LEARNING OBJECTIVES

After completion of this chapter, the student will be able to:

- Explain the importance of evidence-informed health related information for program planning and evaluation;
- Discuss the growing importance and use of web-based technologies and platforms to plan for, develop, implement and disseminate information related to a variety of primary health care programs in Canada and globally;
- Define and differentiate between the terms program planning, strategic (allocative) planning, operational (activity) planning, program evaluation, formative evaluation, process evaluation and summative evaluation.
- Recognize and describe the importance of including key stakeholders in program planning and evaluation processes.
- Describe the significance of program planning and evaluation by health care professionals, workers and policy makers in Canada and internationally;
- Describe how program logic models may be utilized by health care professionals and workers to assess the impact of public health programs in Canada and abroad;
- Describe and differentiate between the 8 critical steps of the program planning and evaluation process;
- List and describe how health services research (HSR) and outcomes research can be utilized by public health care professionals, workers and policy makers to monitor, evaluate and/or improve primary health care services and initiatives in diverse populations across the lifespan, and
- List and discuss ethical considerations and principles related to program planning and evaluation for public health professionals and workers.
### CORE COMPETENCIES FOR PUBLIC HEALTH ADDRESSED IN CHAPTER 10

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### KEY TERMS

- Ethics
- Evidence
- Disability-adjusted life year
- Gantt chart
- Heart services research
- Interactivity
- Outcome
- Outcomes research
- Process evaluations
- Program planning
- Stakeholders
- Structure
- Summative evaluations
- Teleology
- Evidence-informed public health
- Deontology
- Formative evaluations
- Health service
- Impact measures
- Operational or activity planning
- Outcome measures
- Planning
- Program evaluation
- Public health ethics
- Strategic or allocative planning
- Structural evaluations
- Task development time line
- Utilitarianism
CHAPTER 10 HIGHLIGHTS

Increased public scrutiny in Canada; demands for transparency and accountability and how public funds are being employed, program planning and evaluation are critical components to address current and emerging health issues and challenges. Several steps of the program planning and evaluation process mirrors the research process detailed in the chapter entitled “Essential Research Methods for the Practice of Public Health” (e.g., critical examine the existing scientific literature, design and plan interventions, evaluate outcomes, disseminate findings).

In recent decades, both the access and use of internet-based health resources has greatly expanded globally by both health care professionals and workers and by the lay public. For example, the Canadian Best Practices Portal for Health Promotion and Chronic Disease Prevention by the PHAC (See link http://cbpp-pcpe.phac-aspc.gc.ca) was developed to enhance knowledge exchange between health care professionals; and as a central hub to access over 255 best-practice and evidence-informed interventions related to the prevention of a variety of chronic diseases in Canada that are consistently being updated. In addition, this portal consists of a searchable database, a variety of primary health care goals, and resources to assist with program planning and evaluation. Public health care professionals can also register to complete a variety of related skills enhancement modules online. Portals such as these are increasingly being accessed and utilized by various public health care professionals and workers to assist with program planning and evaluation. Interactivity is defined as a process where a user is an active participant in utilizing technology and for acquiring and engaging in the exchange of information.

Program planning is a critical component of public health which seeks to make informed decisions today based on the best-available evidence to influence future health outcomes and directives based on competing resources and/or priorities. Program planning is defined as an organized and structured systemic decision-making process which attempts to meet specific primary health care aims or objectives through the application of currently available, competing or needed resources in the future based on identified priorities or projected needs. Strategic or allocative planning is defined as an open and transparent formalized decision-making process which seeks to determine which health care needs should be addressed in accordance with the available resources and closely resembles policy making. The establishment of health care needs or priorities may be situational (e.g., aging population) or reactive in nature (e.g., SARS, H1N1 pandemic). Operational or activity planning is defined as a formalized decision-making process which focuses on the implementation of plans based on detailed time frames. Short periods are described as those that are typically a few months to a year in duration, whereas a period of 5 or more years is generally employed as the standard time frame for long-term planning activities.

Program evaluation is defined as a formalized ongoing and dynamic process which seeks to monitor, assess and refine health program activities and interventions and to identify gaps or actual or potential flaws in the original program design and implementation. The authors argue that current interest in so-called “results-based
financing” for health outcomes are increasing the pressure on public and private health funders and implementers to carry-out formal program impact evaluations. Evaluation in public health may be viewed as a process that is ultimately intended to determine the worth of something, presumably in comparison with some norm or standard of goodness. The process of making appropriate comparisons can sometimes be a challenge in terms of comparing one public health program with another due to a variety of complex physical and social-political issues (e.g., transportation issues, availability of required infrastructures, access in remote communities, unemployment, and availability of health care professionals).

There are a variety of program evaluation types that can be broadly classified into the following three main categories based on when the evaluations are being conducted and the type of information being collected: (i) Formative; (ii) process, and (iii) summative. Formative types of evaluations focus on public health programs that are being planned and developed to help ensure that the stakeholder’s needs are being addressed and that the program uses effective and appropriate structures, resources, facilities, procedures and/or materials. The term “structure” is often used to describe all the resources and personnel required to support the health process. Process evaluations focus on programs that have gone through the formal planning stages and have been implemented or are already underway and seek to answer the question “What health services are actually being delivered and to whom?” Lastly, summative evaluations are carried-out for health programs that are well underway or have been completed and can be used to assess short-, medium, or long-term aims, goals or desired outcomes of the program both intended and unintended.

An outcome measure evaluates what specifically occurred as the result of the health program being implemented in terms of its noted aims or goals. Conversely, impact measures are used to evaluate the effect of the implemented health program on the users, stakeholders and implementers and specifically measures what changes (positive, negative, or neutral) occurred as a result of the program.

The authors describe eight critical steps in the program planning and evaluation process. The first step includes the need to conduct a needs assessment and the active engagement of stakeholders and implementers (e.g., public health nurses). Stakeholders are defined as all individuals or groups (both internal and external) who have an interest in the program or those who may be affected by the program either directly or indirectly including community volunteers, potential program participants, policy makers, governmental agencies, NGO’s or industry. The second step requires that the stakeholders and implementers collectively describe and detail the program’s aims or goals. The third step involves the development of a draft proposed action plan, design or approach and a proposed evaluation model based on the best-available scientific evidence. Step four consists of seeking feedback from the stakeholders and implementers regarding the draft proposed action plan, design or approach and proposed evaluation model. During step five, the action plan, model or design is formally refined based on the feedback and suggestions received. The formal implementation of the action plan, model or design occurs during step six of this process. Step seven consists
of the evaluation the successes and outcomes of the program via the formal
documentation of the evidence and outcomes achieved to justify the conclusions reached.
The last step of the program planning and evaluation process involves the dissemination
of the program findings and outcomes achieved with the stakeholders and implementers.

There is a plethora of program planning and evaluation models available that
public health care professionals and workers could utilize. A discussion of all these
models is beyond the purpose and scope of this introductory level chapter. Nonetheless,
this chapter provides a description of the program logic model that is used extensively in
many municipal, regional, provincial and federal governmental public health agencies in
Canada. These models are widely employed because of their simplicity for use and ability
to clearly reveal program interrelationships and linkages and provides a diagram of what
the program is intended to do, with whom and why. The development of a logic model
consists of two main planning stages: (i) CAT, and (ii) SOLO. During the CAT stage,
activities are typically clustered thematically into components for the public health
program under construction or review. Conversely, curing the SOLO stage, short and
long-term health related outcomes are identified.

A health service is simply any primary health care service provided by a public
health care professional or worker for the purpose of maintaining, promoting, protecting,
and/or restoring the health of diverse populations across the lifespan. Health services
research (HSR) is defined as an integrative and multidisciplinary scientific field that
involves the integration of knowledge, and the study and evaluation of the organization,
functioning and performance of health services. HSR requires the evaluation of the
following four critical components: (i) Structure; (ii) process; (iii) output, and (iv) outcome.
An outcome for a public health service provided includes all possible results (e.g.,
negative, positive, neutral) that may stem from exposure to a known causal factor,
determinant of health and/or from a primary health care intervention.

Outcomes research seeks to study the specific outcomes of primary health care
interventions and seeks to determine why these end results were obtained or not. We
learned that outcomes research is designed to critically and objectively examine and
document the effectiveness of health care policies and services and the results of care
provided to clients. We described Donabedian’s (1987) framework for conducting
outcomes research based on the following three factors: (i) Structure of care; (ii)
processes and (iii) outcomes. The emphasis on evaluating the quality of primary health
care interventions has shifted from structures to an understanding of the critical processes
involved. Lastly, this chapter provides an overview of basic ethical principles and
considerations that are critically for program planning and evaluation and for the practice
of public health in Canada and globally.
TEACHING STRATEGIES AND SUGGESTED CLASSROOM ACTIVITIES

- Chapter 10 provides an introduction to program planning and evaluation in public health. Instructors are encouraged to reinforce the notion that this process involves examining the best available evidence by both the concerned stakeholders and public health professionals and workers. It is important to emphasise the fact that the “evidence” may come from a variety of sources (e.g., published reports, village elders) and both qualitative and quantitative in nature. Instructors are encouraged to note that the process of program planning and evaluation often involves personal perspectives, interests, and various ethical considerations. Hence, this process is best understood and examined in the context of an applied ethics that is relevant to all public health professionals, workers and stakeholders concerned.
- Instructors are encouraged to reinforce key terms, concepts, definitions and themes and introduce the idea that they will be interwoven throughout the entire course.
- Students are often visual learners who benefit from the use of diagrams, charts, photos and/or short films.
- Instructors are encouraged to utilize examples from the chapter and to also provide local, regional, national or international examples to provide context and meaning for the students.
- Power point lecture slides have been prepared for Chapter 10, which are intended to highlight and reinforce key terms, concepts, definitions and essential content.
- Group activity-based learning boxes are integrated throughout the chapter and are also highlighted as Power point slides (see slide 27).
- The Group activity-based learning boxes have been designed to encourage group thinking, negotiating and problem solving approaches to a variety of public health issues and instructors are encouraged to devote approximately 15-20 minutes of class time to these learning activities. The instructor may also choose to devote time to an on-line discussions and/or forums (e.g., 30-45 minutes) for on-line or hybrid-type courses.
- The Group review exercise box at the end of each chapter has been designed to encourage students to apply theory, think critically, problem solve, and discuss current and emerging public health issues or problems. Instructors are encouraged to use these review exercises, which consist of Canadian and international film documentaries or investigative reports, to review and reinforce key concepts, definitions, and themes covered in the chapter.
- The instructor may also assign the Group review exercise as a graded assignment and/or exam material.
- Critical thinking questions are provided at the end of this chapter and as Power point slides (see slides 52-53). These questions have been designed to encourage students to engage in critical reflection and thinking, and to reinforce specific learning objectives for the chapter. Instructors are encouraged to devote approximately 15-20 minutes of class time to review and discuss these questions. The instructor may also choose to devote time to an on-line discussions and/or forums (e.g., 30-45 minutes) for on-line or hybrid-type courses.