

How population-based practices can improve patient outcomes

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Not too long ago, several postings to a PA listserv addressed how public health should play out in PA practice. The take-home message was that PAs should pay more attention to the use of population-based public health interventions in the care of their patients.

That is, patient care management should be based on the big-picture or population perspective of health care.¹ This approach is grounded in the American Medical Colleges' Medical School Objectives Project, which describes evidence based public health techniques (EBPHT).² The EBPHT approach frames patient care into a question, such as "What are the options for addressing heart disease?" rather than jumping to a traditional approach, such as "How can we intervene with a drug treatment?" Unfortunately, reimbursement issues, interest, and so forth have programmed most clinicians to chase the latest technology and focus on how these technologies help individual patients, as opposed to a specific population. This approach is bankrupting the US health care system and fails to prevent problems.

This topic is so important that the Institute of Medicine now recommends that all health care providers practice population-based medicine, and preferably recommends that all college students have access to education in public health (Public Health 101 and Epidemiology 101) before entering their field of choice.^{3,4} Yes, *everyone*—even students whose majors are in education, fine arts, communication, engineering, and so on. And don't forget the pre-PA major. Talk about a population-based intervention!

My 20-year career as a practicing PA, an academic PA, and now a public health educator has allowed me a unique view into how health professionals define public health. A typical response is: "I take public health approaches into consideration all the time, considering my patients are part of the 'public' and I take care of their 'health.'" (By the way, public health combines science, specialized skills [eg, health education, patient education, and health care policy], and beliefs that help maintain and improve the health of communities.) This response, and the fact that medical practice is so individually based—providing single, individual interventions as opposed to population-based care—makes one wonder if providers really know (or care about) public health.

So, what is a PA to do? Well, a place to start is becoming educated on the topic and attending a continuing medical education (CME) course that teaches the basic concepts of public health practice, the differences between medicine and public health, and how the two can be combined to improve the health of populations, not just individual patients. But before you attend a CME course, set outcome goals within your office practice and provide interventions to reach these goals. These goals can be based on improving your practice health outcomes, quality, access, and so forth. Last, utilize the CDC's approach to patient care to meet your goals.⁵

- **Problem** Describe problems using concepts from descriptive epidemiology (e.g. prevalence of diabetes in my community and practice, average A1C among my patients with diabetes, etc.).
- **Cause** Examine the evidence for risk factors, causation, and efficacy.
- Interventions evaluate a range of options from prevention to cure to rehabilitation, relying on evidence-based recommendations (e.g. population-based approaches to decreasing obesity in your community).
- **Implementation** Consider a range of strategies, including patient- and population-oriented approaches for implementation that answer questions of when to intervene, what method to use, and at whom to target the intervention.

When you have goals for your patient population, you can see how your population compares to your community and to larger geographic areas. Several national surveys are available for comparing your practice outcomes with national outcomes (eg, National Health Interview Survey).

A concrete understanding of the relationship between medicine and public health is essential for excellent PA practice. Ruis and Golden pointed out that “what seems to be different now than at any other time in our country’s history is the intense national focus on health care, including quality, safety, access, outcomes, and effectiveness.”⁶ Utilizing evidence-based public health approaches in your care of patient *populations* will likely demonstrate your value to the larger health care system.

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