Toward a Healthy Campus: 
Employing a population health approach in PHC

PHABC Conference 2012

Dr. Judith Burgess
Director, Health Services
Division of Student Affairs
University of Victoria
Outline

1. A Healthy Campus Settings Approach
   a) What is a settings approach
   b) University Population health data - ACHA

2. Towards a Healthy UVic
   a) Healthy Campus champions
   b) Implementing a Settings approach

3. Reorienting Health Services
   a) PHC Capacity Framework
   b) Implementing a Capacity model
1. A Healthy Campus Settings Approach

“Health is created and lived by people within the settings of their everyday life; where they learn, work, play and love.”

The University is such a setting!
a) What composes a setting?

A setting is a deeply enmeshed physical place (made up of natural and built cultures) and a collective space (made up of social and organizational cultures)

- A settings-based health approach changes the physical space, which in turn shapes the collective space
- This approach engages people in health promoting actions, where healthy choice becomes the easy choice
A settings approach requires health promoting actions*:

- **Strengthening of community action**
  - By engaging the whole community in identifying health issues and need for setting changes

- **Developing healthy public policy**
  - That explicitly establishes requirements for a setting to be health-promoting

*Drawn from the Ottawa Charter (1986) Health Promoting Actions*
• Creating supportive environments
  – To be more inclusive and help people to make healthier choices

• Promoting personal health practices
  – So people have the knowledge and skills to practice wellness and engage in community action

• Re-orienting health services
  – Toward a model for delivering patient health and population health
b) Significance of the post-secondary student population (Stats Canada)

In Canada for 2009-10 a total of 1,905,516 students

<table>
<thead>
<tr>
<th>Public Institutions</th>
<th>Full-time students</th>
<th>Part-time students</th>
</tr>
</thead>
<tbody>
<tr>
<td>University</td>
<td>882,621</td>
<td>321,270</td>
</tr>
<tr>
<td>College</td>
<td>510,435</td>
<td>191,187</td>
</tr>
</tbody>
</table>

In BC for 2009-10 a total of 260,046 students
168,627 full time and 91,419 part-time

• (11 universities, 11 community colleges, 3 prov institutes)
Key campus areas for policy planning, promotion /education, early intervention, and treatment

- Communicable illness
- Mental health
- Sexual health
- Chronic illness
- Health & Wellness
- Sports injury
- Alcohol and drug use/abuse
- Antiviolence
Data from the ACHA-NCHA-US Student Health Survey, Spring 2012
(Canadian data available Spring 2013)

Respondents n=24,752 (27.3% response):
F = 64.2%      M=35.1%      Transgender=0.2%

Ave age 22.59 years
45.8% aged 18 – 20; 35.1 % aged 21-24 years


Staff survey has recently been initiated by ACHA
Proportion of college students (USA) who reported being diagnosed or treated by a professional for any of the following health problems: within the last 12 months:

<table>
<thead>
<tr>
<th>Condition</th>
<th>%</th>
<th>Condition</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allergies</td>
<td>19.7</td>
<td>Broken bone/Fracture/Sprain</td>
<td>7.5</td>
</tr>
<tr>
<td>Sinus infection:</td>
<td>17.5</td>
<td>Back pain</td>
<td>12.6</td>
</tr>
<tr>
<td>Asthma</td>
<td>8.6</td>
<td>Chronic illness</td>
<td>4.9</td>
</tr>
<tr>
<td>Strep throat</td>
<td>10.7</td>
<td>Psychiatric condition</td>
<td>5.6</td>
</tr>
<tr>
<td>Ear Infection</td>
<td>7.2</td>
<td>ADHD</td>
<td>6.7</td>
</tr>
<tr>
<td>Bronchitis</td>
<td>6.5</td>
<td>High blood pressure</td>
<td>3.4</td>
</tr>
<tr>
<td>Migraine headache</td>
<td>7.7</td>
<td>High cholesterol</td>
<td>2.9</td>
</tr>
<tr>
<td>Urinary tract infection</td>
<td>9.8</td>
<td>Irritable Bowel Syndrome</td>
<td>2.7</td>
</tr>
</tbody>
</table>

In total 55.4% of college students (45.8% male, 61.4% female) reported being diagnosed or treated
Self-reported health

• 60.2% of college students surveyed (66.1% male and 57.3% female) described their health as very good or excellent.
  – v 60% of all Canadians 12 and over (CCHS, 2005)

• 92.1% of college students surveyed (93.4% male and 91.5% female) described their health as good, very good or excellent
  – v 89% of all Canadians 12 and over (CCHS, 2005)
Disease and injury prevention: Immunization

College students reported receiving the following vaccinations:

• 70.7 % against hepatitis B
• 41.9 % against Human Papillomavirus/HPV (cervical cancer)
• 39.6 % against influenza (flu) in the last 12 months (shot or nasal mist)
• 73.4 % against measles, mumps, rubella
• 58.6 % against meningococcal meningitis.
• 50.2 % against varicella (chicken pox).

Many US schools require some or all of enrolment to have updated vaccines, where Canadian schools only recommend – uptake is an issue!
## Factors reported affecting academic performance: Spring 2012

<table>
<thead>
<tr>
<th>Factors</th>
<th>%</th>
<th>Factors</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol use</td>
<td>4.5</td>
<td>Homesickness</td>
<td>3.9* (8.7)</td>
</tr>
<tr>
<td>Anxiety</td>
<td>20.2</td>
<td>Internet/computer games</td>
<td>13.2</td>
</tr>
<tr>
<td>ADHD</td>
<td>5.1</td>
<td>Learning disability</td>
<td>3.0</td>
</tr>
<tr>
<td>Cold/flu/sore throat</td>
<td>15.6</td>
<td>Participation in extracurricular</td>
<td>10.1</td>
</tr>
<tr>
<td>Concern for friend/family</td>
<td>11.1</td>
<td>Relationship difficulties</td>
<td>10.4</td>
</tr>
<tr>
<td>Death of friend/family</td>
<td>5.8</td>
<td>Roommate difficulties</td>
<td>5.8</td>
</tr>
<tr>
<td>Depression</td>
<td>12.4</td>
<td>Sleep difficulties</td>
<td>20.6</td>
</tr>
<tr>
<td>Finances</td>
<td>6.6</td>
<td>Work</td>
<td>13.9</td>
</tr>
</tbody>
</table>
## Health promotion

<table>
<thead>
<tr>
<th>College students reported usually eating the following number of servings of fruits and vegetables per day:</th>
<th>Male %</th>
<th>Female %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 servings per day</td>
<td>7.0</td>
<td>4.6</td>
<td>5.5</td>
</tr>
<tr>
<td>1-2 per day</td>
<td>60.3</td>
<td>56.2</td>
<td>57.6</td>
</tr>
<tr>
<td>3-4 per day</td>
<td>27.2</td>
<td>32.4</td>
<td>30.5</td>
</tr>
<tr>
<td>5 or more per day (Recommended amount)</td>
<td>5.5</td>
<td>6.8</td>
<td>6.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Students meeting the (US) Recommendation* for moderate-intensity exercise, vigorous-intensity exercise, or a combination of the two</th>
<th>Male %</th>
<th>Female %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guidelines met</td>
<td>54.2</td>
<td>48.8</td>
<td>50.6</td>
</tr>
</tbody>
</table>
## Estimated average Body Mass Index (BMI) Spring 2012

<table>
<thead>
<tr>
<th>BMI</th>
<th>Male %</th>
<th>Female %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;18.5 Underweight</td>
<td>3.1</td>
<td>5.4</td>
<td>4.6</td>
</tr>
<tr>
<td>18.5-24.9 Healthy Weight</td>
<td>56.2</td>
<td>63.6</td>
<td>61.0</td>
</tr>
<tr>
<td>25-29.9 Overweight</td>
<td>28.2</td>
<td>18.8</td>
<td>22.0</td>
</tr>
<tr>
<td>30-34.9 Class I Obesity</td>
<td>8.4</td>
<td>7.0</td>
<td>7.5</td>
</tr>
<tr>
<td>35-39.9 Class II Obesity</td>
<td>2.8</td>
<td>3.0</td>
<td>2.9</td>
</tr>
<tr>
<td>≥40 Class III Obesity</td>
<td>1.4</td>
<td>2.2</td>
<td>1.9</td>
</tr>
</tbody>
</table>
Mental health on (US) campuses
Spring 2012

At any time within the past 12 months
• 86.1% felt overwhelmed by all they had to do
• 61.0% felt very sad
• 57.3% felt very lonely
• 50.7% felt overwhelming anxiety
• 45.3% felt things were hopeless
• 31.3% felt so depressed it was difficult to function
• 37.1% felt overwhelming anger
• 5.5% intentionally cut, burned, bruised, injured self
• 7.1 seriously considered suicide (1.2 attempted)
The Canadian University/College Experience

- NCHA Survey to be completed by over 30 post-secondary institutions in Spring 2013 (some now have baseline and comparative data)

- UVic will initiate to establish baselines, compare with other institutional settings, plan and implement strategies, and track progress
2. Towards a Healthy University of Victoria

a) Healthy Campus Champions

- **Build a Healthy Campus Advisory**
  
  Goal: Connect Deans, Assoc Deans, Educators, Service leaders, Practitioners and Students

  Goal: Develop shared understanding of campus health and wellbeing

  Goal: Meet 3-4 times each year to share information and link on collaborative projects

Projects underway:

- NCHA survey for baseline student health
- Mapping Project for a healthy student campus
- CARBC application on substance use
2. Towards a Healthy University of Victoria

b) Implementing a Settings Approach

- Adopted and Adapted a Settings Framework, guided by the Ottawa Charter;

- Will use this framework to guide our planning, implement projects/strategies and track our actions
Healthy University of Victoria Initiative

The UVic Healthy Campus Framework is guided by the Ottawa Charter for Health Promotion (1986), in which health is “seen as a resource for everyday life” and emphasizes social and personal resources, as well as physical capacities. In using a campus approach, “health is created and lived by people within the settings of their everyday life, where they learn, work, play and love”. Campus settings comprise natural, built, social and organizational environments/cultures. Health promotion actions that serve to increase control over and improve the health of our people include building healthy public policy, creating supportive environments, strengthening community actions, developing personal skills, and reorienting health services. Health is thus everyone’s responsibility!

<table>
<thead>
<tr>
<th>Health Promotion Actions</th>
<th>Population Lens</th>
<th>Environments and Cultures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strengthen Community Engagement and Action</td>
<td>Students</td>
<td>Natural</td>
</tr>
<tr>
<td></td>
<td>Faculty</td>
<td>Built</td>
</tr>
<tr>
<td></td>
<td>Staff</td>
<td>Social</td>
</tr>
<tr>
<td></td>
<td>Community</td>
<td>Organizational</td>
</tr>
<tr>
<td>Develop Policy to Promote Healthy Campus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create Supportive and Inclusive Environments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promote Personal Health and Wellness Practices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reorient Services and Academic Vision toward Health &amp; Wellbeing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Examples of First Steps

Strengthen community engagement and action
• Health Advisory Committee; Mental Health Task Force, NCHA data, Healthy Campus mapping project

Develop policy to promote healthy campus
• Immunization recommendations for post-secondary students; mandatory health insurance

Create supportive and inclusive environments
• Student Mental Health Action Plan; Academic targeted health partnerships, linking with UVSS and GSS

Promote personal health & wellness practices
• Student Health 101; Mental Fitness Boot Camp, Peer health helpers

And...
3. Reorienting Health Services:
A PHC Capacity Framework

Assumptions:

• Primary Health Care is the integration of primary care services provided to individuals plus population health strategies designed for targeted groups.

• A Capacity Framework serves to identify enhancing factors for improving people performance and actualizing organizational potential.
A Primary Health Care Capacity Framework

QUALITY OF CARE
Effectiveness

QUANTITY OF CARE
Efficiency

PATIENT HEALTH
Outcomes

POPULATION HEALTH
Outcomes

(Adapted from Quinn & Rohrbaugh, 1981; Quinn et al, 2011)
3. Reorienting Health Services: A PHC Capacity Framework

- Each quadrant in this PHC Framework represents a dominant culture, and all cultures require attention in order to extend PHC capacity.

- The care continuum axis differentiates the competing tensions and demands for care quality (effectiveness) and care quantity (efficiency).

- The care excellence axis shows the competing challenges in addressing both patient-centred health and population-targeted health.

- Actualizing PHC capacity requires enhancing these dominant cultures, while balancing competing demands, and this is unique to each organizational context and varies over time!
A Primary Health Care Capacity Framework

QUALITY OF CARE

Effectiveness

QUANTITY OF CARE

Efficiency

PATIENT HEALTH

Outcomes

POPULATION HEALTH

Outcomes

C A R E

C O N T I N U U M

Innovation Culture (create)

Evaluation Culture (count)

Leadership

Institution

Practitioner

Client

Relations Culture (collaborate)

Structure Culture (control)

PHC Capacity

(Care)

(Excellence)

(Care)

(Continuum)

(Adapted from Quinn & Rohrbaugh, 1981; Quinn et al, 2011)

© Judith Burgess
A Primary Health Care Capacity Framework

QUALITY OF CARE
Effectiveness

QUANTITY OF CARE
Efficiency

PATIENT HEALTH
Outcomes

POPULATION HEALTH
Outcomes

C A R E

PHC Capacity

C A R E

C O N T I N U U M

© Judith Burgess

(Adapted from Quinn & Rohrbaugh, 1981; Quinn et al, 2011)
Relations Culture

The Relations Culture is about the people who collaborate well and are internally driven toward a shared purpose.

Indicators include:

• Client confidence in care
• Practitioner shared care and teamwork
• Leadership cohesive values
• Institutional partnerships
Implementing a UVic Capacity Model: Examples

Relations Culture:

• Exploring student development theory and defining quality patient interactions

• Physician and nurse care augmented with psychiatry care and NP role, team building retreats and weekly practitioner meetings instituted

• Adopted Student Services value statement and developed a Team Charter with principles of practice

• Formalizing clinical and health promotion partnerships with campus units and with VIHA/MCFD
Structure Culture

The Structure Culture focuses on internal control of well defined procedures to guide people and ensure a smooth functioning operation.

Indicators include:

- Client access to care
- Practitioner communication processes
- Leadership human resource practices
- Institutional policies and resources
Implementing a UVic Capacity Model: Examples

Structure Culture:

- Improved patient access with flexible appointments and adding evening clinic
- Implemented electronic medical record and shared drive for improved communications
- Revised job descriptions, clarified roles, and expanded scopes of practice
- Developing institutional policies for increased student medical coverage, and making facility improvements
Innovation Culture

The Innovation Culture creates a dynamic participatory climate for people to be outward looking, forward thinking & embrace challenges.

Indicators include:

- Client engagement
- Practitioner programs
- Leadership vision and goals
- Institutional strategic planning
Implementing a UVic Capacity Model: Examples

Innovation Culture:

- Engaging students in learning placements, and facilitating a student mapping engagement initiative
- Developed Communities of Practice and focused programs for mental health, sexual health, health & wellness, public health, sports health
- Setting annual service plan and goals for clinical practice and population health strategies
- Linking PHC to institutional strategic planning
Evaluation Culture

The Evaluation Culture engages people in continual inquiry and improvement by clearly defining targets and focusing on what counts as evidence and outcomes.

Indicators include:

- Client best practice & results
- Practitioner standards and performance
- Leadership reporting and accountability
- Institutional funding and incentives
Implementing a Capacity Model: Examples

Evaluation Culture:

• Building EMR query skills, tracking encounter data; CoP best practice of PH, SxH, MH, underway with NCHA study and quality assurance planning
• Performance planning and review with team members started, translating practice standards
• Annual report and financial budget planning are prepared and presented to partners and VIHA funders
• Funding contracts have been revised and renewed
Conclusions

• The PHC Capacity Framework integrates the competing demands of patient health and population health in a continuum of care strategies.

• The Capacity Framework helps us to address the challenges of delivering and achieving both quality and quantity of care.

• The Framework also guides our post-secondary health service renewal through assessment, planning, implementation, and evaluation.
Questions?

Judith Burgess
Email: jburgess@uvic.ca