



**NATIONAL ASSOCIATION OF
CHRONIC DISEASE DIRECTORS**
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Article/Publication:

Quality Improvement Interventions in Public Health Systems: A Systematic Review

Source:

Dilley JA, Bekemeier B, Harris JR. Quality Improvement Interventions in Public Health Systems: A Systematic Review. *American Journal of Preventive Medicine* 2012; 42(5S1):S58-S71.

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Theme(s) and/or STAR Framework Component(s):

- Organizational Development

Relevant NACDD Chronic Disease Competencies:

1. Use program evaluation findings to improve program performance.
2. Apply current techniques in decision analysis and planning for chronic disease.
3. Identify the factors that influence the delivery and use of public health programs and services.
4. Know and apply the Chronic Disease Indicators.
5. Guide the translation of research into chronic disease programs and activities.

Introduction/Purpose:

This article reports a review of literature on quality improvement (QI) interventions in public health, examining the impact that the 15 identified studies (18 separate QI interventions) had on public health service performance or health outcomes. Implementation mostly occurred at the state-level or at large local public health departments.

Summary:

The article frames its discussion around quality improvement as an approach for public health leaders to maximize public health effectiveness within the context of resource constraints. The study is based on the theory that QI interventions are applied for the purpose of improving public health service performance, which leads to improvements in the public's health. The authors identify 15 peer-reviewed studies across three functional categories: 1) organization-wide QI, 2) program- or service-specific QI, and 3) administrative or management function QI. Several themes pivotal to QI success emerge in the literature; for example, top-level leadership engagement is a key influence for QI projects to succeed and a barrier if not in place or during leadership changes, and similarly managers' engagement (through QI or program evaluation within their job descriptions or by individual outreach) is associated with QI success. The authors emphasize that few studies link public health QI initiatives with health outcomes, but it is important to do so. The article discusses several limitations for consideration: one is that smaller scale QI interventions may be happening but not published in the literature, and another is that QI interventions in smaller health departments, tribal health departments, or broader, non-governmental public health systems are not a part of this study.



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Application to Chronic Disease Leadership and Practice:

Chronic disease units are becoming increasingly committed to the use of continuous quality improvement to guide and improve practice. As the authors acknowledge, growing interests in public health accreditation increase accountability to both policymakers and the public and can influence increased QI interest and activity. To respond on the need to link QI interventions to public health service performance and health outcomes, chronic disease public health practitioners, with support from funding agencies and partners, may be well-positioned to carry out this effort. For example, public health's partnership with health care on targeted chronic disease diagnoses for select subpopulations can be leveraged to make desired connections between evidence-based practice guidelines, public health intervention, and prioritized quality measures in demonstrating improved health outcomes. The article largely pertains to NACDD competencies within the area of Use Public Health Science.

Reflection Questions (to consider upon reading the full article):

1. A takeaway from this article is that QI efforts need to be linked to health outcomes.
 - a. How has this been approached by your state health agency?
 - b. Does your unit or team have capacity to do this? What resources (e.g., staffing, partners, technical assistance, etc.) do you need to help strengthen this arm of QI intervention?
2. What types of QI interventions has your unit or team undertaken, particularly with a focus on public health service performance, health outcomes, or other program-related activities? What do you see as the benefits, and how have your QI findings shaped practice?
3. How does your QI work intersect with your evaluation efforts? For example, are the same staff or different staff involved?
4. Which areas of chronic disease would you like to prioritize in future QI work? What might be some "low-hanging fruit" you have not yet taken on? Conversely, what are some more in-depth projects you can envision?

Additional Notes:

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