Developing a Public Health Research and Applications Agenda: Tools for the 21st Century

Ron Bialek, M.P.P.

For many years, the public health practice community has expressed frustration over the lack of applicable research to meet their needs. Too often research which can benefit communities is not adequately translated or disseminated in a manner which makes it of practical use. In addition, there is insufficient research in health and medicine which focuses on human behavior, a critically important component of public health. The practice community shares the perception that research is driven by funding priorities, rather than by community needs, and that information and input from the communities which can best use academic research is almost always excluded.

In March, 1998, the Council on Linkages Between Academia and Public Health Practice (for a list of agencies represented on the Council, see page 2 of The Link) discussed proposed increases to the research budgets for the National Institutes of Health, the Centers for Disease Control and Prevention and the Agency for Health Care Policy and Research. It was felt that now is an ideal time for bringing public and private sectors together to develop a comprehensive and coordinated public health research and applications agenda. While not meant to be prescriptive, and never meant to stifle creativity, this agenda will provide guidance to both funders and researchers about the practice community—research needs that, if met, will result in improved community health.

Improving the practice of public health will ultimately require bringing the academic and practice communities together to conduct research, and the Council recommends immediate action toward developing a national research and applications agenda. Such an effort could be pursued under the leadership of the Public Health Functions Steering Committee—a group comprised of national leaders from federal, state, and local agencies, academic institutions, associations, foundations, and a variety of other private sector partner organizations.

Where to begin…

Since the initial discussions by the Council in early 1998, there have been several meetings with the Public Health Functions Steering Committee, its Working Group, and a subgroup of over 25 organizations convened specifically for the purpose of exploring approaches for pursuing a research agenda. These meetings have served to refine the scope of the activity, identify potential benefits, establish a framework, develop a workable process, and enumerate end products. An overarching consideration, however, is the need to involve both the private (academe, industry, foundations) and public (local, state and federal) sectors in this effort. This will help to ensure that a realistic and achievable approach is developed.

Defining the scope of a research agenda

This activity will help determine existing and needed research to carry out the Essential Public Health Services. The focus on the Essential Services is key, because these are what are seen as necessary for preventing disease and promoting health in communities. It will help to identify what exists that requires better translation and dissemination for use in the field, as well as new research that is needed. Stakeholders (both the users and producers of applied research) as well as funders and policy makers (including key Congressional staff) will be engaged in this effort.

One important step in refining the scope of this activity is first determining other research agenda-setting efforts recently completed or underway. For example, the Task Force on Community Preventive Services is helping to develop science-based practice guidelines. Through the Task Force’s efforts, research gaps and needs are being identified. This effort, and others, will contribute to development of a comprehensive research and applications agenda, as well as the identification of new research being proposed to meeting determined and emerging needs.
Benefits
There are many who can benefit from development of a national public health research and applications agenda. Funders are a main beneficiary, since the agenda can provide an objective basis for decision making. Researchers will gain new insights into needs of the practice community. Users of the research, such as local public health systems, will be assisted through better translation and dissemination of existing research, and development of applied research that will lead to more effective program design. Through more effective programs, communities will benefit through improvements in community health.

A research agenda that results in new research to address priority needs will help in developing new chapters of the Guide to Community Preventive Services. One of the greatest barriers to development of the Guide is the absence of public health practice research. The agenda-setting activity will help to identify research needs quickly, and result in research that can contribute to the science-base for the Guide.

Framework
Possibly the most complicated, and controversial, aspect of the research and applications agenda setting activity is defining the proposed framework. The Council felt strongly that one of the goals of applied research should be to help achieve the over 500 national health objectives in Healthy People 2010. (The draft document is undergoing revision and will be released in early 2000.) In addition, the research should address ways to build capacity and more effectively carry out Essential Public Health Services. Given this desire, the framework for the research agenda will encompass health objectives and the Essential Services. Table 1 diagrams the framework and the types of questions that will be asked within each of the cells. A decision has not yet been made about whether to organize along broad topic areas within Healthy People 2010, more detailed chapters, or, the finest cut, individual objectives. Table 1 also indicates some options for priority setting.

A small working group, determined to see whether or not this approach was feasible, took one proposed health objective for 2010 and tried to identify important questions for each of the 10 Essential Public Health Services. In less than a half hour, the group was able to identify numerous areas where research may be desirable for helping to confine the incidence of HIV. Table 2 demonstrates how the framework can work.

Table 1. Framework for a Public Health Research and Applications Agenda

<table>
<thead>
<tr>
<th>Essential Public Health Services</th>
<th>Healthy People 2010 Objectives Categories:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Source: Public Health Functions Steering Committee)</td>
<td>Promote Health Behaviors</td>
</tr>
<tr>
<td>Chapters</td>
<td>Objectives (singular or grouped)</td>
</tr>
</tbody>
</table>

1. Monitor health status to identify community health problems
2. Diagnose and investigate health problems and health

In each box...
What do we need to know to be effective – interventions, causes, methodological
hazards in the community
3. Inform, educate, and empower people about health issues
4. Mobilize community partnerships to identify and solve health problems
5. Develop policies and plans that support individual and community health efforts
6. Enforce laws and regulations that protect health and ensure safety
7. Link people to needed personal health services and assure the provision of health care when otherwise unavailable
8. Assure a competent public health and personal health care workforce
9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services
10. Research for new insights and innovative solutions to health problems.

research?
What do we know?
Information being used?
Need to better disseminate?
Need to better translate?
What do we not know?
What specific questions need to be answered?
What research is underway and when will it be completed?

Priority setting...
Take key dimensions of columns and rows
How important to know to deliver EPHS?
How doable?
How easy to answer question?

Table 2. Example Cell

<table>
<thead>
<tr>
<th>Essential Public Health Services</th>
<th>Healthy People 2010 Objectives Categories:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Source: Public Health Functions Steering Committee)</td>
<td>Prevent and Reduce Disease and Disorders</td>
</tr>
<tr>
<td>21 – 11 HIV: Confine Incidence to X</td>
<td></td>
</tr>
<tr>
<td>1. Monitor health status to identify community health problems</td>
<td>• Does name reporting make a difference?</td>
</tr>
<tr>
<td></td>
<td>• Do we know how to monitor?</td>
</tr>
<tr>
<td></td>
<td>• What proportion currently are diagnosed?</td>
</tr>
<tr>
<td></td>
<td>• What are barriers to getting diagnosed (e.g., confidentiality)?</td>
</tr>
<tr>
<td>2. Diagnose and investigate health</td>
<td>• How do you conduct a health risk appraisal in a community?</td>
</tr>
<tr>
<td>Problems and health hazards in the community</td>
<td>How do you determine if a community is at risk?</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>3. Inform, educate, and empower people about health issues</td>
<td>How do you get people to practice safe behaviors? (e.g., condom use, needles, etc.) How do you inform communities of available services/programs? How do you minimize and handle backlash to programs?</td>
</tr>
<tr>
<td>4. Mobilize community partnerships to identify and solve health problems</td>
<td>How do we identify stakeholders groups? What are the motivations for mobilizing? Who are the appropriate spokespersons? How do you structure approaches to identify &quot;appropriate&quot; stakeholders?</td>
</tr>
<tr>
<td>5. Develop policies and plans that support individual and community health efforts</td>
<td>How do you sell needle exchange to a community? What is an effective community plan to needle exchange? Examples of any effective communication plans? How to research effectiveness? Tailoring plan to unique community characteristics?</td>
</tr>
<tr>
<td>6. Enforce laws and regulations that protect health and ensure safety</td>
<td>How are laws &quot;intelligently&quot; enforced?</td>
</tr>
<tr>
<td>7. Link people to needed personal health services and assure the provision of health care when otherwise unavailable</td>
<td>Effectiveness of counseling? What’s best way to limit transmission?</td>
</tr>
<tr>
<td>8. Assure a competent</td>
<td>Current level of competence?</td>
</tr>
</tbody>
</table>
| public health and personal health care workforce | • Tradeoffs?  
• Can this be assured effectively at the community level? |
|---|---|
| 9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services | • What are the dimensions of effectiveness, etc., in this area?  
• Generalizability?  
• What questions need to be answered nationally? Locally? |
| 10. Research for new insights and innovative solutions to health problems. | • What is relative contribution of each of the above? |

**Process**
The framework described in Table 1 is complex and ambitious. The Council has recommended that a feasibility study be conducted to determine if the framework is reasonable and if the stakeholders will truly benefit from such a research agenda-setting process. The pilot will address two or three Healthy People 2010 chapters and/or objectives, with the Council serving as a steering group. The feasibility study is to be completed within 12 months from the time funding is secured. If the study indicates that the activity is feasible and desirable, the Council will proceed to refine the framework and recommend to the Public Health Functions Steering Committee development of a comprehensive public health research and applications agenda.

**End products**
The primary product of a full-scale effort will be the development of a national public health research and applications agenda. The agenda will provide guidance on public health research priorities. In addition, it will provide a framework for continuously updating the research agenda and for its further refinement. Finally, it will serve as a framework for other agenda-setting activities.

The ability for this agenda-setting activity to create "buy-in" from policy makers to public health research should not be underestimated. As the first national effort of this type, involving private and public sectors, researchers, practitioners, communities, and politicians, the priorities that are developed will be primed for action.

**A note of caution**
An agenda-setting activity, by nature, is meant to be directive. However, while this effort will identify needs and priorities, it also will serve to encourage and promote entrepreneurship around these agenda items as well as others that may not yet have been identified through the process. At no time should researcher creativity not be encouraged and permitted to flourish. No agenda-setting activity can identify all of the current or future needs, and researchers will continue to be encouraged to add their creative talents to the mix of research endeavors.

**Your comments and suggestions, please**
To comment, provide suggestions, or if you would like to become involved in this activity, please contact Ron Bialek, President, Public Health Foundation, 1220 L Street, N.W., Suite 350, Washington, D.C. 20005; phone: 202.218.4400; fax: 202.218.4409; e-mail: rbialek@phf.org.
Bibliography
As part of the effort to develop a public health research and applications agenda, it will be necessary to determine what already has been done in this area, what efforts currently are underway, and what other literature can help inform the process. The following represents the beginnings of a bibliography on this topic.


Coburn, A.F., "The Role of Health Services Research in Developing State Health Policy," Health Affairs, Volume 17, Number 1, January/February 1998.

Executive Office of the President, Office of Science and Technology Policy, Meeting the Challenge: A Research Agenda for America’s Health Safety, and Food, developed by the National Science and Technology Council Committee on Health, Safety, and Food, Washington, D.C., February, 1996.


