

# Fostering workforce capacity to maximize opportunities for the digital transformation of public health in Canada

### **Project update Public Health in Canada Advisory committee**

Ihoghosa Iyamu & Mark Gilbert | December 2023

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## Phased multi-methods approach

Phase 1 Rapid review of literature

Phase 2 **Environmental** scan

Phase 3 Focus groups with Canadian public health practitioners

In progress

Knowledge Translation with faculty members at Canadian schools of public health

Next steps

Completed

8/15/2024

# Phase 1 - Rapid review: identified 45 unique competency statements

# 1 potential new competency category

#### **Public health sciences**

 Develop and ethically apply research methods including data science, statistical genetics and omic technologies (i.e., exposomes), computational biology, epidemic and infectious disease modelling to public health problems.

#### Communication

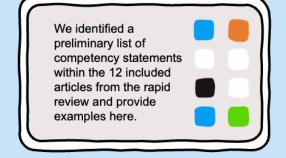
 Use mass media, electronic technology, and communication methods (e.g., social media) for public health communication, health education and promotion.

# Partnerships, collaboration and advocacy

- Use new media to conduct advocacy e.g., social media.
- Manage Information technology (IT) operations related to project or program and those managed by external organizations.

# Data, data systems management & governance

- Apply policies and security protocols to protect confidential information in electronic files and computer systems while maximizing the benefits to public health.
- Develop public health information systems that are interoperable with other relevant information systems.



#### **Assessment and analysis**

 Use, protect and interpret complex, linked large data sets from multiple sources from administrative, clinical, biologic, environmental, population to social/societal levels, within and outside the health systems.

# Policy and program planning, implementation and evaluation

 Design, implement and evaluate population-based projects, programs or interventions that use social media as a communication platform and a tool for public health education and promotion.

#### Leadership

 Support development of strategic directions for public health informatics within the enterprise.

## Diversity and inclusiveness

 Develop team approaches that bring together diverse disciplines and organizations to develop new and creative ways of designing and implementing studies and addressing public health concerns.



## Phase 2 - Environmental scan

Programs and courses included from the two staged search (N = 56)

51 at graduate level, 4 at undergraduate level, 1 Bachelor and masters. Europe 11 Programs 4 interviews conducted to understand the role of partnerships in program/course development (N = 4) Germany: 2, U.K.: 3, Sweden: 1, Portugal: 1, Ireland: 1, France: 1, Demark: 1, Netherlands: 1 Public health data 2 Interviews: 1 Germany, 1 27 **Netherlands** science Programs 20% Public health data informatics/ Information management 56 Digital health, public **North America** 13 40 Programs health communication: a US: 35, Canada: 5 mixed bag Australia 1 Interview: McGill University 2 Programs Asia 1 Interview 3 Programs India: 2, Brunei: 1

8/15/2024



## Step 3: Focus groups public health practitioners

- 4 Focus groups completed
- 1 Eastern and Central Canada, 2 Western Canada and 1 practitioners serving indigenous populations.

### **Findings:**

- Need to tier digital competencies.
- Exploring digital resource persons within organizations and public health systems.
- Individual digital competencies are potentially limited by public health systems digital capabilities – resources, infrastructure, policies and equity.

3/15/2024



## **Next steps**

- Complete focus groups January 2023.
- Planning KT event with public health faculty to inform final recommendations.





# Thank you.

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