% less hours of care from informal caregivers
- the transfer of a greater cost burden to assisted living and long term care homes

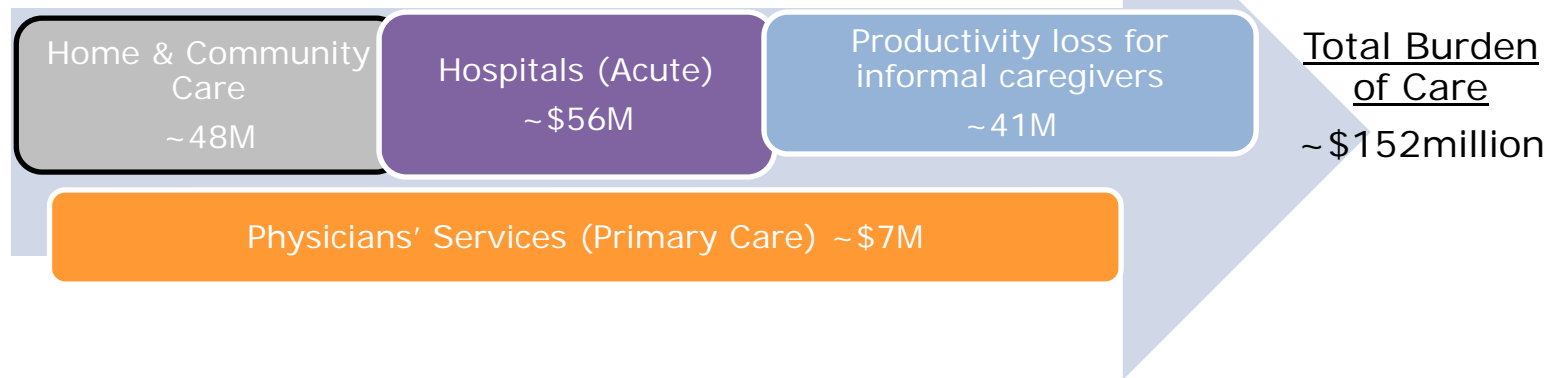
40% of clients would remain living at home, causing a 1.5-2X increase in caregiver burden:

- While informal caregiver hours would increase for these clients, the productivity of those hours would decrease, as would quality of life for both client and informal caregiver
- Increases in informal caregiver hours among this group would be more than offset by a decrease in productivity of the informal caregiver and the large decrease of informal caregiver hours for those that enter Assisted Living / Long Term Care Homes

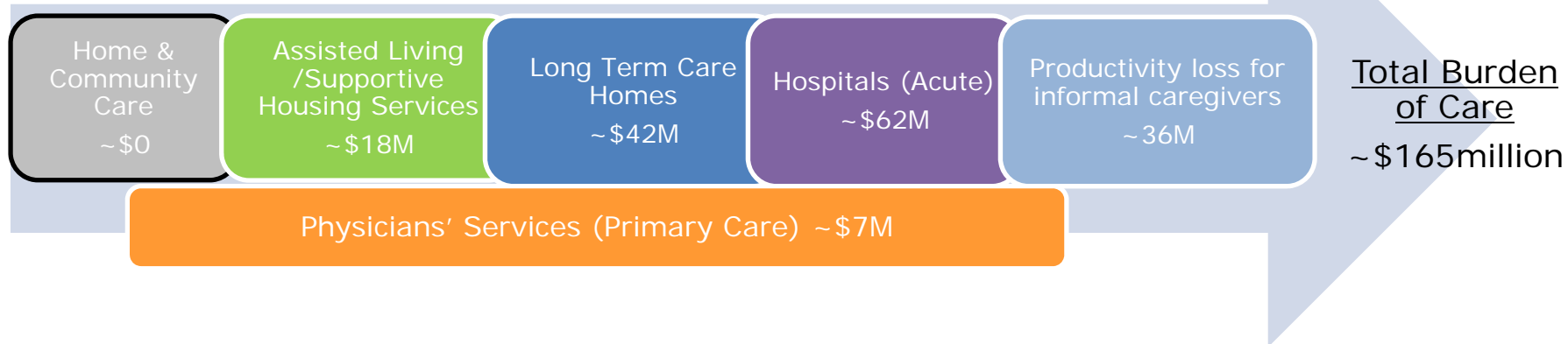
\* Informal caregiver time commitment is defined as the time spent assisting a client and does not include time spent socializing.

# Estimated total burden of care

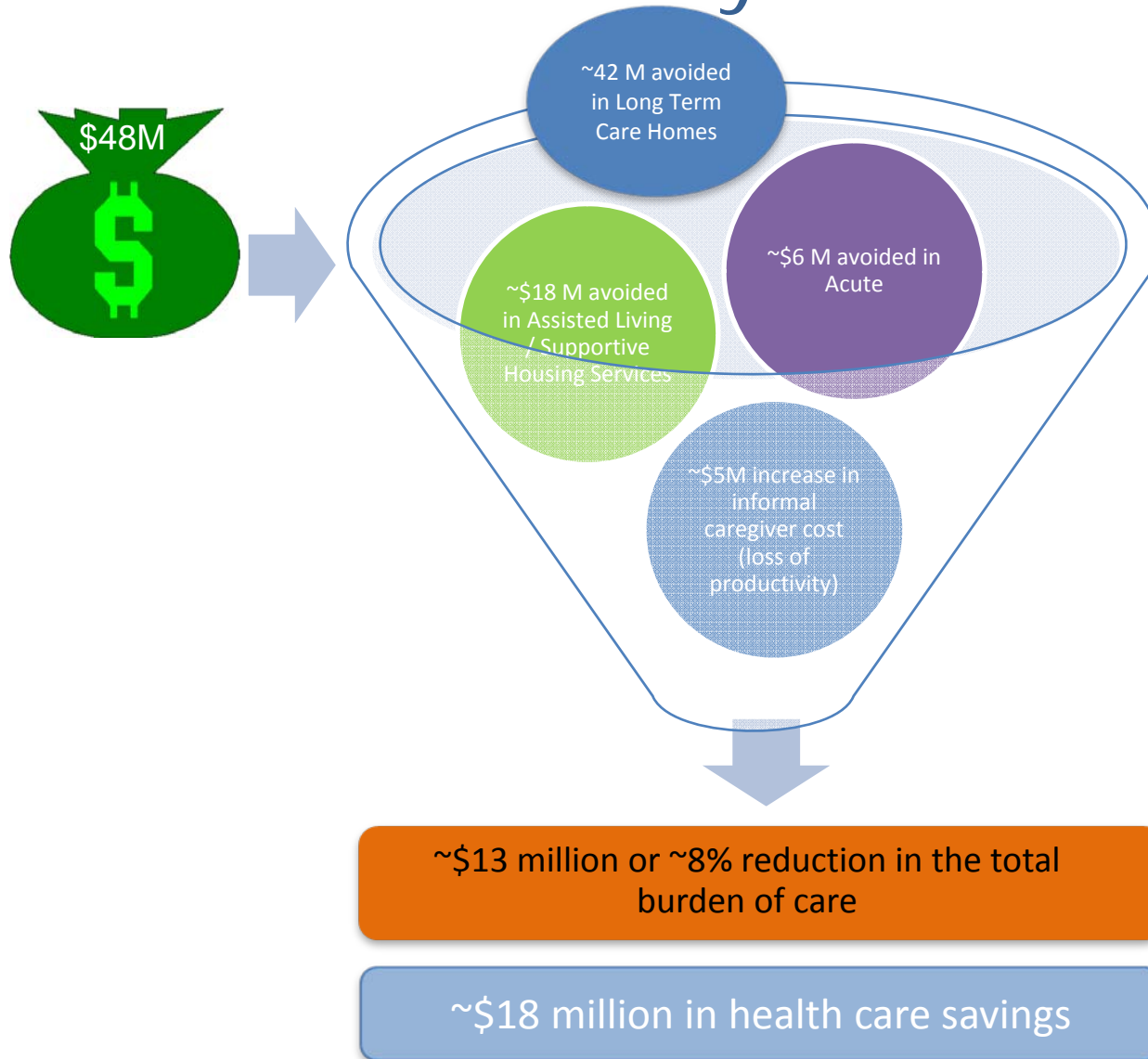
## With Home & Community Care



## Without Home & Community Care



# \$48 Million invested in Home & Community Care results in:



# Direct Economic Value Creation of Home & Community Care

Research findings if extrapolated suggests ~\$150 million in real value (savings) to Ontario's healthcare system for frail elderly long-stay clients

# Human Value Creation of Home & Community Care



# Human Value of Home & Community Care

The examination revealed the creation of human value from Home & Community Care:

## Value for Clients

- The ability to live at home independently
  - Fosters feelings of independence and pride
  - Dignity in the face of healthcare challenges
  - Higher quality of life throughout illness
  - Contributes to personal autonomy, well-being and self-esteem
  - Keeps families connected
  - "I've had two loves in my life – my wife and my farm. Now that my wife has passed, I can't imagine leaving my farm." – John, HCC client
  
- Increased social interaction
  - Trusting relationships formed
  - In-home service providers "bring the outside world in" to clients, reducing their isolation
  - Cognitive stimulation, socialization and sense of community
  - Comfort from having help with stressful daily physical activities
  - "I'm a people person and it can get lonely at home. A great relationship with my PSW helps fill that gap" – Georgina, HCC client

# Human Value of Home & Community Care

## Value for Informal Caregivers

- Peace of mind
  - Significant decreases in the level of stress and concern for their loved one
  - Comfort of knowing that someone else is "checking-in" on loved ones
  - Decreased stress improves caregiver health
- Granting of "relief time"
  - Time to do whatever they need to or want to do
- Provides "shoulder to lean on"
  - Important for caregivers struggling to cope with daily demands
  - "It comforts the caregivers to know their loved one is functioning in a safe environment."
    - Carla, Physiotherapist and Occupational Therapist

# One Person's Story



# One Person's Story – Annette

Annette was a generous, dynamic 80 year-old woman living with osteoporosis.

Deeply committed to the volunteering activities that kept her close to her church, and strongly independent – “stubborn about living on her own,” according to her daughter Louise – Annette took pride in her self-sufficiency and hated the thought of not living at home. To Annette, moving to a smaller bungalow ten years ago was enough of a compromise: being at home and contributing to her community meant the world to her and she simply needed to stay strong and vital as long as possible.

Due to advancing osteoporosis, mobility issues began to impact Annette's energy, causing concern for her daughter. “In the last few years my mom was living at home... I was always worried about her falling and I felt if I didn't check in every day she wouldn't eat – it was pretty stressful.” At that time, Annette had a strong aversion to asking non-family members for assistance. Fortunately, Annette's daughter and son-in-law Peter lived in the same town as Annette and were willing to put in the hours necessary to help keep her home and engaged. “As children we try to provide as much support as possible... but it is hard for us to be there during the working day,” said Louise. “I live in the same town as my mom but other family members live in different locations which makes co-ordination of care difficult, and most of the work falls to me and my husband.”

Over time, trips and falls increased as Annette became more unstable due to her osteoporosis and to weaker eyesight, and visits to the hospital became more frequent; caring for Annette became more difficult for Louise and Peter. When a decision was made to seek additional care, Louise contacted the Community Care Access Centre in Hamilton Niagara Haldimand Brand.

For 3 years, Annette received assistance with housework, meal delivery and transportation services all while living in her home. This care substantially impacted the burden for Louise and Peter, while also relieving much of the daily stress they felt over their mother. “It gave me huge comfort knowing that someone else was at least checking in”, said Louise. Meanwhile, Annette continued to enjoy the fulfillment and satisfaction she received from volunteering at her church, socializing with her peers in the community and being around young churchgoers.

Eventually, Annette transferred to Assisted Living. For 2 additional years prior to entering a Long Term Care home, Annette maintained the bond with her community that had made her later years so enjoyable. Annette passed away at age 80 **86?**, spending her final year in a Long Term Care home.

***“Our mom was able to maintain her independence much longer with H&CC support – and that was very important to her. There is no doubt my mom would have been in long-term care much earlier without the help she received.”***

# One Person's Story

## Annette's Story

- Annette had osteoporosis and lived independently until her late 80s
- Caring for Annette becomes too much for Annette's family and so begins Annette's involvement with home and community care
- 3 years of home-based H&CC support, 2 years assisted living, 1 year in long term care home

Shows increased informal caregiver burden

Annette was largely dependant on her family before moving to Assisted Living

Shows Assisted Living and Long Term Care Home cost avoidance

Care cost increased 3x more when Annette moved to Assisted Living; Annette received minimal home and community care support while at home, but would have moved to Assisted Living 4 years earlier without home and community care

Shows Acute Care cost avoidance

Annette made fewer visits to the hospital once she moved to Assisted Living

Shows human value

Annette's daughter considerably relieved from mother moving to Assisted Living; feels great comfort in knowing her mother was being checked on regularly

# The Path Forward



# The Path Forward

Focus of efforts & investments where Home & Community Care creates the highest value for Ontario's economy

Suggested Next Steps	Rationale / Approach
<b>1. Share findings with stakeholders</b>	<ul style="list-style-type: none"><li>• Valuation tool a credible, data-driven approach for justifying additional funding for HCC and measuring quality of care, to be invested where it has the highest impact</li><li>• Leading/best practices gleaned regarding the prioritization of resources are easily shared and implemented sector wide</li><li>• Consistency in the quality and availability of care is increased through strong sector cooperation</li></ul>
<b>2. Complete full value assessment</b> <ul style="list-style-type: none"><li>• Finish HNHB, then adjust for mix in other regions</li><li>• Map out detailed path forward and future research areas</li></ul>	<ul style="list-style-type: none"><li>• Validate the hypothesis that value is primarily driven by type of service and population segment, with fairly high consistency across regions</li></ul>
<b>3. Move toward population-based model</b>	<ul style="list-style-type: none"><li>• Focus limited resources where home and community care adds the most benefit and most effectively meets clients' needs – the right care to the right person at the right time</li><li>• Consider reducing or eliminating services that provide low or negative value to each population segment</li><li>• Capitalize on the opportunity to increase awareness of services available and address client's individual needs before crisis</li></ul>