Primary Healthcare Research Unit
Chronic Disease Research Projects

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PHRU projects

1. CPCSSN
2. OSTIS
3. Primary Care Reform
4. Qualico PC
5. Health Coaching
6. HPV
7. BETTER
PHRU Surveillance? Studies

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CPCSSN

- Marshall Godwin MD MSc
- Rick Birtwhistle
- PHAC
- Chronic Diseases (Others?):
  - DM
  - Depression
  - Hypertension
  - Cardiovascular Disease
  - Cerebro-Vascular Disease
CPCSSN

• Extraction of de-identified point-of-care data from practice of family doctors with EMRs
• Data pulled quarterly
• 100s of Canadian physicians data brought together into a central Canadian database
• NL data stored on secure server at CPCSSN central and copy sent to NLCHI to allow for linked database research
• Started in 2008. Funded by PHAC
• Current funding until 2015
CPCSSN – Future Directions?

- Observational Studies
- Surveillance
- Data Content Standards
OSTIS – Chronic Disease

- Shabnam Asghari MD PhD
- NLCAHR
- Chronic Diseases:
  - DM only currently
  - The future?
OSTIS – What does it do?

• Integrates advanced GIS functions for spatial and temporal analyses
• Based on available geographic and medical administrative databases
OSTIS – Data

Health variables
- Incidence/prevalence
- Morbidity / mortality
- Treatments / Rx
- Human Resources
- Materiel Resources

Geographic variables
- Administrative Zones
- Regions rural/urban
- Standard Geographical Classification (SGC)

Time variables
OSTIS – What will it provide?

• Ongoing and online information
• It instantly produces results displayed as tables, graphs or maps
• Easily visualize problems in relation to existing health and social services and their natural environment
PHRU Observational Studies

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Primary Care Reform

• Me
• CIHR, RDC
• Chronic Diseases:
  ❖ Ambulatory Care Sensitive Hospitalization (e.g. Asthma, CVD, CAD, DM, uti, vaccine preventable, etc...
Primary Care: Context

• Primary Care Reform in NL
  ❖ Pilot communities 2003-2006
  ❖ PHC teams and networks
  ❖ Maximizing scope of practice

• Primary Care Reform in Canada
  ❖ Team-based care
  ❖ Alternate payment models
Primary Care Reform

- Three study periods
  - 2001-03, 2004-06, 2007-09
- Compare “reform” communities to others for rate of ACSH over the 3 periods
- Data limitations!
Primary Care Reform Progress

• NLCHI Approval
• HREA Approval
• Data compilation
• National Study
QualicoPC

- Me
- Walter Wodchis
- European Consortium
- EU, CIHI, RDC?
- “Quality and Costs in Primary Care”
Qualico PC Methods

• Survey based
• Practice is the unit of analysis
• Surveys:
  ❖ Practice
  ❖ Provider
  ❖ Patient Experience
  ❖ Patient Values
• HCN*
Qualico PC
Qualico PC

- Future directions
- Linkage studies:
  - Hospitalizations
  - ED visits
  - Walk-in visits
  - Billings (CDPS?)
  - (Morbidity) and Mortality
PHRU Interventional Studies

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Health Coaching

• Health Coaching to Effect Lifestyle Behaviour Change: A Randomized Trial of Individuals with Pre-disease
• Marshall Godwin MD MSc
• CIHR
• Chronic Diseases:
  ❖ Pre-DM
  ❖ Pre-hypertension
  ❖ Obesity
Health Coaching

• Intervention
  – Health Coaching with coach trained in Newfield Method of health coaching. (participants get 6 month coaching program)

• Control
  – Usual care
Health Coaching

• Outcomes
  – Self Efficacy
  – Lifestyle score (SLIQ)
  – Lipids
  – BP
  – Blood glucose
HPV

- Pauline Duke MD
- CIHR
- “Effect of Vaginal Self-Sampling on Cervical Cancer Screening Rates: a Community-Based Study in Newfoundland & Labrador”
HPV – Research Question

• Would introducing a self-collection method for HPV testing increase cervical screening rates, especially in underscreened and unscreened women?

• What proportion of women in a community-based setting, would use a self-collection method to screen for HPV?
Methodology

Community A
- HPV self collection method in addition to access to regular pap-test
- Intense educational and promotional campaign promoting cervical cancer screening

Community B
- Access to regular pap-test screening
- Intense educational and promotional campaign promoting cervical cancer screening

Similar Demographics

Community C
- Control with similar demographics; provided with regular provincial screening and educational services
## HPV: Results

<table>
<thead>
<tr>
<th>Community Screening Rates</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPV Intervention</td>
<td>46.23%*</td>
<td>39.27%</td>
<td>37.99%*</td>
</tr>
<tr>
<td>Education</td>
<td>41.33%</td>
<td>38.31%</td>
<td>39.98%</td>
</tr>
<tr>
<td>Control</td>
<td>35.96%*</td>
<td>38.91%</td>
<td>46.33%*</td>
</tr>
<tr>
<td>Provincial Screening Rates</td>
<td>43%</td>
<td>43%</td>
<td>45%</td>
</tr>
</tbody>
</table>

* P <0.05
BETTER

• Me
• Donna Manca, Eva Grunfeld
• Chronic Diseases
  ❖ All for which there is good evidence of an intervention to prevent
Doing it BETTER

Building on Existing Tools to Improve Chronic Disease Prevention & Screening in Family Practice

Kris Aubrey-Bassler, Donna Manca, Eva Grunfeld
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The views expressed herein represent the views of the BETTER 2 Coalition and do not necessarily represent the views of the project funders.
BETTER: Context

- Family Practice is the ideal setting for most CDPS
- Evidence-based tools are available to improve CDPS but tools are inconsistently applied.
- MDs are pre-occupied with acute care.
- Dedicating time for prevention and screening is desirable.
- Maximizing practice scope of all providers is desirable.
BETTER

• BETTER History:
  * BETTER 1 Recently completed pragmatic RCT
  * BETTER 2: Ongoing dissemination study

• BETTER 1 Research Question: Does an allied health care delivered intervention improve CDPS relative to usual care.

• BETTER 2 Research Question: Does the success of the intervention demonstrated in BETTER 1 translate into other clinical settings.
BETTER Approach

• Extensive guideline review, compilation and summary
• Development of a new role: The “Prevention Practitioner”
• Development of tools
• Algorithmic approach
• Through shared decision-making, goal setting, PPs develop an individualized prevention prescription for each patient
BETTER 1: Results

- Usual Care
- BETTER

- All
- Mental Health
BETTER 2: Sites

- NWT
- Newfoundland and Labrador
- Alberta
- Ontario
- Nova Scotia