OUTLINE: CONTINUING PROFESSIONAL DEVELOPMENT SESSION -- "PITFALLS AND TIPS IN INTERPRETING MEASURES OF POPULATION HEALTH STATUS."
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Overview and Instructional Objectives:
Policy and programme staff – working at various levels of public sector administration -- often have to interpret reports on the health status of populations served (e.g. for assessing progress towards specific health improvement goals). These reports typically make use of *routinely collected data* such as: mortality and birth-related outcomes from vital statistics; hospitalizations; case counts from cancer (and occasionally other) disease registries and other mandatory disease reporting systems; and health survey results. However, such data are easily misinterpreted.

This course provides the learner with:
- A summary of the most commonly observed "pitfalls" in interpreting such data, based on the authors' epidemiological experience over many years, internationally – using recent examples from health status reports in a range of jurisdictions.
- A set of suggested "tips" to avoid such misinterpretations, including additional questions to ask, and subsidiary *but basic* analyses to request, to help sort out what is really going on, when these sorts of data are potentially misleading, confusing or contradictory.

Core Content:
- Prevalence and incidence – when does the difference matter? (e.g. for setting useful health improvement targets)
- Understanding the population-level drivers of care volume and costs
- Pros and cons of using log-transformed graphs of mortality and incidence rates
- A tricky kind of rate best avoided (but widely seen in reports of health status)
- Examples of "cherry picking" of health outcomes by special interest groups
- Why some time-trends in rates of health outcomes are smooth, and some are not – and the implications of "latency"
- Key insights from basic *cohort analysis* of time-trends in health outcomes, by age

Target Audience/Pre-requisites:
This is targeted at learners who have completed at least some MPH-level courses at the introductory level in statistics and epidemiology – although pre-MPH learners with public health professional experience have benefited from it without such courses.

Format:
The interactive 2-hour-long session is based on a slide presentation that pauses, for a few minutes, after every three to five slides introducing each of the above seven topics, to present a "Test Yourself" quiz question. Each question relates to a common issue of interpretation of the sort of widely used data just presented (e.g. all of the examples are commonly seen in health status reports at the local/regional and national level). Each pause will give a chance to participants to discuss the quiz question with whomever is sitting next to them in the session (typically groups of two to three work best – ideally this is done at desks/tables, rather than in a lecture theatre, so they can face each other during each pause). Then, after a few minutes, the presenter will provide a "suggested answer" to the question posed, followed by questions and comments from participants about that question and the suggested answer (e.g. any aspects of the suggested answer with which they disagree, or are unclear about).

Hard copies of all slides, including a set of "suggested answers," will be shared with participants, as a record of the session content for their personal use.