



interRAI Assessment Instruments as Part of Health and Social Service Information Systems

John P. Hirdes, Ph.D.

Ontario Home Care Research and Knowledge Exchange Chair &
Professor, Dept of Health Studies & Gerontology
University of Waterloo &
Scientific Director, Homewood Research Institute

Agenda

- Integrated health and social service information systems
- Canadian Experience with interRAI instruments
- Examples of applications of system level perspective
 - Population level needs
 - Understanding and managing transitions

Why do we need to think at the system level?

- People with comparable needs receive services in different sectors of the health and social services system
 - Especially true for persons with complex needs
 - Elderly
 - Persons with mental illness
 - End of life care
 - System-level implication:
 - May be able to fine-tune who gets what services where
 - Person-level implication:
 - Must deal with multiple providers
 - Continuity of care important

Why do we need to think at the system level?

- Changes in one part of the system will affect other parts of the system
 - ↓ acute hospital LOS ↑ acuity of post-acute home care clients
- Pressures in one part of the system ***might*** be reduced by changing another part
 - Increasing the capacity of home care and supportive housing to serve high needs may
 - Allow more seniors to avoid LTC placement
 - Reduce demands on LTC bed supply
 - But it will also increase LTC case mix*

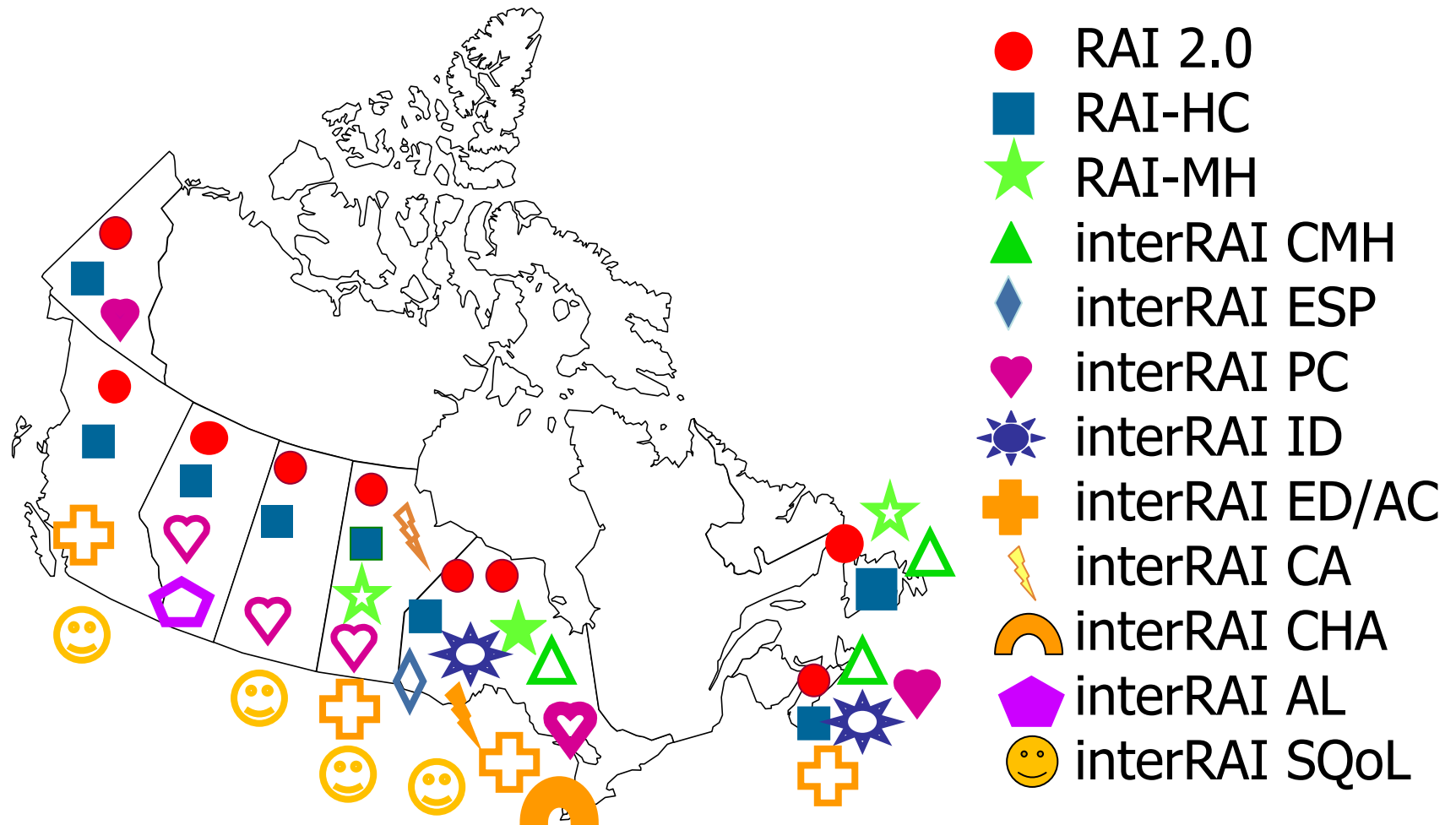
Examples of Cross-Linkages in Health Care

- **Mental Health**
 - 58% of inpatients in contact with community mental health in last year
 - 67% of community mental health clients have 1+ lifetime admissions to inpatient psychiatry
- **Home Care**
 - 43% of long stay clients were in hospital in last 90 days
 - 25% used ED in last 90 days
- **Complex Continuing Care Hospitals**
 - 80% admitted from acute care
 - 19% discharged home with home care
 - 20% discharged to nursing home

The interRAI Family of Instruments

- **Home Care**
 - + **Contact Assessment**
- **Complex Continuing Care Hospitals, Nursing Homes**
- **Acute Care**
 - + **ED Screener**
 - + **Post Acute supplement**
- **Mental Health**
 - **Inpatient**
 - **Community**
 - **Emergency Screener**
 - **Forensic Supplement**
 - **Correctional Facilities**
 - **Brief Mental Health Screener**
- **Intellectual Disability**
- **Palliative Care**
- **Post-Acute Care-Rehabilitation**
- **Community Health Assessment**
 - **AL supplement**
 - **Functional supplement**
 - **MH supplement**
 - **Deafblind supplement**
- **Subjective Quality of Life**
 - **Mental Health**
 - **Home and Community Care**
 - **Long Term Care**

Implementation & Testing of interRAI Instruments



Solid symbols – mandated or recommended by govt; Hollow symbols – research/evaluation underway

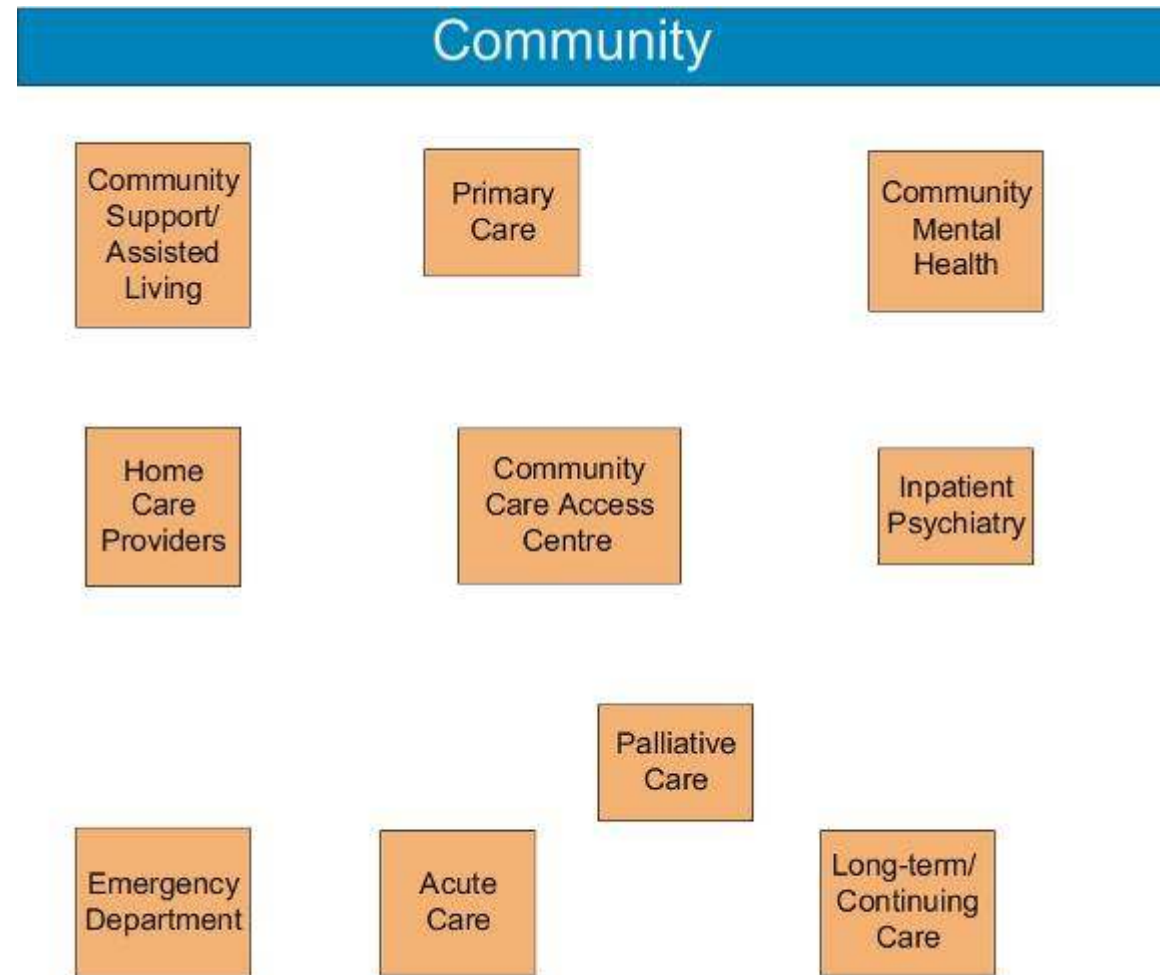
What Makes the interRAI Instruments an Integrated System?

- Common language
 - consistent terminology across instruments
- Common theoretical/conceptual basis
 - triggers for care plans
- Common clinical emphasis
 - functional assessment rather than diagnosis
- Common data collection methods
 - professional assessment skills
 - clinical judgment of best information source
- Common core elements
 - some domains in all instruments (e.g., ADL, cognition)
- Common care planning protocols
 - for sectors serving similar populations

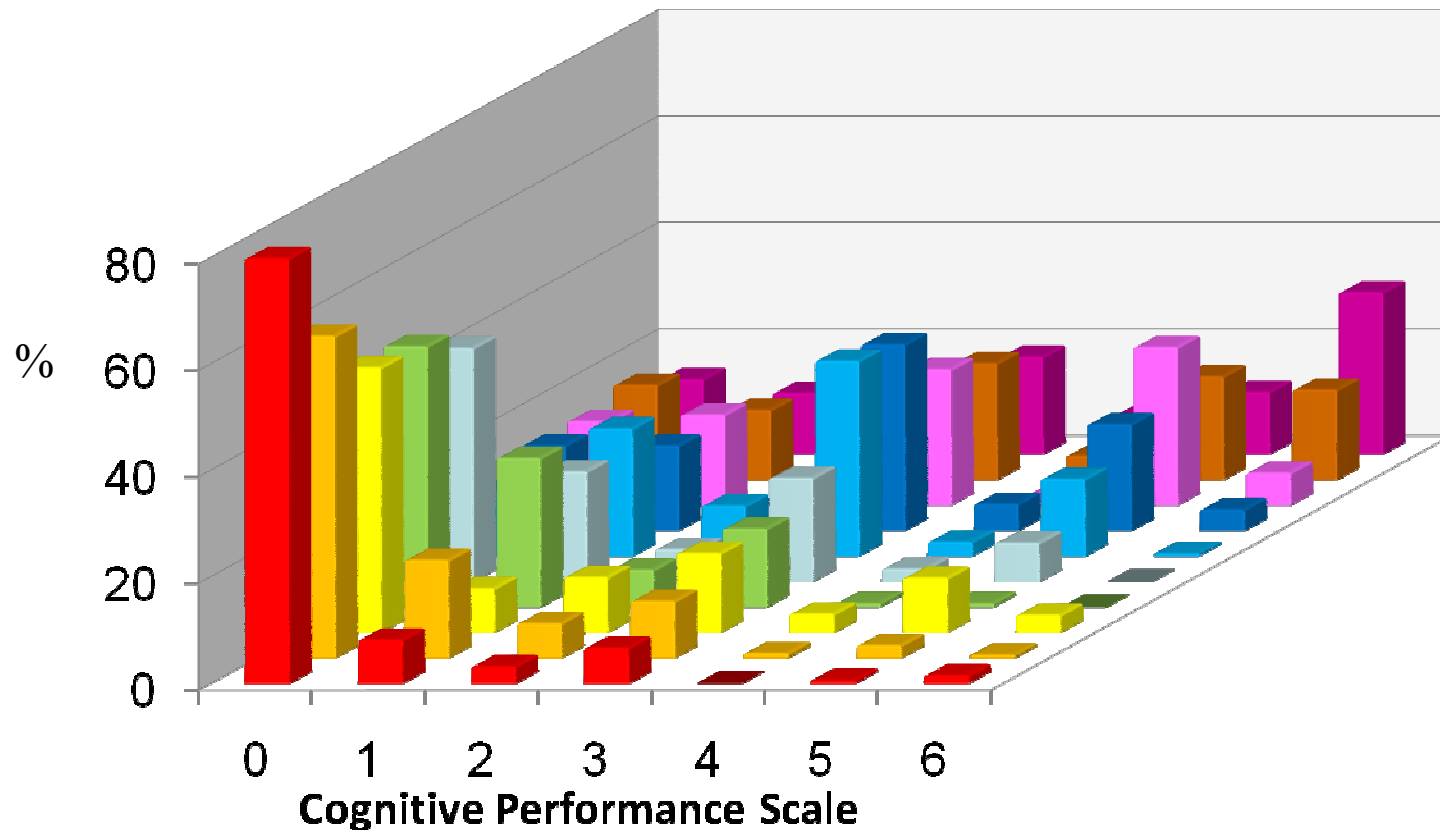


Cross-sector Comparisons

Integration through: Compatible assessment systems across settings



What should be the “shape” of the health care system? Distribution of the Cognitive Performance Scale in Various Care Settings

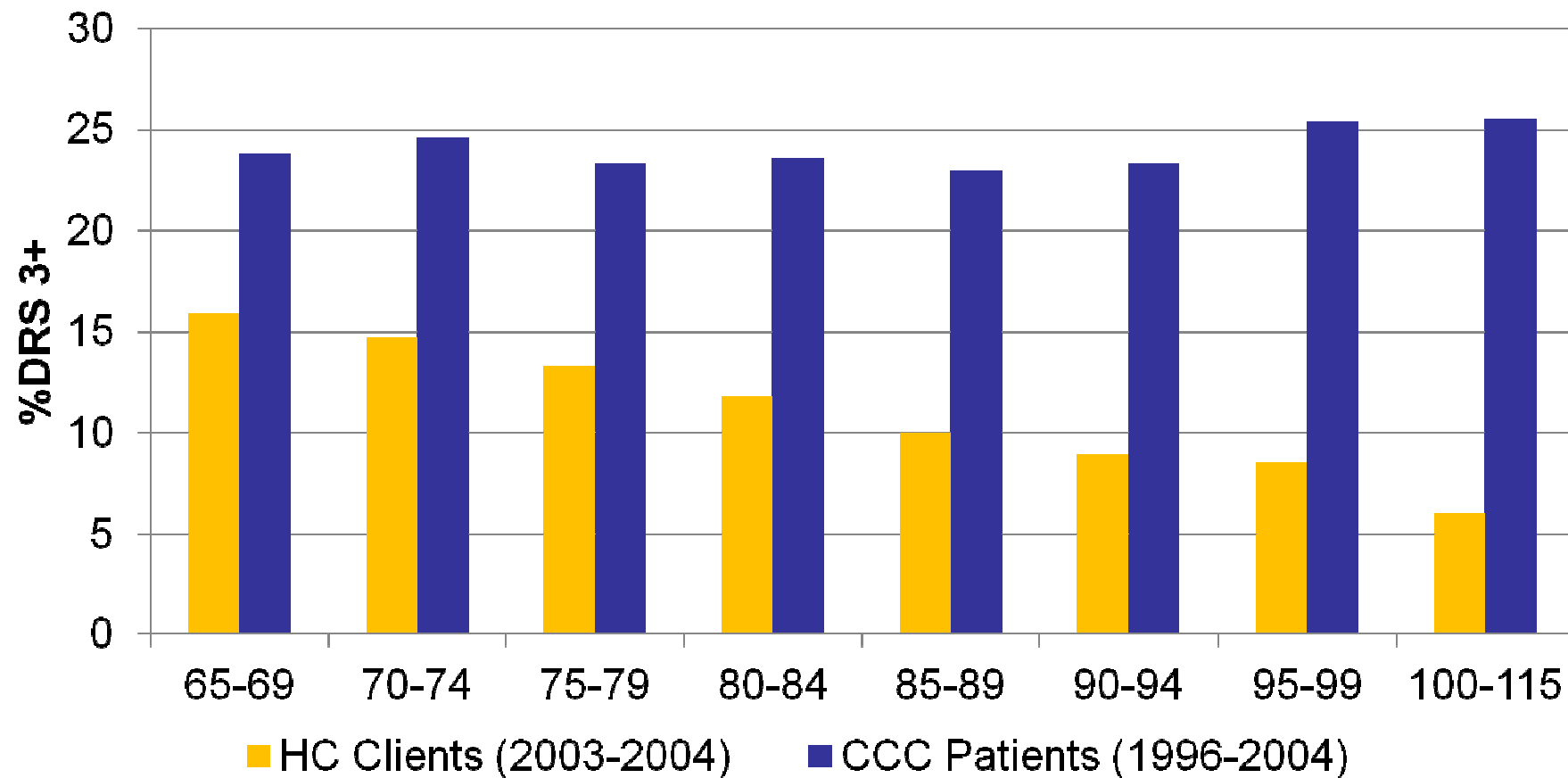


- Community Palliative Care
- Acute Care (75+)
- Acute Psychiatry (65+)
- Psychiatry - ID
- Long Term Care
- Long-stay Home Care
- Community Mental Health
- Psychiatry - Older Szp
- Geriatric Psychiatry (Non-szp)
- Complex Contg Care (Existing)

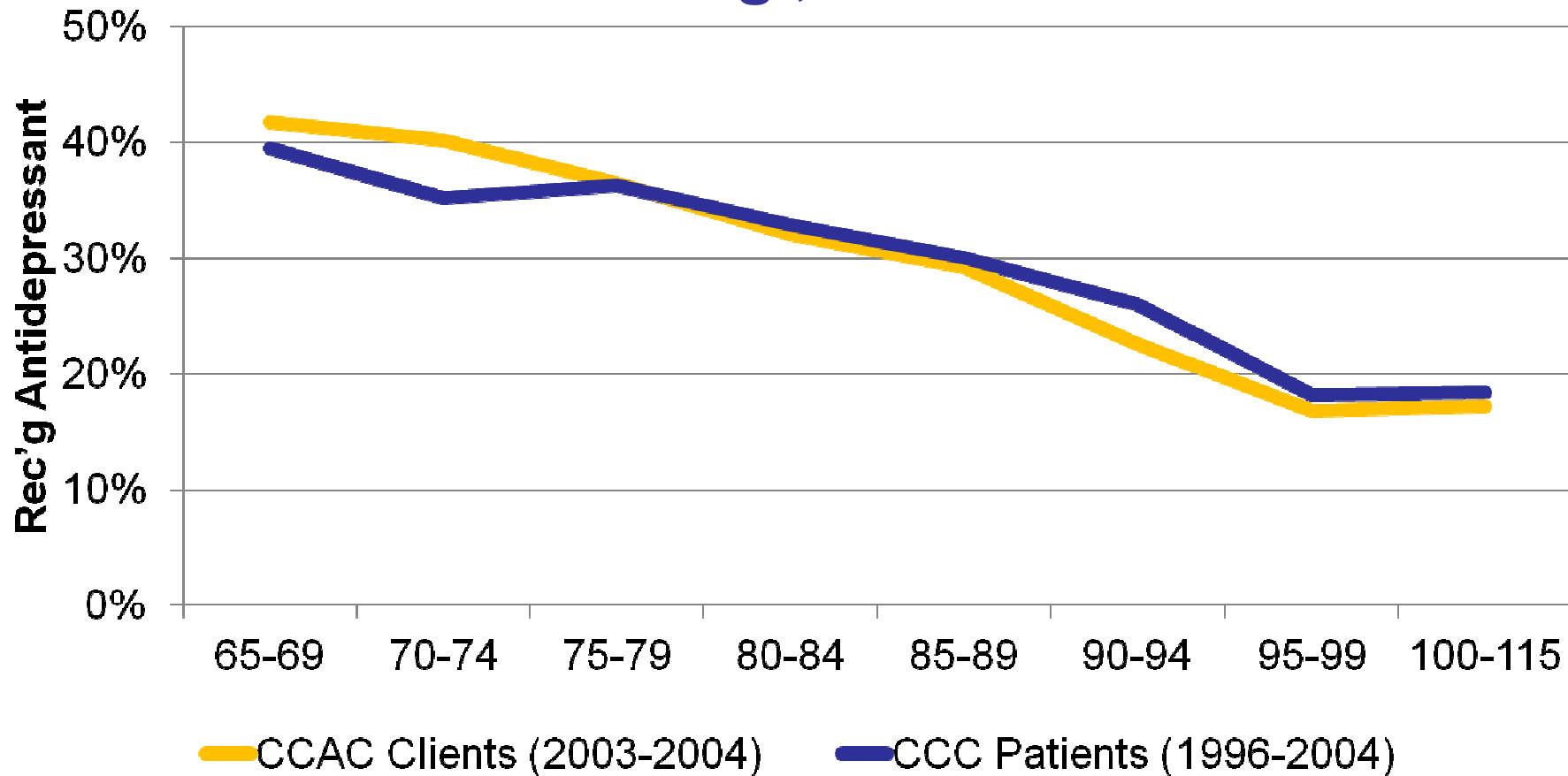
Number of Persons Assessed by Age Group, Ontario, CCAC Clients and CCC Patients

	65-69	70-74	75-79	80-84	85-89	90-94	95-99	100-115
HC Clients (2003-2004)	8,229	1,413	2,264	2,995	2,325	1,271	3,078	483
CCC Patients (1996-2004)	6,623	1,108	1,635	1,829	1,499	7,733	2,115	298

Prevalence of Depressive Symptoms (DRS 3+) by Care Setting, Ontario



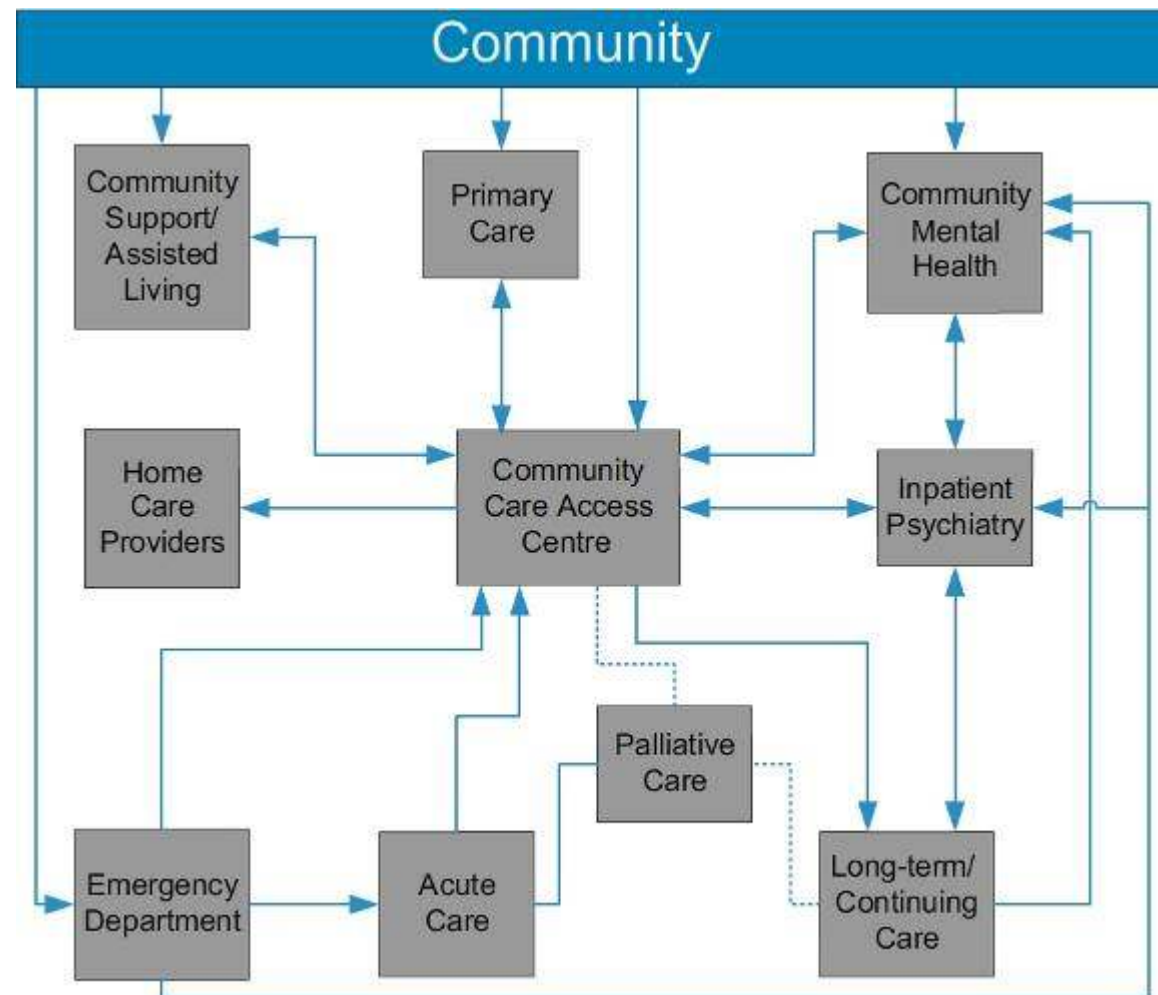
Receipt of Antidepressants Among Persons with DRS 3+ by Age and Care Setting , Ontario



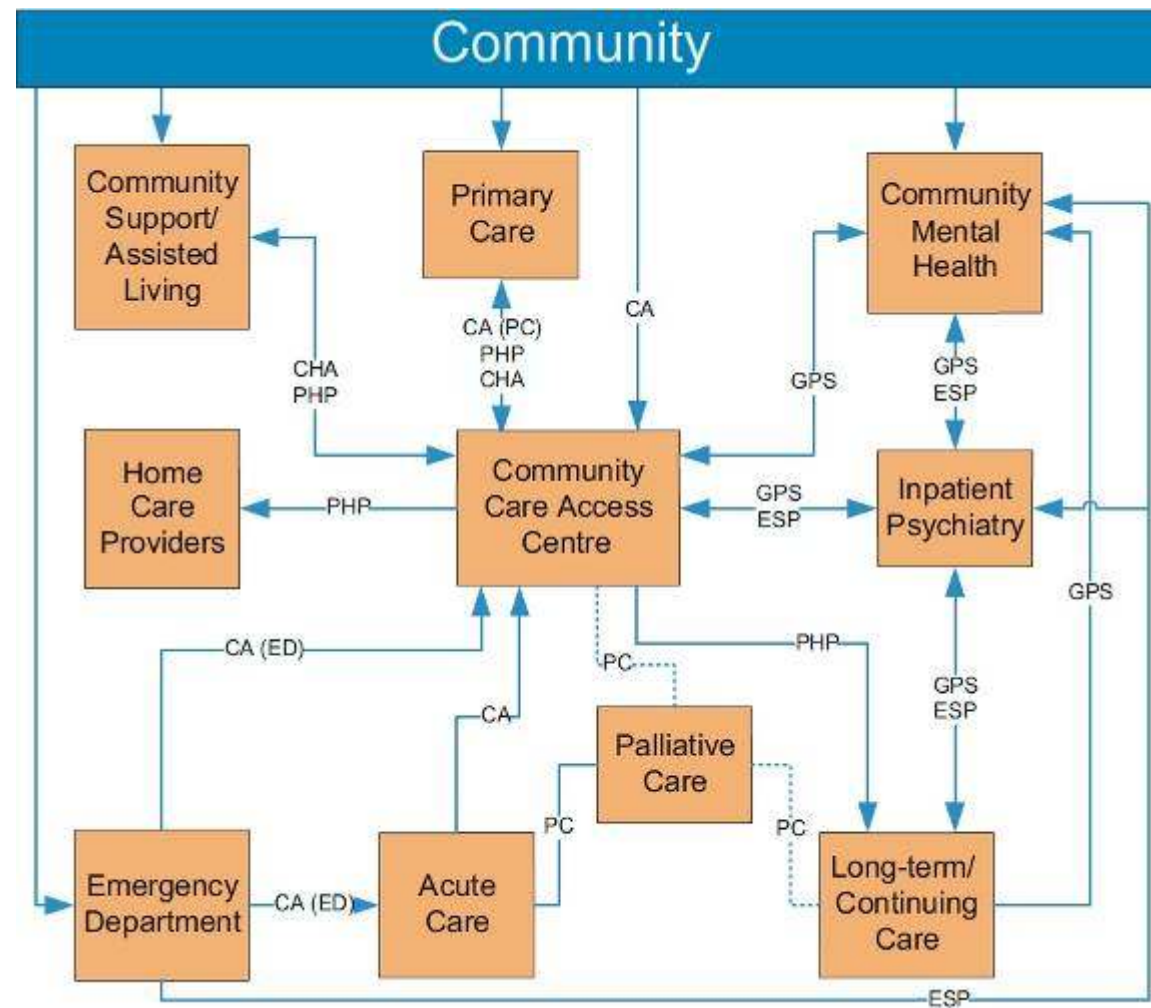


Transitions Along the Continuum of Mental Health Care

Integration through: Management of transitions between settings



Integration through: interRAI Instruments and Decision-support Systems



Prevalence of mental health issues by province, setting, and admission source

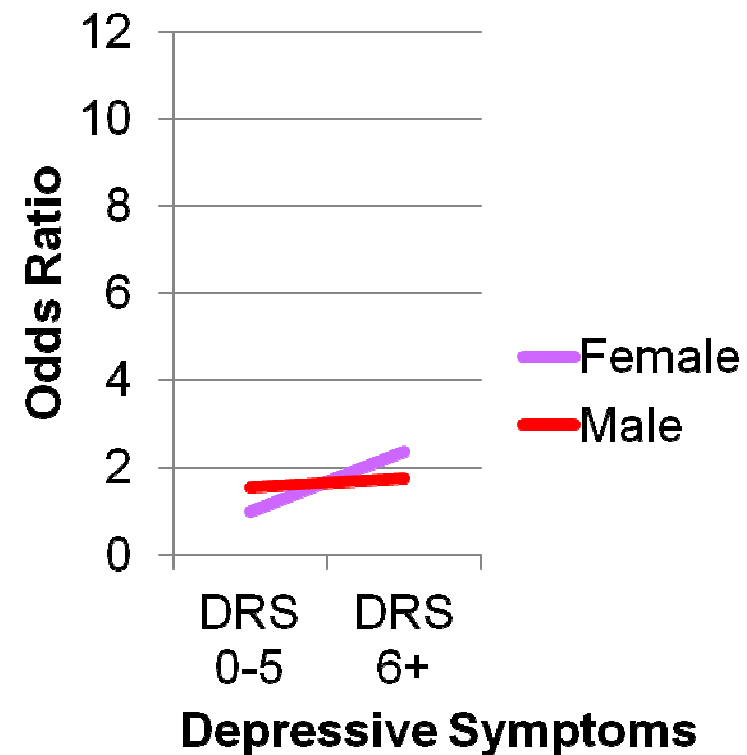
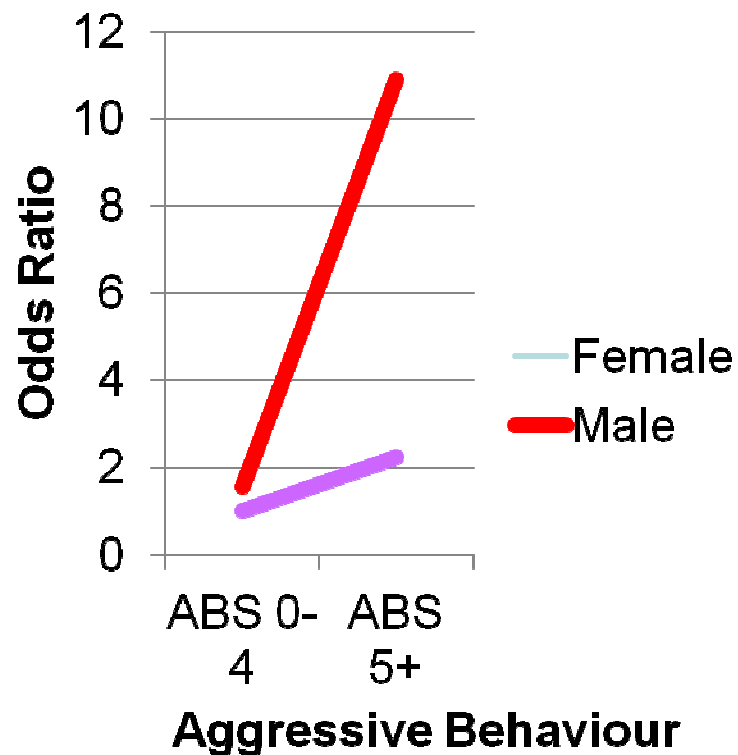
Mental Health Issue	Ontario CCC (%)		Ontario LTC (%)	
	From Psychiatry	General	From Psychiatry	General
Hallucinations	9.9	3.8	6.4	1.2
Delusions	18.7	4.4	5.8	1.7
Aggressive Behaviour Scale				
0	47.2	76.0	49.1	69.2
1-4	31.3	19.5	34.7	24.5
5+	21.5	4.5	16.2	6.3
Depression Rating Scale				
0-2	55.6	78.5	65.1	77.6
3-5	26.0	14.9	22.1	15.9
6+	18.4	6.6	12.8	6.5

CCC patients
discharged to

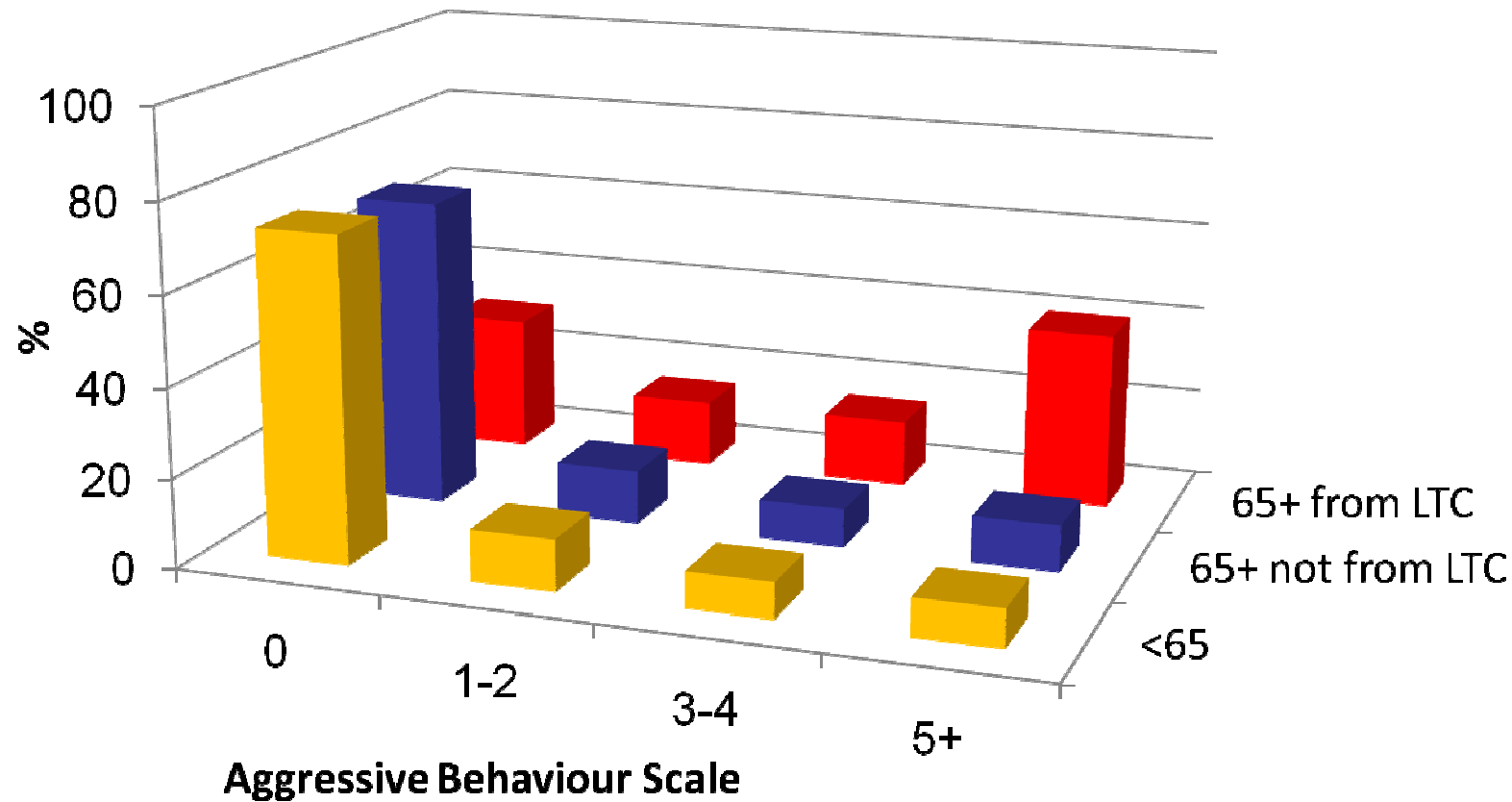
Discharged to ...	General CCC Admissions	CCC Admitted from Psychiatry
Home no home care	10.0	10.5
Home care	17.6	9.5
LTC Home	19.8	29.3
Psychiatry	0.2	4.7
Dead	33.4	22.6

Discharge to Psychiatry from CCC, Ontario

Controlling for age, psychiatric diagnosis, cognition, hallucinations and delusions



Transitions Between Care Settings: Aggressive Behaviour Among New Admissions to Inpatient Psychiatry, ON 2005-7



Concluding comments

- Responding to population aging depends on the availability of population level data
- The interRAI family of instruments provide an integrated information system that lets us identify and respond to the complex needs of vulnerable populations across all sectors of the health social services system



Thank you!

Questions? Comments?