

## *The Balance of Care Project*

*A. Paul Williams, PhD.*  
Professor & CRNCC Co-Director, University of Toronto

*Kerry Kuluski, Jillian Watkins*  
PhD. Students, University of Toronto

*Community Care and Health Human Resources:  
Informing Policy Action*

*March 18, 2008*



## *Balance of Care Team*

---

### **CIHR Team in Community Care Research Leads**

A. Paul Williams, University of Toronto  
Janet Lum, Ryerson University  
Karen Spalding, Ryerson University  
Raisa Deber, University of Toronto

### **Research Associates**

Kerry Kuluski, University of Toronto  
Jillian Watkins, University of Toronto  
David Salib, Ryerson University  
Alvin Ying, Ryerson University  
Jennifer Sladek, Ryerson University

### **Research and KT Infrastructure**

CIHR Team in Community Care and Health Human Resources  
Canadian Research Network for Care in the Community (CRNCC)

## *The Medicare Conundrum*

---

- While Medicare remains a defining characteristic of Canadian identity and top policy issue, “sustainability” a key concern
- “Blunt instrument” attempts to control costs failed to solve system problems while raising public concerns about access
  - Preoccupation with wait times
  - Diversion of more resources “upstream” even as ALC, ER, LTC challenges grow



## *Breaking A Negative Cycle*

---

- Home & community care which can prevent/delay illness & dependency, or substitute for care in a hospital or LTC facility, remains under-resourced
- Ontario’s “aging in place” strategy provides a great opportunity to break this cycle
  - Better outcomes for individuals and carers
  - Better outcomes for the system



## *Credible and Growing Evidence*

---

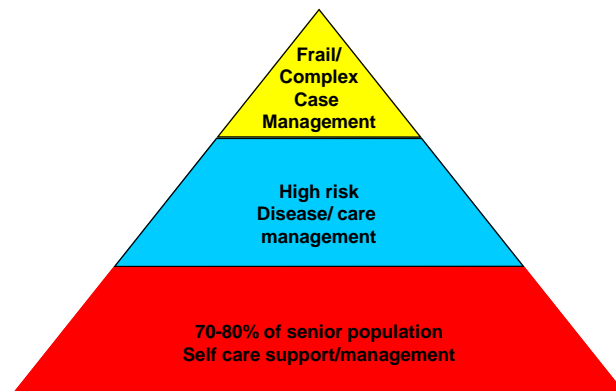
- Little evidence for fragmented H&CC services
- However, targeted, managed H&CC within an integrated continuum consistently meet individual & system goals
  - Maintain the health, well-being and autonomy of individuals and carers
  - Help solve key health system problems (e.g., ALC beds, ER and LTC waits)

For details go to [www.CRNCC.ca](http://www.CRNCC.ca)



## *Targeting, Managing Needs Across an Integrated Continuum*

---



**Kaiser Permanente Triangle**

Source: UK Department of Health (2005)



## *Balance of Care*

---

Personal Social Services Research Unit (PSSRU),  
University of Manchester

- Balance of Care approach aims at determining most appropriate mix of institutional and community resources at the local level to meet the needs of an aging population

Source: Dr. David Challis -- go to [www.CRNCC.ca](http://www.CRNCC.ca)



## *Balance of Care: Key Assumptions*

---

What determines optimal balance of institutional care (LTC beds) and H&CC at the local level?

- Demand side: individual characteristics
  - Physical, psychological and social needs
  - Support from/of carers
- Supply side: system configuration
  - Access to safe, appropriate, cost-effective H&CC
  - Varies considerably at local level



## *LTC Wait Lists*

---

- LTC wait lists a key system performance indicator
  - Waterloo 1100
  - Toronto Central 1600
  - North West 600
  - Central 3000

*“How many wait listed older persons could be “diverted” safely, cost-effectively to H&CC?”*



## *Waterloo-Wellington Steering Committee*

---

- **Eileen Bain**, VP Patient Services, Guelph General Hospital
- **Audrey Devitt Wilson**, Manager, St. Joseph Health Centre, Guelph
- **Deb Gemmell**, Executive Director, RAISE Home Support
- **Linda Gordon**, Project Coordinator, Balance of Care
- **Laura Holtom**, Assistant Administrator, Wellington Terrace Long Term Care
- **Barbara McKay**, Manager, Waterloo/Wellington CCAC
- **Beatrice Mudge**, VP Patient Services/Chief Nursing Officer, CMH
- **Janice Paul**, Client Services Manager, Community Support Connections
- **Maria van Dyk**, Senior Integration Consultant, WWLHIN
- **Marianne Walker**, CEO, St. Joseph Health Centre, Guelph



## *Waterloo-Wellington Expert Panel*

---

- **Goldie Barth**, Special Services Manager, County of Wellington Social Services Department
- **Audrey Devitt Wilson**, Manager, Community Outreach, St. Joseph Health Centre
- **Laura Holtom**, Assistant Administrator, Wellington Terrace Long Term Care Home
- **Veronica MacDonald**, Executive Director, Community Care Concepts
- **JoAnne Maxwell**, Case Manager, CCAC Waterloo
- **Diane McCabe**, Support Services Manager, Spruce Lodge Home for the Aged & Supportive Housing (Stratford)
- **Jane McKinnon-Wilson**, Seniors Mental Health Team at the Community Mental Health Clinic, Guelph
- **Irene O'Toole**, Director, Home Support Services, The City of Waterloo
- **Janice Paul**, Client Services Manager, Community Support Connections
- **Bil Smith**, Attendant Services Director, Independent Living Centre of Waterloo Region
- **Diane Thistel**, Case Manager, CCAC Waterloo



## *Toronto Central Steering Committee*

---

- **Claire Bryden**, ED, Bellwoods Centres for Community Living
- **Andrea Cohen**, ED, Lawrence Heights Community Health Centre
- **Stacey Daub**, Senior Director of Client Services, Toronto Central Community Care Access Centre
- **Wolf Klassen**, VP, Program Support, Toronto East General Hospital
- **William (Bill) Krever**, CEO, Don Mills Foundation for Seniors
- **Dr. Barbara Liu**, Program Director, Regional Geriatric Program, Toronto Sunnybrook & Women's College Health Sciences Centre
- **Helen Leung**, ED, Carefirst Seniors & Community Services Association
- **Terry McCullum**, CEO, LOFT Community Services
- **Odete Nascimento**, Director, Older Adult Centre, St. Christopher House
- **Jane Piccolotto**, Director, Community Support Services, Woodgreen Community Services
- **Sandra Pitters**, GM, City of Toronto Homes for the Aged
- **Josie Walsh**, VP, Programs, Chief Nurse Executive, Providence Healthcare



## Toronto Central Expert Panel

---

- **Lisa Abbatangelo**, Care Coordinator, Toronto Central CCAC
- **Laurie Barker**, Care Coordinator, Toronto Central CCAC
- **Bernita Borgh**, Vice President Resident Services, Don Mills Foundation for Seniors
- **Mary Campbell**, Community Health Nurse, Lawrence Heights Community Health Centre
- **Suzanne Crawford**, Program Director, LOFT Community Services, St. Anne's Place
- **Gillian Coyston**, Geriatric Nurse Specialist, Toronto East General Hospital
- **Janice Hayden**, Director, Bellwoods Centres for Community Living
- **Gregory Kolesar**, Manager, Community Programs, Toronto Homes for the Aged
- **Mary Lang**, Manager, Supportive Housing and Homemaking, WoodGreen Community Services
- **Therese Liston**, Professional Practice Leader, Social Work, Providence Healthcare
- **Rola Moghabghab**, GEM Clinical Nurse Specialist, St. Michael's Hospital
- **Alex Mouloupoulos**, Social Worker, Geriatric Day Program, Toronto Sunnybrook & Women's College Health Sciences Centre
- **Vivian Yuen**, Director, Home Support Services, Carefirst Seniors & Community Services Association
- **Kathryn Well**, Social Worker, Toronto East General Hospital
- **Angela Xavier**, Client & Family Services Coordinator, St. Christopher House



## Variable 1: Cognition

---

Cognitive Performance Scale – short term memory, cognitive skills for decision-making, expressive communication, eating self-performance

	<i>Waterloo</i>	<i>Toronto</i>
<b>Intact</b>	43%	48%
<b>Not Intact</b>	57%	52%



## *Variable 2: ADL*

---

Self-Performance Hierarchy Scale – eating, personal hygiene, locomotion, toilet use

<b>Difficulty</b>	<b>Waterloo</b>	<b>Toronto</b>
<b>Low</b>	53%	43%
<b>Medium</b>	28%	28%
<b>High</b>	19%	29%



## *Variable 3: IADL*

---

IADL Difficulty Scale - meal preparation housekeeping, phone use and medication management

<b>Difficulty</b>	<b>Waterloo</b>	<b>Toronto</b>
<b>Low</b>	2%	3%
<b>Medium</b>	32%	32%
<b>High</b>	66%	65%



## Variable 4: Caregiver Living with Client?

	Waterloo	Toronto
Yes	46%	35%
No	54%	65%



### Waterloo: Characteristics of 36 groups (first 14 of 36)

Type	Confusion	ADL difficulty	IADL difficulty	Live with Caregiver?	MAPLE score	Frequency and Percentage
1-Appleton	Intact	Low	Low	Yes	Low/Mild	1 (0.1%)
2-Bruni	Intact	Low	Low	No	Low/Mild	10 (1%)
3-Copper	Intact	Low	Medium	Yes	Low/Mild	49 (6.0%)
4-Davis	Intact	Low	Medium	No	Low/Mild	103 (13%)
5-Eggerton	Intact	Low	High	Yes	Low/Mild	29 (4%)
6-Fanshaw	Intact	Low	High	No	Mild/Moderate	40 (5%)
7-Grimsby	Intact	Medium	Low	Yes	Mild/Moderate	0
8-Hamilton	Intact	Medium	Low	No	Mild/Moderate	0
9-Islington	Intact	Medium	Medium	Yes	Mild/Moderate	11 (1%)
10-Jones	Intact	Medium	Medium	No	Moderate	18 (2%)
11-Kringle	Intact	Medium	High	Yes	Moderate	19 (2%)
12-Lambert	Intact	Medium	High	No	Moderate/High	29 (4%)
13-Moore	Intact	High	Low	Yes	Moderate/High	0
14-Nickerson	Intact	High	Low	No	Moderate/High	0



## Toronto: Characteristics of 36 Client Groups (first 14 shown)

Type	Confusion	ADL difficulty	IADL difficulty	Live with Caregiver?	MAPLE score	Frequency and Percentage
1-Appleton	Intact	Low	Low	Yes	Low/Mild	5 (0.3%)
2-Bruni	Intact	Low	Low	No	Low/Mild	28 (1.7%)
3-Copper	Intact	Low	Medium	Yes	Low/Mild	75 (4.5%)
4-Davis	Intact	Low	Medium	No	Low/Mild	281 (16.7%)
5-Egerton	Intact	Low	High	Yes	Low/Mild	36 (2.1%)
6-Fanshaw	Intact	Low	High	No	Mild/Moderate	84 (5%)
7-Grimsby	Intact	Medium	Low	Yes	Mild/Moderate	0
8-Hamilton	Intact	Medium	Low	No	Mild/Moderate	3 (0.1%)
9-Islington	Intact	Medium	Medium	Yes	Mild/Moderate	18 (1%)
10-Jones	Intact	Medium	Medium	No	Moderate	43 (2.6%)
11-Kringle	Intact	Medium	High	Yes	Moderate	34 (2%)
12-Lambert	Intact	Medium	High	No	Moderate/High	63 (3.7%)
13-Moore	Intact	High	Low	Yes	Moderate/High	0
14-Nickerson	Intact	High	Low	No	Moderate/High	0



## Client Vignettes

### Vignette #3- Copper

*“Copper is cognitively intact and functionally independent in all ADLs with the exception of bathing (limited assistance is required). Copper has no difficulty using the phone and managing medications, some difficulty preparing meals and great difficulty with housekeeping and transportation. Copper has a live-in caregiver.” This live-in caregiver provides advice/emotional support and assistance with IADLs.*

- 1) Cognition- Intact (memory recall is good, makes consistent/reasonable/safe decisions and can express ideas without difficulty)
- 2) ADL- No help required with most ADLs (locomotion inside the home, eating, toilet use and personal hygiene), client requires limited assistance when bathing (still highly involved in activity but requires some assistance/guided maneuvering).
- 3) IADL- No difficulty using the phone and managing medications, some difficulty with preparing meals (needs some help, is very slow/fatigued). Great difficulty with housekeeping and transportation (little or no involvement in the activity is possible).
- 4) Caregiver (in home?)- Yes, provides advice/emotional support and assistance with IADLs.



## Toronto Care Package for Copper (N = 75, 4.5%)

Service	Frequency
Meals on Wheels	3 times per week
Congregate Dining	Once per month
Transportation	1 two-way trip per week
Home Maintenance	Once per month
Caregiver Support Group	One hour every other week
Home Help/Homemaking	2 hours every other week
In-Home Support PSW (CCAC)	2 hours per week
Occupational Therapist (CCAC)	Assessment once a week (total 2 visits)
<i>Care Monitoring once every six months</i>	



## Toronto Care Package for Copper (N = 75, 4.5%)

SERVICE	MINISTRY CODE	UNIT =	COST/UNIT OF SERVICE TO MINISTRY	UNITS OF SERVICE FOR 13 WEEKS	TOTAL MINISTRY COST
Meals on Wheels	02A	Meal	\$11.00	39	\$429.00
Congregate Dining	03A	Attendance	\$12.43	3.25	\$40.40
Transportation	04A	1-Way Trip	\$17.26	26	\$448.76
Home Maintenance	05C	1 Job	\$15.11	3.25	\$49.11
Home Help/Homemaking	09B	Hour	\$28.63	13	\$372.19
Caregiver Support Group	08A	Hour	\$72.30	6.5	\$469.95
In-Home Support PSW (CCAC)	10A	Hour	\$26.29	26	\$683.54
Occupational Therapy	17A	Visit	\$94.85	2	\$189.70
Case Management					
Community Care Package					\$2,682.65
Supportive Housing*					\$1,795.30
Supportive Housing					\$2,835.95
Supportive Housing					\$3,498.43
Long-Term Care Home @ \$80.00/day					\$7,259.07



\*3 local scenarios

## Waterloo Divert Rates

Group	Confusion	ADL Difficulty	IADL Difficulty	Live with Caregiver?	Frequency (Adjusted Percentage)	Long-Term Care (13 weeks)	Line by Line (13 weeks)
3-Copper	Intact	Low	Medium	Yes	49 (7%)	\$7259.07	\$3913
4-Davis	Intact	Low	Medium	No	103 (13%)	\$7259.07	\$2604
5-Eggerton	Intact	Low	High	Yes	29 (4%)	\$7259.07	\$4149
6-Fanshaw	Intact	Low	High	No	40 (6%)	\$7259.07	\$4051
12-Lambert	Intact	Medium	High	No	29 (4%)	\$7259.07	\$4651

Line by Line Diversions highlighted yellow



## Waterloo Divert Rates

Group	Confusion	ADL Difficulty	IADL Difficulty	Live with Caregiver?	Frequency (Adjusted Percentage)	Long-Term Care (13 weeks)	Line by Line (13 weeks)
17-Quinn	Intact	High	High	Yes	20 (3%)	\$7259.07	\$11000
21-Upperton	Not Intact	Low	Medium	Yes	32 (4%)	\$7259.07	\$8131
22-Vega	Not Intact	Low	Medium	No	38 (6%)	\$7259.07	\$6114
23-Wong	Not Intact	Low	High	Yes	65 (9%)	\$7259.07	\$7825
24-Xavier	Not Intact	Low	High	No	62 (9%)	\$7259.07	\$6389
29- C. Cameron	Not Intact	Medium	High	Yes	72 (10%)	\$7259.07	\$10159

Line by Line Diversions highlighted yellow



## Waterloo Divert Rates

Group	Confusion	ADL Difficulty	IADL Difficulty	Live with Caregiver?	Frequency (Adjusted Percentage)	Long-Term Care (13 weeks)	Line by Line (13 weeks)
30-D. Daniels	Not Intact	Medium	High	No	71 (10%)	\$7259.07	Cost not calculated
35-I. Innis	Not Intact	High	High	Yes	66 (9%)	\$7259.07	Cost not calculated
36-J. Johns	Not Intact	High	High	No	42 (6%)	\$7259.07	Cost not calculated
<b>Line by Line Divert Rate</b>							<b>49%</b>



## Toronto Divert Rates

Group	Confusion	ADL Difficulty	IADL Difficulty	Live with Caregiver?	Frequency (Adjusted Percentage)	Long-Term Care (13 weeks)	Line by Line (13 weeks)	Supportive Housing (13 weeks)
3-Copper	Intact	Low	Medium	Yes	75 (5.1%)	\$7259.07	\$2,682.65	\$1,795.30 to \$3,498.43
4-Davis	Intact	Low	Medium	No	281 (19%)	\$7259.07	\$3,743.45	\$3,896.75 to \$5,603.68
6-Fanshaw	Intact	Low	High	No	84 (5.6%)	\$7259.07	\$3,985.48	\$4,138.78 to \$10,468.11
10-Jones	Intact	Medium	Medium	No	43 (2.9%)	\$7259.07	\$12,469.88	\$5,537.55 to \$6,175.90
12-Lambert	Intact	Medium	High	No	63 (4.3%)	\$7259.07	\$15,431.57	\$7,726.34 to \$22,366.99

Line by Line Diversions highlighted yellow

Supportive Housing Diversions highlighted purple



## Toronto Divert Rates

Group	Confusion	ADL Difficulty	IADL Difficulty	Live with Caregiver?	Frequency (Adjusted Percentage)	Long-Term Care (13 weeks)	Line by Line (13 weeks)	Supportive Housing (13 weeks)
17-Quinn	Intact	High	High	Yes	44 (2.9%)	\$7259.07	\$17,836.21	\$7,754.20 to \$9,163.19
18-Rogers	Intact	High	High	No	77 (5.2%)	\$7259.07	\$17,494.66	\$7,835.03 to \$30,391.27
22-Vega	Not Intact	Low	Medium	No	56 (3.8%)	\$7259.07	\$6,631.06	\$6,498.36 to \$10,594.33
23-Wong	Not Intact	Low	High	Yes	52 (3.5%)	\$7259.07	\$7327.58*	\$5,574.83 to \$6,631.47
24-Xavier	Not Intact	Low	High	No	83 (5.6%)	\$7259.07	\$14,390.31	\$6,538.09 to \$15,583.03
29-C. Cameron	Not Intact	Medium	High	Yes	107 (7.2%)	\$7259.07	\$14,659.84	\$5,586.95 to \$6,929.59

Line by Line Diversions highlighted yellow    Supportive Housing Diversions highlighted purple    \*(4% Premium)



## Toronto Divert Rates

Group	Confusion	ADL Difficulty	IADL Difficulty	Live with Caregiver?	Frequency (Adjusted Percentage)	Long-Term Care (13 weeks)	Line by Line (13 weeks)	Supportive Housing (13 weeks)
30-D. Daniels	Not Intact	Medium	High	No	176 (11.9%)	\$7259.07	N/A	N/A
35-I. Innis	Not Intact	High	High	Yes	175 (11.8%)	\$7259.07	\$23,322.88	\$5,981.11 to \$8,208.75
36-J. Johns	Not Intact	High	High	No	161 (10.9%)	\$7259.07	N/A	N/A
Line by Line Divert Rate							37%	
Supportive Housing Divert Rate								49.9% to 52.7%

Line by Line Diversions highlighted yellow    Supportive Housing Diversions highlighted purple



## *Waterloo and Toronto Divert Rates Summarized*

---

	Divert: line by line	Divert: Supportive housing	LTC Required
Waterloo	49%	N/A	25%
Toronto	37%	50-53%	20%



## *Insights: Opportunity Knocks*

---

- Divert rates suggest considerable opportunity to invest resources in new ways
- “Aging at home” strategies need to consider needs *and* local system capacity to meet needs



*Insights:*  
*Unit of Care*

---

- Strong emphasis by care managers that system must support older person *and* carer



*Insights:*  
*Management, Integration*

---

- Availability of services less a problem than coordination, integration of care
  - Integration within single organization (regional health authority)
  - Coordination of providers (PRISMA, Quebec)
  - Coordination via case management (VIP program)



## *Insights:* *Global Logic, Local Variation*

---

- Different use of services
  - Higher reliance on volunteer v.s. paid services in Waterloo
  - Higher reliance on paid vs. volunteer services in Toronto (e.g., respite workers, friendly visitors)
  - More transportation trips recommended in Toronto
  - More home maintenance recommended in Waterloo
- In North West LHIN (one day workshop), greater emphasis on services through the Legion, local churches, schools



## *Insights:* *Care Models*

---

- Line-by-line logic does not offer “biggest bang for the buck” even with intensive care management
- Supportive housing, cluster care may allow more cost-effective use of resources
  - If only a 15 minute service required, can now be substituted for a 60 minute service
  - Travel costs minimized
  - Greater continuity of care provision



*Insights:  
Evidence to Action*

---

- Community-researcher partnerships are essential in generating, mobilizing policy-relevant knowledge
  - From academic exercise to “real life” insight and benchmarking, to informed policy-making
- Little choice about aging, illness, disability
- Considerable choice about how best to meet people’s needs



*The Balance of Care Project*

[www.teamgrant.ca](http://www.teamgrant.ca)

[www.crncc.ca](http://www.crncc.ca)

*Please join us -- CRNCC membership is free!*

