Nursing-Sensitive Quality Indicators in Public Health

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April 4, 2012
Agenda

- Research question
- Search strategy
- Search results
- Findings of included studies
- Limitations of included studies
- Recommendations
Investigative Team

- Monique Lloyd, RNAO
- Sara Clemens, RNAO
- Katie Dilworth, President, CHNIG
- Jo Ann Tober, President, ANDSOOHA
- Karen Quigley-Hobbs, President Elect, ANDSOOHA
- Carol Timmings, CNO, Toronto Public Health
The Research Question

“How is Public Health Nursing quality measured?”
Research Question

Population: Clients of public health nursing with no limits on type of program or service

Intervention: Public Health Nursing

Outcome: indicators, performance measures, quality assessment / assurance / monitoring
Inclusion Criteria

• Focus of paper
  – Indicators
  – A priori identification
  – Public health
  – Public health nursing
1,337 papers

Title & abstract review

BENCHMARKING

QUALITY INDICATORS

64 papers

Full text review

PHN EFFECTIVENESS

47 excluded

17 included

Not PHN

Practice standards

Quality barriers

Informatics

Data extraction

Practice standards
Search Results

<table>
<thead>
<tr>
<th>Types of Papers</th>
<th>Number of Papers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research studies</td>
<td>7</td>
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<tr>
<td>(1-2,7-9,12-13)</td>
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<tr>
<td>Narrative articles</td>
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<tr>
<td>(3,6,14-15)</td>
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<tr>
<td>Theoretical papers</td>
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<tr>
<td>(10-11)</td>
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<tr>
<td>Reviews</td>
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<tr>
<td>(4-5,16-17)</td>
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<tr>
<td>Purpose of Paper</td>
<td>Number of Papers</td>
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<td>------------------------------------------</td>
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<tr>
<td>Describe existing indicator sets</td>
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<tr>
<td>(3-4,14-15)</td>
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<tr>
<td>Propose theoretical model of service quality</td>
<td>4</td>
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<tr>
<td>(8,10-11)</td>
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<tr>
<td>Program evaluation</td>
<td>3</td>
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<tr>
<td>(5-6,17)</td>
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<tr>
<td>Indicator validation</td>
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<tr>
<td>(1-2,7,9,12-13,16)</td>
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## Search Results

<table>
<thead>
<tr>
<th>‘Clinical’ Topics</th>
<th>Number of Papers</th>
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<tr>
<td>Community-based non-acute care (1-2,4,9,14-15)</td>
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<tr>
<td>School nursing (3,7,10,13,16)</td>
<td>5</td>
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<tr>
<td>Maternal/family-child health (5,8,17)</td>
<td>3</td>
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<tr>
<td>Tobacco use (6)</td>
<td>1</td>
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<tr>
<td>Patient safety (11)</td>
<td>1</td>
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<tr>
<td>Patient-population (12)</td>
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</tbody>
</table>
Organizing Framework
Ontario Public Health Standards 2008
Findings – Capacity

Ontario Public Health Standards 2008
Findings - Capacity

- Intensity of PHN
  - # of nursing encounters or contacts
- Ratio nurses to “clients”
- Skill mix
  - Number of unlicensed personnel
- BScN preparation
- Interagency & community coalitions
Findings – Chronic Diseases
Findings – Chronic Disease & Injuries

Risk reduction

• Public education: availability & attendance / year
  – # of clients attending CV disease education
  – Nutrition and exercise programs
  – Participation of target population in attending risk reduction / screening programs

• Self-management education

• Obesity rates

• Health disparities – Diabetes
Findings – Chronic Disease & Injuries

Tobacco cessation
- # of smoke-free environments
- Population awareness campaigns
- Implementation of tobacco marketing policies
- Prevention / risk reduction programs for tobacco use
- Community interventions for tobacco cessation
Findings – Chronic Disease & Injuries

School Health
• Drug use
  – Rates of use
  – Alcohol and drug abuse awareness
  – Tobacco cessation interventions
• Curriculum
  – Health education (nutrition and exercise)
• Level of self-care management of health & symptoms
• Implementation of school nutrition policies
Findings – Family Health
Findings – Family Health

Infant & Child Health
- Birth & abortion rates
- Morbidity and mortality (failure to thrive)
- Breastfeeding rates
- Physical activity
- Health disparities – infant mortality
- Availability & utilization rates of community services

Maternal Health
- Physiological
- Psychological
- Health habits
- Maternal-child interaction
- Rates of 1st trimester prenatal care
Findings – Family Health

School health
- # of days missed due to illness
  - Improved hygiene (gastroenteritis)
- Asthma admission rate
- Failure to rescue
- Referrals (vision, hearing deficits)
- Knowledge, self-esteem, self-efficacy skills
  - Attendance rates at health promotion programs
- Delay of onset of sexual behaviour
  - # of teen pregnancies, births, abortions
- Early identification of eating disorders
- Levels of physical activity
Findings – Emergency Preparedness

Ontario Public Health Standards 2008
Findings – Emergency Preparedness

• # of trained staff members
• Schools
  – Number of ‘safe schools’
Findings – Infectious Diseases
Findings – Infectious Disease

Immunization

- Sufficient availability
- Rates of early childhood immunization
- Incidence of vaccine-preventable disease
- Screening of targeted high-risk groups
- Public education of benefits
Findings – Infectious Disease

Disease Surveillance

- Rates of community disease
  - STD rates per 100,000 population
  - School surveillance

- Accurate & effective communication of outbreak information

- Health disparities - tuberculosis
Findings – Environmental Health
Findings – Environmental Health

- Community assessments
  - Need for homeless shelters
- Rates of exposure to environmental hazards
  - Rates of lead exposure in children
Findings – Facilitators to Quality

“What aspects of PHN facilitate quality outcomes?”

Organization-level capacity
Evidence-based practice
Professional development
Findings – Barriers to Quality

“What negatively impacts nursing quality in public health?”

Lack of electronic documentation

Minimum staffing levels

Large caseloads
Limitations of Included Studies

• Process vs outcome indicators?

• Evidence-base for indicators?
  – “Popular” interventions & outcomes

• Nursing-sensitivity?
  – Public health nurses
  – Ontario public health
Thank you
Included Studies


