# New Brunswick Institute for Research, Data and Training

Initiated 2011 Launched 2015

Dr. Ted McDonald Director, NB-IRDT Professor of Economics, UNB



## PURPOSE OF NB-IRDT

Conduct objective, rigorous and evidence-based research and program evaluation to support GNB planning and policy development

Host and provide access to person-level deidentified program **data** from GNB in a highly secure research network (Fredericton, Moncton, Saint John sites)

Provide **training**, mentoring and capacity development for GNB



## RESPECTING PRIVACY OF NB RESIDENTS

Complies with relevant privacy legislation (PHIPAA, RTIPPA, An Act Respecting Research)

Reviewed and approved by the Privacy Commissioner, Privacy and IT Security officers of multiple GNB departments

**Privacy by design** principles enshrined in all agreements, policies and procedures



## MEMORANDUM OF UNDERSTANDING

Signed by President of UNB and GNB Clerk Feb 2018

Commits both GNB and UNB to:

- Long term sustainability of NB-IRDT
- Annual Research Plan
- Annual Training Plan
- NB-IRDT as "researcher of choice" for GNB

Reaffirms participation in GNB / NB-IRDT governance committees



## LINKABLE DEIDENTIFIED DATASETS AT NB-IRDT

- Citizen database (Medicare registry)
- Discharge Abstracts Database
- Physician billing data
- Provider registry
- Vital Statistics death data
- Cancer registry
- Breast cancer screening registry
- Chronic disease indicators for diabetes, MS, COPD, hypertension, etc.
- Healthy Toddler Assessment
- NB Trauma registry
- National Rehabilitation Database
- Suicide registry
- Provincial drug plans
- Radon exposure data



## GNB COLLABORATIONS UNDERWAY AND IN DEVELOPMENT

SD/Aging Secretariat – MEKTU provides program evaluation oversight and support for all funded Healthy Seniors Pilot projects (underway)

EECD – K-2 lengthened school day program evaluation (underway)

SD – Non-profit organization data development and program evaluation

DTI – Motor vehicle collisions and infrastructure improvement

DPS/Chief Coroner (DPS) - Suicide prevention and infrastructure

ELG – Health effects of industrial activity



## **TRAINING**

NB-IRDT is working with Treasury Board (TB) on a training program for GNB employees

Content for year 1 based on results from a survey of training needs for all GNB employees of pay band 5 and above

Year 1 content includes statistical training, program evaluation, privacy and disclosure, and programming in R and SAS



## **Predicting 20-year Dementia Risk at the Community Level**

#### **Background**

- Dementia is a major public health problem, with
  >47M affected globally; expected to triple by 2050
- A third of dementia risk is attributed to modifiable lifestyle factors
- Increasing health literacy plays a key role in reducing individual risk
- Targeting public health promotion programs will be facilitated by identifying communities at highest risk

#### **Dementia Risk Score**

- The validated CAIDE Risk Score uses midlife health indicators to predict individual's 20-year dementia risk
- A Community CAIDE Risk Score using population-based administrative and survey data will be developed





#### **Outcomes**

- The Community CAIDE Risk Score will be used to predict which communities in NB will be at greatest risk of dementia in 2030-2034
- The results will be used to target delivery of a community-based brain health promotion program (cogniciti.com)
- As the data used are available across Canada we will be poised to test the generalizability of our model in different provinces

### **Research Partnerships with GNB Departments**

## Brunswick c A N A D A

#### Post-secondary Education, Training and Labour

5-year Research Partnership with PETL includes work on:

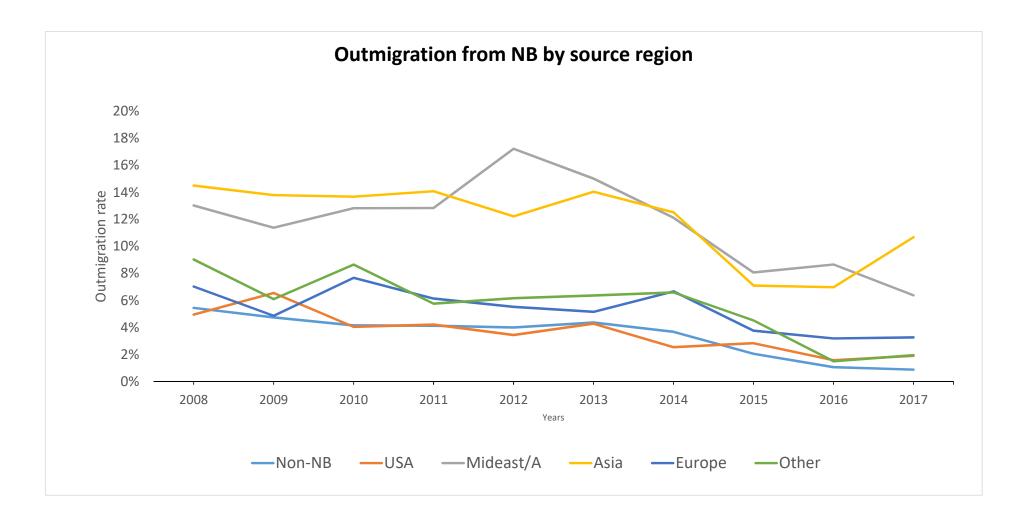
- Immigrant retention in NB
- Sustaining rural communities
- Outcomes after training and apprenticeship programs
- Low skilled workers and high school equivalency
- Businesses, entrepreneurship and labour markets



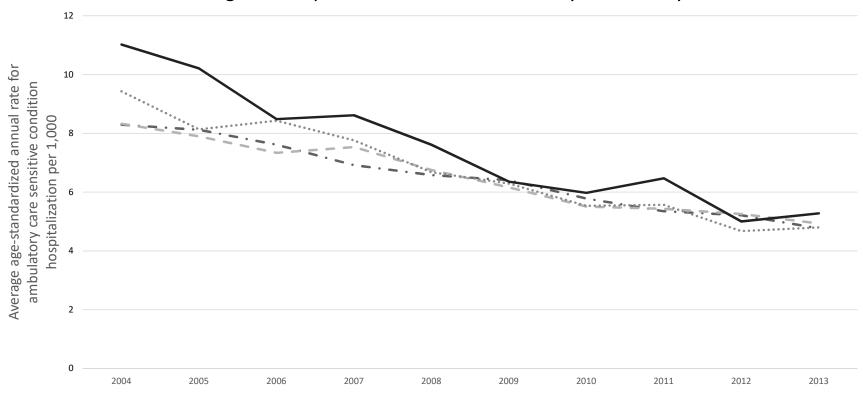
#### **Education and Early Childhood Development**

Evaluating impacts on students in kindergarten to grade 2 whose school day has been extended by 1 hour

- 17 study school (10 English, 7 French)
- Quantitative analysis at NB-IRDT (e.g. test scores, report cards)
- Qualitative analysis at schools (e.g. focus groups, interviews)



## Changes in hospitalization rates over time by community size



Grey dash/dot = major cities; Grey dashes = smaller urban areas; grey dots= towns; solid black line = rural areas.

## LOOKING FORWARD

Become leaders in Canada in efficiently harnessing data to support short and longer term policy and program evaluation

Continue to foster and develop productive and cost-effective collaborations with Government, academia, NGOs and the private sector

Continue to work to achieve our mission statement of helping to make NB a better place to live



## **THANK YOU**

**Thank you very much** to all of our GNB partners for your effort, commitment and energy in partnering with us over the past eight years to establish and expand NB-IRDT as a province-wide resource

If you have research questions, let us know!

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- www.unb.ca/nb-irdt

