

1 **Teaching, Research and Knowledge Exchange Nodes: Key to**
2 **Strengthening Local Public Health Capacity**

3
4 **Issue:**

- 5 • Local public health unit capacity will be strengthened through Teaching, Research
6 and Knowledge Exchange Nodes that connect to the work of the Public Health
7 Agency for Ontario (Agency).
8

9 **Background:**

- 10 • The Capacity Review Committee's (CRC) Interim Report outlined issues to
11 consider in five areas necessary to improve Local Public Health Capacity.
12 • The province's five Public Health Research, Education and Development
13 (PHRED) Programs wish to commend the CRC and its subcommittees for the
14 work done to date and for the release of the interim report. The following is
15 provided to assist with future deliberations.
16

17 **Recommendations:**

- 18 1. Teaching, Research and Knowledge Exchange Nodes should be established to
19 create a bridge between the Public Health Agency for Ontario (Agency) and local
20 public health units across the Province (by the Ministry of Health and Long-term
21 Care (MOHLTC) in collaboration with the Agency).
22
23 • The Agency's strategic research vision and tools must connect with front-
24 line practice. Facilitation and coordination through the Teaching,
25 Research and Knowledge Exchange Nodes by the Agency, will help
26 accomplish this goal.
27 • Regional Nodes will model and facilitate the integration of knowledge
28 transfer and exchange into daily local public health practice as a way of
29 doing business, not just an activity. Closer connection to regional issues
30 (e.g. aboriginal and francophone issues, rural injury rates, urban issues)
31 and involvement of users of the data is the best strategy to ensure
32 knowledge exchange.
33 • Other regional agencies may also benefit from access to the public health
34 expertise in Teaching, Research and Knowledge Exchange Nodes and this
35 structure fosters regional partnerships. An example of such a model is the
36 Northern Perinatal and Child Health Survey Consortium.
37
38 2. Regional Nodes should be funded 100% provincially by the MOHLTC, with
39 multi-year budgets and resources adequate to meet deliverables and should be
40 complemented with enhanced funding to local health units to support meaningful
41 participation in research and education activities.
42
43 • Equitable, sufficient and reliable access across the province can be assured
44 with such a model.
45 • A regional model of nodes of expertise allows the Public Health Agency
46 for Ontario to extend their work into the field and facilitates the

1 transmission of local research needs back to the Agency to develop a
2 provincial research agenda.

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4 3. The Teaching, Research and Knowledge Exchange Nodes should be located in
5 designated health units to ensure that research and education is grounded in
6 practice and to facilitate equitable access across the province and allowing for a
7 hub of research and education expertise in each Node, which will complement the
8 critical mass of the Agency.

- 9
10 • Each local public health unit would link and derive local benefit from
11 Teaching, Research and Knowledge Exchange Node consultations on
12 evaluation, ethics issues, sources of evidence, etc. An advantage of
13 regional Nodes is the increased ability to establish relationships – a key
14 factor in effective consultation and collaboration.

15
16 **Value added through Teaching, Research and Knowledge Exchange Nodes**

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18 The Regional Nodes will engage local health units within a region and faculty from
19 academic institutions as active participants/partners. Health unit representatives,
20 academics and centre staff will meet twice a year to:

- 21 - identify local research questions to inform a provincial research agenda
22 - develop and monitor a local research work plan, consistent with local needs
23 and the provincial research agenda
24 - develop a knowledge exchange operational plan to meet regional needs
25 - identify opportunities for undergraduate and graduate student placements and
26 projects/thesis topics for graduate students
27 - identify regional continuous learning needs related to applied public health
28 research, program evaluation, numeracy skills
29 - oversee regional events to meet identified learning needs

30
31 Regional staff will be a conduit for research and evaluation input to the Agency from the
32 field to inform a provincial agenda and similarly will facilitate and support the sharing of
33 Agency tools, resources and strategies with the field.

34
35 This model builds on the experiences of the Health Intelligence Units (HIU) in engaging
36 local health units. Similarly, the experiences of the Northern Ontario Perinatal and Child
37 Health Survey Consortium offer a concrete example of the proposed model in action.
38 This successful initiative demonstrated the complementary roles of provincial leadership
39 (identified research agenda, clear expectations and timelines, good accountability),
40 regional coordination and support role (in this case by PHRED Program), academic
41 partnership of three northern universities, northern HIU and most importantly meaningful
42 participation of all seven northern health units.

43
44 Like the Centres for Disease Control (CDC) in the US, which sends CDC staff to work in
45 local health units, node staff working on regional projects will be closely aligned with
46 health units, and will work in partnership with local staff.

1 Using the key functions outlined in the interim report, the Teaching, Research and
2 Knowledge Exchange Nodes will add value to local health units, the Agency, and to
3 academic institutions specifically in the following domains:
4

5 **Research & Knowledge Transfer**

6 7 **A. Regional research supports**

- 8 • Bring together a hub of practitioners, closely aligned with the Agency, to support
9 the integration of research into practice and policy, through a variety of channels
10 including regional workshops to strengthen critical appraisal skills, build
11 numeracy skills.
 - 12
 - 13 ○ Practitioners may include: knowledge brokers, student placement
14 coordinators, program evaluators, epidemiologists, librarians, research
15 assistants, IT supports, planners, administrative assistants,
16 communications specialists and discipline-specific leaders and specialists
17 in specific topic areas.
- 18
- 19 • Conduct locally relevant research with applications across regions, and
20 collaborate in system-wide research, which makes significant contributions to the
21 practice of public health and policy development, (for example, the investigation
22 of local support for tobacco by-laws, which translated, into local by-laws).
- 23
- 24 • Engage multi-disciplinary staff from academic institutions to better access
25 funding opportunities and to produce research relevant to local needs (encourage
26 affiliation agreements and alternate arrangements, such as cross appointments).
27 For example, research on childhood obesity which brought together medical,
28 human ecology, and public health researchers and front line staff.

29 30 **B. Regional knowledge exchange supports**

- 31 • Provide staff with the necessary skills sets and dedicated time to communicate
32 Agency research findings to local public health unit staff and decision makers to
33 incorporate evidence into programming and policy, thereby improving practice at
34 regional and local levels.
- 35
- 36 • Tailor best practices to meet specific local needs.
- 37
- 38 • Build the capacity of staff to use evidence by providing information specialist
39 expertise through regional library services.
- 40
- 41 • Evaluate the impact of research and knowledge exchange efforts at the regional
42 and local levels, (for example, build on the work of Dobbins et al. on the
43 effectiveness of specific knowledge exchange strategies).
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1 **C. Regional links for Agency functions and products**

- 2 • Disseminate and facilitate local implementation of Agency products and services,
3 using the expertise and academic and practice partnerships which have been
4 developed in the dissemination of products such as the *Benchmarking Toolkit*, the
5 *Program Evaluation Toolkit*, the *Nursing Mentorship Resource Guide*, and a
6 *Public Health Research Ethics Toolkit*.
7
8 • Work with local staff to use evaluation strategies and tools developed by the
9 Agency.
10
11 • Serve as a bridge between the Agency and local health units to better tap field
12 expertise and ensure the needs of the field re: best practice information, research,
13 and evaluation are heard and contribute to shaping the education and research
14 agenda.
15

16 **D. Regionally accessible expertise**

- 17 • Provide research, program planning and evaluation expertise, including the
18 validation of tools and measures, and support to local health unit research
19 projects, (for example, through individual consultations, seminars or regional
20 workshops).
21
22 • Serve as centres of expertise for research activity with specified subpopulations
23 (i.e. northern, rural, Aboriginal, Francophone) and content (i.e. applied public
24 health research, knowledge exchange, child health, prevention of obesity, public
25 health human resources recruitment and retention).
26
27 • Build on the Effective Public Health Practice Project, (for example, conduct new
28 systematic reviews and summary statements of existing systematic reviews to
29 inform evidence-based public health programming and to assist in revisions to the
30 Mandatory Health Programs and Services Guidelines).
31

32 **Human Resources**

33
34 **A. Training of future practitioners through formalized affiliation
35 agreements with local academic institutions**

- 36 • Provide public health input into curriculum through links with local academic
37 institutions.
38
39 • Coordinate student placements through a regional program and dedicated staff in
40 each health unit (for example, the PHRED Connection has developed common
41 tools to facilitate student placements).
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43 • Market public health as a career of choice through established partnerships with
44 students and faculty.
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46 **B. Staff development of current practitioners**

- 47 • Integration of teaching, research and practice aids recruitment and retention.

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- Provide sites for practicum and skills enhancement training sponsored by the Agency, to increase capacity in applied public health research skills including program evaluation.
- Engage academic partners in providing continuous learning events to meet local needs, (for example, a local Faculty of Nursing offers an education day in a local health unit on mentoring).
- Facilitate “communities of practice” for public health professionals across the regional node areas, and host annual forums on professional practice.
- Provide “real-time” accessible expertise—experts at the end of a telephone which practitioners may reach when immediate answers to research, teaching and/or public health practice questions arise.

Accountability

- House professionals with epidemiological skills to support local public health unit surveillance and reporting, a necessary ingredient for evidence-based planning and service delivery.
- Work with local health unit staff to complete meaningful analysis and consistent interpretation of local data, which can be incorporated into, or inform, provincial reports and program and policy decisions.
- Participate in the development of standardized indicators and performance measures, by facilitating input from the local level.
- Provide a hub of skilled staff with performance measurement expertise to guide local health units to monitor and improve health unit effectiveness and efficiency.

1 **A Future Vision**

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3 Teaching, Research and Knowledge Exchange Nodes will help realize a new
4 vision of public health in Ontario. Nodes must be founded on a number of principles
5 including close alignment with the Agency, partnerships with local health units, academia
6 and the integration of research, practice and teaching, principles that support applied
7 public health research, innovation and dissemination. Node activities will be based on a
8 partnership model and will include face to face and virtual consultations e.g. phone,
9 email, instant messaging, videoconferencing, regional workshops etc. to disseminate and
10 facilitate the uptake of new knowledge; co-ordination of both regional and provincial
11 research initiatives (e.g. Provincial Health Status Report, Francophone Health Status
12 Reports, benchmarking), and partnerships with academia that facilitate the opportunity to
13 influence public health content in curricula, provide student placements and to engage
14 faculty in applied public health research.

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16 The locations of the new Teaching, Research and Knowledge Exchange Nodes
17 must provide equitable access for public health practitioners and decision makers across
18 the province and allow for complementary hubs of research and education expertise in
19 each site to support the work of the Agency.

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