WATERLOO PUBLIC HEALTH AND HEALTH SYSTEMS interRAI

Development of the interRAI Brief Mental Health Screener (BMHS) to enhance the ability of police officers to identify persons with serious mental disorders

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presentation to:

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interRAI

Who ?

- International, not-for-profit network of ~85 researchers and health/social service professionals

What?

- Comprehensive assessment of strengths, preferences, and needs for vulnerable populations

How?

- Multinational collaborative research to develop, implement and evaluate instruments and their related applications

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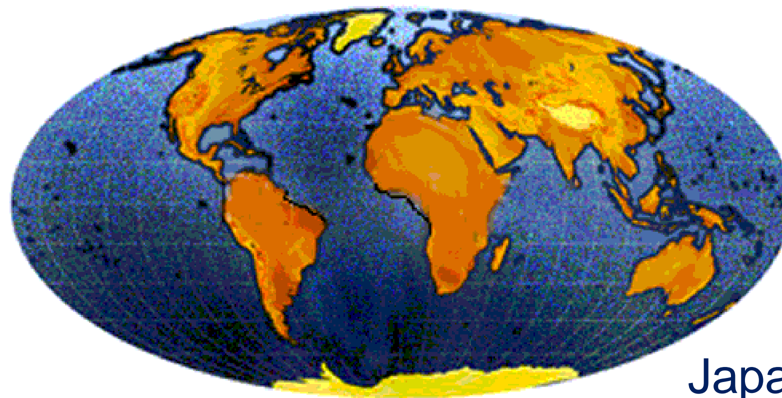
interRAI Countries

North America
Canada
US
Mexico

Europe
Iceland, Norway, Sweden, Denmark, Finland, Netherlands, France, Germany, Switzerland, UK, Italy, Spain, Czech Republic, Poland, Estonia, Belgium, Lithuania, Russia
Portugal, Austria



Central/ South America
Brazil, Chile
Peru

Pacific Rim
Japan, China, Taiwan, Hong Kong, South Korea, Australia, New Zealand
Singapore

South Asia, Middle East & Africa
India, Israel, Lebanon, Qatar
South Africa, Ghana

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The interRAI Family of Instruments

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

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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

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New interRAI Mental Health CAPs

- **Safety**
  - Suicidality and Purposeful Self-Harm *
  - Harm to Others *
  - Self Care *
- **Social Life**
  - Social Relationships
  - Social Support (CMH)
  - Support Systems for Discharge (MH)
  - Interpersonal Conflict
  - Traumatic Life Events
  - Criminal Activity
- **Economic Issues**
  - Personal Finances
  - Education and Employment
- **Autonomy**
  - Medication Management & Adherence
  - Rehospitalization
  - Control Interventions (MH)
- **Health Promotion**
  - Smoking *
  - Substance Use
  - Exercise
  - Weight Management
  - Sleep Disturbance
  - Pain
  - Falls

* Also available in ESP

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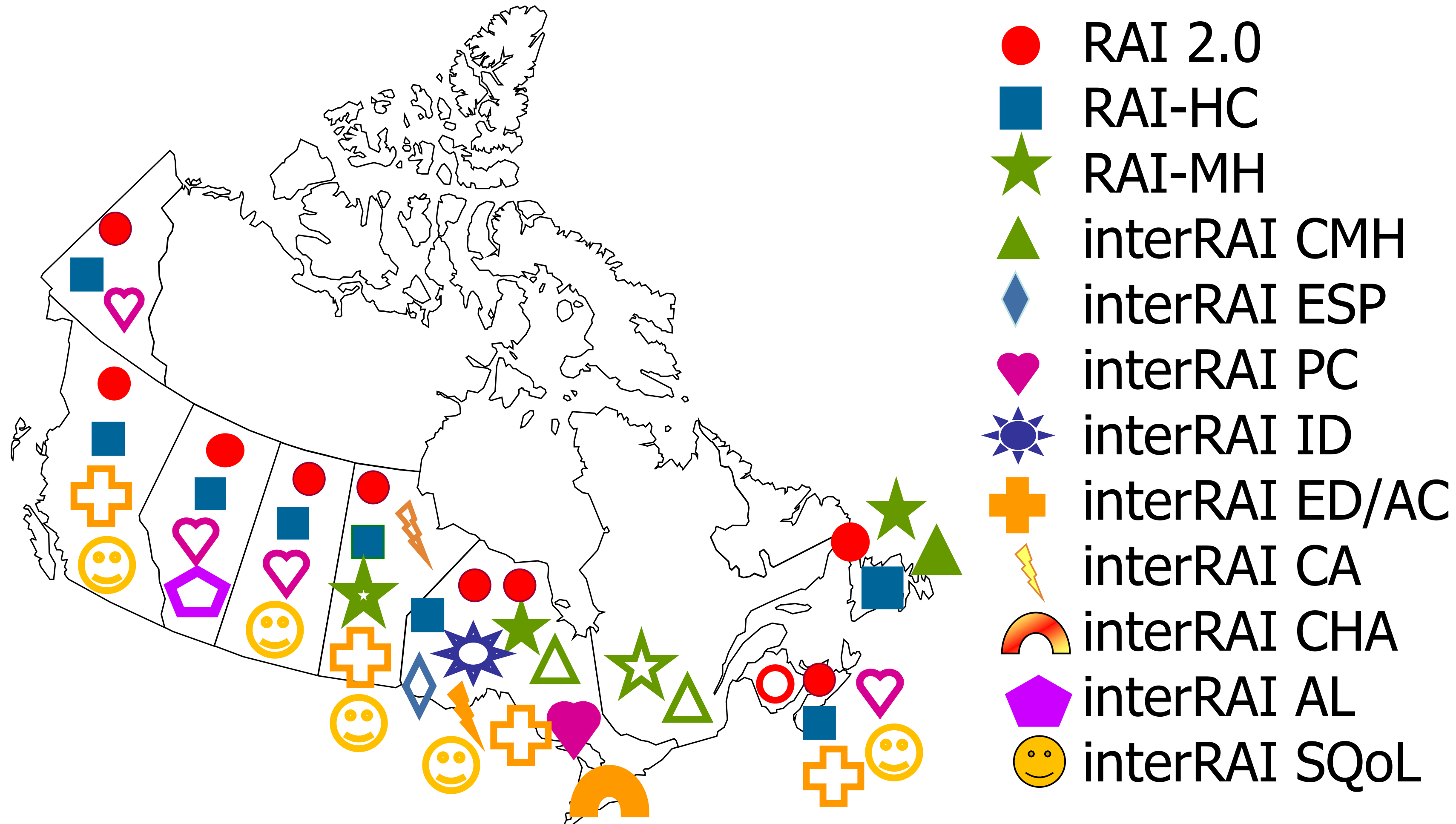
Implementation & Testing of interRAI Instruments in Canada



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

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interRAI Canada by the numbers

(Based on CIHI Reporting Systems only)

- **10** provinces and territories use interRAI instruments (8 mandated, 2 pilots)
- **644,820** new in-person assessments annually
  - Typical assessment includes 350+ items, scales and algorithms
- **1,503,848** Canadians assessed in-person by end of 2013
  - 647,078 in nursing homes & CCC hospitals
  - 648,024 in home care
  - ***208,746 in mental health***
- **5,119,344** in-person assessments by end of 2013
  - 2,713,898 in nursing home & CCC hospitals
  - 1,606,149 in home care
  - ***799,297 in mental health***

Development of the interRAI Brief Mental Health Screener (BMHS)

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interRAI Brief Mental Health Screener (BMHS)

A “new” form that police officers would complete when they encounter someone who they have *reasonable grounds* to believe has a mental health disorder.

Policing Issues

- Vague MHA apprehension authorities "*disorderly manner*"
- Police officer's opinion *vs.* ED physician's opinion
- Lengthy waits in ED
- Public safety in jeopardy (in ED & community)
- Escalating costs of policing
- "Criminalization" of persons with serious mental disorder (PSMD)

Major Concerns

- Inadequate training for both police & emergency department staff
- Inability to integrate systems (justice & health) & services (police & emergency department)

What makes the BMHS unique?

- ✓ based on analysis of extensive health database – “evidence-based”
- ✓ items on BMHS written in ***health language*** – common language helps systems communicate more effectively

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Developmental Process

- Literature reviews and focus groups
- Analyses of about 41,000 admissions in OMHRS to identify items most predictive of high risk for
  - Harm to self, harm to others, inability to care for self
- Pilot study of draft BMHS in Wellington County
- International review of findings by interRAI Network of Excellence in Mental Health (iNEMH)
- Approval of final version by the interRAI Instrument and System Development Committee

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Items on the Brief Mental Health Screener

Identified through analysis of RAI-MH database, *n* = 41,019	Items recommended by the Advisory Committee	
Clinical	Clinical	Administrative
1. Irritability **2. Hallucinations** **3. Delusions** **4. Abnormal thought process** **5. Socially inappropriate or disruptive behaviour** **6. Verbal abuse** **7. Degree of insight into mental health problem** **8. Cognitive skills for daily decision-making** **9. Violent ideation** **10 Intimidation of others or threatened violence** **11.Violence to others** **12.Self-injurious attempt – in last 7 days** **13.Considered performing a self-injurious act in last 30 days** **14.Family, caregiver, friend, or others express concern that person is at risk for self-injury**	1. Command hallucinations 2. Hyper-arousal 3. Pressured speech 4. Intoxication by drug or alcohol 5. Home environment-Squalid conditions 6. Suicide plan 7. Refused to take some or all of prescribed medication in last 3 days 8. Previous police contact in last 30 days 9. Person has been known to carry or use weapons(s)	1. Name 2. Sex 3. Birth date 4. Address 5. Homeless 6. Apprehension made under existing order for psychiatric evaluation 7. Police action (e.g. lay a criminal charge or apprehend under MHA) 8. Time of arrival at scene 9. Time of arrival at the ED 10. Time call ended

Pilot study objectives:

1. Validate items on BMHS as key indicators of serious mental disorder (i.e. predict which persons have the highest probability of being taken to hospital/admitted?)
2. Measure police resources used
3. Did it enhance the communication process (i.e. reduction in police officer wait times in emergency dept.?)

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Organizations involved in Pilot Study

Police Services:

Ontario Provincial Police Service (OPP) Wellington County

Guelph Police Service (GPS)

General Hospitals:

Guelph General Hospital (GGH)

Groves Memorial Community Hospital (GMCH)

Palmerston & District Hospital (PDH)

Louise Marshall Marshall Hospital (LMH)

Psychiatric Facility:

Homewood Health Centre (HHC)

Key Findings

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Factors related to police apprehension compared to those related to hospital admission

Police apprehension	Hospital admission
Self-injurious attempt – 7 days *	Self-injurious attempt – 7 days *
Self-injurious considered – 3 months	Hallucinations
Suicide plan	Delusions
Others Concern at risk of self-injury	Abnormal thought process
Verbal Abuse	Low insight into their problem
Socially Inappropriate/disruptive behaviour	Intoxication by drug/alcohol (negative relationship)
Violent Ideation	
Violence Others	

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Police Resources

	Minutes	Mean	Range
Total time (Start time – End time)	299	3 hrs. 30 mins.	4 mins. - 24 hrs.
Emergency Dept only (Time arrive at ED – End time)	238	3 hrs. 9 mins.	5 mins. - 23 hrs.

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Benefits to Police Services

- captures & standardizes police observations in health system language
- evidence-based training for police officers
- common language helps to synchronize the “systems” & expedite transfer of responsibility
- user friendly & does not require extensive training

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Benefits to Hospitals

- algorithm flags high risk patients at presentation to ED
- more & better quality information from police compatible health psychiatric assessment form (RAI MH)
- improved communication & collaboration between frontline hospital staff & police officers
- *integrated* & *seamless* system of care (*other* interRAI instruments used in *other* settings)

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Current status…

- Presentations to CEO's of Ontario Chiefs Association & Ontario Hospital Association
- Ontario Provincial Police (OPP) province wide use as of May 2014 – first data cut of 1000 forms
- Development of app
- Pilot site in Niagara region – use of BMHS as part of overall strategy reduced police wait times in ED
- Additional police agencies in process of implementation
- interRAI BMHS created for general use

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interRAI™ Brief Mental Health Screener

Quick Assessment

Key Terms
& Definitions

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Definitions

Irritability

Marked increase in being short-tempered or easily upset.

Key Terms & Definitions

interRAI™ Brief Mental Health Screener

SECTION A: IDENTIFICATION

SEX

MALE **FEMALE**

AGE

Touch to Edit

HOMELESS

YES **NO**

APPREHENSION UNDER

●●●●○ ROGERS 3G 9:21 PM 23%

interRAI™ Brief Mental Health Screener

SECTION B: INDICATORS

Irritability

(Touch for Definition)

Not Present	0
Present but not exhibited in last 24 hours	1
Exhibited in last 24 hours	2

◂Back Definitions

interRAI™ Brief Mental Health Screener

Assessment Results

Submit & Print

◀ Back

Definitions

interRAI™ Brief Mental Health Screener

Your assessment results have been submitted to: “FaxMachine@Niagarahealth.on.ca” for printing.

YOUR REFERENCE NUMBER:

654-321

Please record your reference number, as it will allow you to identify the assessment subject during the pilot of the BMHS.

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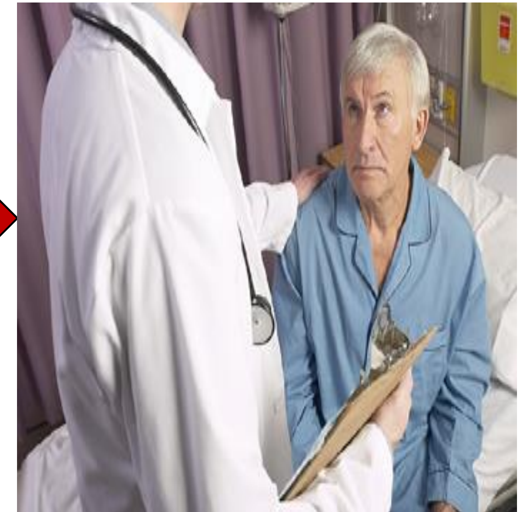
"Seamless system of care"

Police officer completes BMHS at scene & sends to ED prior to arrival

BMHS flags high risk persons in the ED

BMHS data inform completion and interpretation of RAI-MH



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Thank you

Questions?