

Public Health Practice Guideline: A Case Study of Council Activities
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In an attempt to bring the academic and practice communities together to address an acute need in public health, the Council on Linkages between Academia and Public Health Practice (the Council) initiated the Public Health Practice Guidelines Project. This project began in 1994, with the initial purpose of determining the feasibility and desirability of developing guidelines to aid the practice of public health. The W.K. Kellogg Foundation provided initial funding for the project, with a \$150,000 grant.

The first year of this effort, Phase I, was directed toward; 1) researching whether sufficient evidence was available upon which to develop practice guidelines in public health; and, 2) determining the feasibility and usefulness of practice guidelines. During Phase I, the project focused on four target areas – prevention of lead poisoning in children, achieving complete and timely childhood immunizations, completion of treatment for tuberculosis, and prevention of cardiovascular disease. Expert panels, with individuals from research and practice settings, were assembled to develop recommendations for each target area. The panels carried out extensive reviews of the literature prior to developing their recommendations.

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At the conclusion of Phase I, the panels and the Council (as the project's advisory body) determined that guidelines were feasible and highly worthwhile; and that even though the evidence for each target area was not complete, there was sufficient information from which to develop guidelines. In October 1995 the Council published *Practice Guidelines for Public Health: Assessment of Scientific Evidence, Feasibility and Benefits: A Report of the Guideline Development Project for Public Health Practice*.

Building on the findings and recommendations from Phase I, the W.K. Kellogg Foundation funded a second phase to determine if guidelines could actually be developed. During Phase II, the Council moved ahead with the development of draft guidelines for two of the four target areas – completion of treatment for tuberculosis and the prevention of cardiovascular disease. The general format for the guidelines consisted of delineating strategies and linking them to evidence.

In 1996, based upon the Council's experience, the Assistant Secretary for Health and various agency heads of the U.S. Public Health Service endorsed further guideline development. Additionally, they suggested a partnership between the Council and the Centers for Disease Control and Prevention (CDC) in order to speed the development process. Today, the Community Preventive Services Task Force of the U.S. Public Health Service, under the direction of the CDC, is developing a series of guidance documents to be published as volumes of a publication titled *Guide to Community Preventive Services*. The first volume, addressing the area of immunizations, was released by the Task Force earlier this year.

What are practice guidelines?

Health-related guidelines are not a new idea – a multitude of guidelines currently exists. However, current sets of guidelines are often not population-based; instead they focus on treatment of the individual and often ignore community preventive measures. In addition, many guidelines are not scientifically based. With the development of a set of science-based public health guidelines focusing on population-based interventions, public health practitioners will be able to implement effective prevention programs that improve a community's health, and also document the outcomes.

The process of literature review and guidelines development (which was Phase I of the Council's project) included representatives from federal, state and local health agencies; managed-care and other private health care organizations; academic institutions; community organizations; and national associations; as well as primary-care physicians. Members of the Health Program Alliance of Johns Hopkins School of Public Health served as staff support to the project. Literature searches were performed on Medline and other electronic databases, and requests were made to experts in each of the target areas for identifying additional resources, where appropriate literature resides. Two databases were used to catalogue the information, a Reference manager database and a Guidelines Database (created for this project by Johns Hopkins staff). Relevance of available evidence was scrutinized for its applicability to the target areas and Essential Public Health Services; and a list of "critical questions" was developed by the project director and panel chairs.

On April 5 and 6, 1995, the project directors, panel members, and Health Program Alliance staff convened in Baltimore to reach consensus on the sufficiency of evidence, the feasibility and desirability of practice guidelines, and the timeliness of developing such guidelines. The main points agreed upon were:

- Scientific-based public health practice guidelines are feasible.
- The potential benefits of public health practice guidelines are immediate and far-reaching. Guidelines would be useful for public health planning, coordination with providers, coordination with the community, bolstering the legitimacy of programs, and program evaluation and dissemination of materials.
- Each set of guidelines should have a carefully circumscribed scope (target populations and target health conditions).
- Guidelines should be flexible rather than prescriptive, offering public health practitioners options.
- Guidelines should be dynamic, with a continual modification process in mind.
- All major stakeholders should be involved as guidelines are developed.
- "Critical questions" are an efficient tool by which to structure the evidence-collection process.
- Searching existing databases for scientific studies is a useful first step.
- Additional sources of documentary evidence should be tapped and systematically evaluated, such as existing public health guidelines; expert opinion; reports from agencies, foundations, and task forces; program evaluations; and literature on social marketing, psychology, education, and the social sciences.
- Empiric evidence from state and local public health programs should be sought, evaluated, and incorporated into guidelines.

- Development of guidelines will stimulate needed research.
- Guidelines should be pilot-tested before dissemination and then continuously evaluated.

Building upon the work of Phase I, Phase II of the Public Health Practice Guidelines Project took place, with continued funding from W.K. Kellogg Foundation, From July 1995 to July 1997.

The panels that addressed cardiovascular disease prevention and completion of treatment for tuberculosis were reconvened. These two panels decided on different frameworks for organizing their efforts, due to the obvious difference in scope for their target areas.

The cardiovascular disease panel used a matrix to organize and categorize the literature (see Figure 1). Evidence in each cell was evaluated, and guidelines were drafted based on this evidence. For some cells, it was determined that the amount of evidence was not sufficient. The tuberculosis panel was able to develop a continuum for the interventions – from most restrictive/intensive to least restrictive/intensive, with treatment completion and cure rates as the measures of effectiveness (see Figure 2). After evaluating the evidence in the continuum, the panel recommended activities to enhance the completion of treatment in individuals with tuberculosis.

Figure 1. Cardiovascular Disease Matrix of Interventions

	Cholesterol & Diet	Hypertension	Sedentary Lifestyle	Smoking
Screening				
Education				
Media				
Environmental				
Legislative				

Figure 2. Tuberculosis Interventions

Article #			
I. OUTCOME			
	Cure Rate		
	Completion Rate		
	Qualitative Outcome - + positive, - negative		
II. INTERVENTION			
CLIENT ORIENT INTERVENTIONS			
Monetary Incentives			
	Stipend		
	Transportation		
	Food, Housing		
	Other		
Social Incentives			
	Verbal/Written Agreements		
	Family Support		

	Social Home Visit (no administration of medication)			
	Other			
Education/Counseling				
	Patient only (via phone/in person)			
	Patient and Family (via phone/in person)			
	Printed Information (postcard reminders, etc.)			
Outreach				
	By Health Professional			
	By Community/Lay Worker			
Medication Administration				
	Self			
	Observed – client oriented (at home, work, etc.)			
	Observed – provider oriented (at clinic, provider office, etc.)			

(Figure 2 Cont.)

PROVIDER ORIENTED INTERVENTIONS				
Incentives				
	Monetary			
	Other			
Education				
	Educate MD's			
	Educate Outreach Workers			
	Other			
SURVEILLANCE ORIENTED INTERVENTIONS				
	Pharmacy Reporting System			
	Laboratory Reporting System			
	Other			
III. DOCUMENTS				
	Type: 1 – RCT, 2 – case control/retrospective, 3 – program description, 4 – expert opinion			
	Quality: 1 – High, 2 – Medium, 3 – Low			

A successful conclusion

In the end, both panels were able to construct frameworks to organize the evidence and make recommendations to serve as the basis for public health practice guidelines. They were also successful in further demonstrating that available scientific evidence can lead to the development of guidelines that are applicable to the public health practitioner. A consensus statement of the tuberculosis guidelines portion of the project was published in the *Journal of the American Medical Association* (279:943-948, 1998).

The CDC Task Force on Community Prevention Services is taking the lead on developing additional guidelines for public health practice. Efforts to date can be found on the Internet at <http://web.health.gov/communityguide/>. The first volume of the *Guide to Community Preventive Services* was published earlier this year in the *American Journal of Preventive Medicine* (vol. 18, no.1, supplement, Jan. 2000).

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