

Effective Clinical Partnerships Between Primary Care Medical Practices and Public Health Agencies

Philip D. Sloane, MD, MPH
University of North Carolina at Chapel Hill

Jessica Bates, MPH
University of North Carolina at Chapel Hill

Margaret Gadon, MD
American Medical Association

Cheryl Irmiter, PhD
American Medical Association

Katrina Donahue, MD, MPH
University of North Carolina at Chapel Hill



Table of contents

Preface.....	2
I. Introduction: Review of Literature.....	3
II. Methods.....	8
III. Results, Part 1: Descriptive Profiles of 48 Existing Partnerships.....	12
IV. Results, Part 2: Lessons from Qualitative Analysis of Interviews of Partnership Participants	
Description of the Programs.....	15
Getting Started: The Initiation of Partnerships.....	15
Structure and Organization of Successful Partnerships.....	18
Program Evaluation and Outcomes Achieved.....	22
Barriers and Facilitators of Partnership Success.....	24
Maintaining and Sustaining the Collaboration.....	27
V. Conclusions and Recommendations.....	30
References.....	35
Appendix A: Telephone Informational Interview – Interview Guide.....	37
Appendix B: Public Health Agency Staff Interview Guide.....	39
Appendix C: Physician Partner Interview Guide.....	42
Appendix D: Descriptive Profiles of Programs Identified.....	44

Preface

We believe that partnerships between primary care medical practices and public health entities that address areas of mutual interest, such as health promotion and disease prevention, should be fostered. If well implemented, such partnerships would enhance overall coordination and integration of services and would likely provide more services at a lower overall cost. Among the public health entities with the greatest interest in such partnerships are health departments, cooperative extension services, and Area Agencies on Aging, each of which has a widespread presence in virtually every state. In the absence of a major overhaul of the U.S. health care system, however, development of such partnerships must be on an individual, case-by-case basis.

The purposes of the study reported in this monograph were:

- To identify partnerships between public health and medicine that increase the effectiveness and efficiency of clinical care, with a particular emphasis on the aging population; and
- Through a careful examination of current models, to identify themes and lessons that would be useful in the expansion, replication, and broader application of such partnerships.

Our research methods included conducting a national scan to identify successful ongoing programs, gathering detailed information from a sample of the identified programs, and analyzing the data to identify themes and lessons that could be drawn from the experiences of these pioneers.

The monograph is divided into four sections. The Introduction reviews the literature on primary care/public health partnerships. The methods used in our research are described in the second section. The third section describes the 48 programs we identified and profiled, thereby providing an inventory of the wide range of partnerships currently in operation. The fourth section presents the results of qualitative analyses of in-depth interviews we conducted with key participants in a selection of 16 programs. The final section presents our conclusions and recommendations.

We believe that the U.S. health care system would benefit greatly from more integration between population-oriented and individual patient care

systems. This monograph is intended to foster movement in that direction.

Philip D. Sloane, MD, MPH
University of North Carolina at Chapel Hill

Jessica Bates, MPH
University of North Carolina at Chapel Hill

Margaret Gadon, MD
American Medical Association

I. Introduction: review of literature

Health care and health services provision in the United States today consist largely of independent systems. Often, two or more of these systems will target the same population and attempt to provide the same or similar services, yet with little or no coordination, collaboration, or even communication. This leads to an inefficient, redundant, fragmented system of care in which overlapping services and gaps in service provision are common. The premise of this monograph is that primary care practitioners and public health agencies share many common goals, and that promotion of partnerships between these two systems of care can enhance community and individual health. Many reasons have been proposed for the desirability of such partnerships.

Lasker, in a landmark 1997 monograph, argued that neither medicine nor public health can accomplish its mission alone. Medicine and public health were more closely aligned early in the 20th century but both training and practice in the two disciplines became increasingly separate after World War II. Social medicine, preventive medicine, and community oriented primary care all arose as attempts to forge bridges between these two fields, but have been largely unsuccessful. Lasker further argued that collaboration between medicine and public health was both logical and necessary because the two fields are becoming increasingly interdependent (Lasker, 1997).

The public health system has promoted partnerships both to save money and to increase the capacity of local public health agencies to improve population health and serve often diverse racial, ethnic, and socioeconomic groups (Halverson et al, 2000). Both perceived need and organizational willingness are central themes underlying the formation of inter-organizational partnerships (Bazzoli et al, 1997).

In turn, changes in primary care support the development of such partnerships. The chronic care model – a widespread, well-accepted framework for approaching chronic disease management – explicitly states that "provider organizations need linkages with community-based resources" to support patient self-management (Bodenheimer, Wagner & Grumbach, 2002). A desire to improve the provision of chronic disease care through practice redesign and the application of the chronic care model has led to a concerted call for the development of a "new model" of primary care practice that emphasizes

interdisciplinary teamwork and linkages with community services" (Future of Family Medicine, 2004; Green et al, 2004). The primary care medical home model, which embodies these principles, is now being piloted by multiple public and private payers. This model systematizes a population health approach to clinical care, including the use of community resources to improve quality (Berenson et al, 2008; Rosenthal, 2008; Starfield & Shi, 2004).

Although the chronic care model was developed for management of disease, it may be useful as a model for improving disease prevention as well (Glasgow et al, 2001). The use of decision support and community resources in preventive efforts are two elements that can increase adherence to disease prevention guidelines. This concept was elaborated on by Barr et al (2003), who proposed an expanded version of the chronic care model, with even greater emphasis on community resources and health promotion/disease prevention. Because public health departments, cooperative extension services, and Area Agencies on Aging all tend to focus on health promotion and disease prevention, while primary care practices tend to have an undersupply of health promotion resources, collaborations between these two types of providers appear particularly opportune for partnership development.

Patterns and models of partnership

The majority of what has been published about partnerships between public health and medicine can be found in three reports (Bazzoli et al, 1997; Halverson et al, 2000; Lasker, 1997) and a series of case studies. Most partnerships were initiated by public health or community agencies, and published reports tend to be written from the public health perspective. Reports on collaboration initiated by physicians in practice are rarely found in the medical or social sciences literature.

Lasker identified 414 and profiled 19 case studies of collaborations between medical care providers and public health departments in her 1997 study. Six models of collaboration between medicine and public health were identified: 1) coordination of services (combining clinical care with health education, outreach, case management, and/or social services); 2) financial support to medical groups to improve access to care of specific underserved populations; 3) initiatives within medical practice to improve quality and cost-effectiveness of care by applying a population perspective to medical practice; 4) the use of

clinical practices to identify and address community health problems; 5) health promotion strengthening through community campaigns; and 6) collaboration around policy, training and research initiatives. These models of collaboration were grouped into five different categories: coalitions, contractual agreements, administration/management systems, advisory functions (e.g., advisory committees), and intra-organizational platforms (i.e., merging both functions into a single organization, such as a managed care system) (Lasker, 1997). Unfortunately, the Lasker document provides little guidance on the formation and function of such partnerships, or of the pitfalls that arise and must be overcome.

Additional data on the organizational structure of partnerships and the community factors that sustained them are provided by a study by Halverson et al (2000). These researchers studied 60 geographically and demographically diverse U.S. counties in 15 states to identify patterns of, and community factors associated with, collaborations between public health agencies and medical care providers. However, the medical care providers they studied were hospitals and community health centers (CHCs); they excluded private physicians from the study, arguing that they were not "essential components of the health care safety net for underserved populations." Their findings were as follows:

- Fewer than 40% of hospital/public health collaborations were formalized by contract. Of the partnerships studied, 31% included joint delivery of personal health services, 29% included joint administration of population-based programs, and 11% involved joint assessment of community health needs. Public and/or nonprofit ownership of a hospital was the strongest predictor of collaboration with public health agencies.
- Nearly two-thirds (64%) of relationships between public health agencies and CHCs were formalized by contract, and 76% involved agreements for referral of patients for medical care services. The strongest predictors of public health/CHC collaboration was high HMO penetration in the market.

Further data on health care outcomes of public health and medicine partnerships come from a 1995 project conducted by the Community Care Network (CCN), a consortium of private foundations. CCN sponsored a demonstration program examining public-private partnerships that focused on: a) the health status of communities rather than of patients; b) a seamless continuum of care delivery; c) management within fixed

resources; and d) community accountability. In a survey of 172 applicants to the CCN grant program in 1995, respondents identified a wide variety of services that their partnerships provided. Of these, 49% claimed to conduct geriatric health screening, 72% to offer health education, and 44% to provide primary care services. Factor analysis identified seven dimensions of collaborative services that partnerships could engage in: preventive and health education services; traditional acute and chronic care services; behavioral health services; community reporting; cost-effectiveness and expenditure control; community studies of health needs; and coordination of services. Unfortunately the report did not specify how many or which of these collaborations involved primary care physician practices, as opposed to other private organizations such as hospitals and health systems (Bazzoli et al, 1997).

Finally, there are a variety of partnership models described in reports and case studies. Strategies that have been involved in these published reports include:

- Physically locating a public health professional, paid by the health department, in a physician's practice to carry out clinical, public health, and care coordination services (Burton, 2005);
- Developing tools and databases to assist primary care physicians in increasing the proportion of patients referred to community agencies for assistance with health education and health promotion counseling. These materials can be developed by a health department (Lasker & Abramson, 1998), by an academic group (Flocke et al, 2006), by a coalition of agencies and specialty societies (Lasker & Abramson, 1998), or as part of a central planning process (Harris et al, 2005).
- Having public health staff conduct short, unscheduled visits to primary care offices to distribute educational materials ("action kits" containing provider information, patient education materials, and samples of nicotine replacement products) as part of a campaign dedicated to smoking cessation (Larson et al, 2006). This process is referred to as public health detailing:
- Initiating government-sponsored programs that incorporate public health staff and primary care physicians to improve chronic disease care through case management (Steiner et al, 2008).
- Involving practicing physicians in a case registry maintained by a county health department (e.g., for breast cancer) or the Centers for Disease Control and Prevention (e.g., influenza) (Lasker & Abramson, 1998).

- Paying a private physician as a consultant or part-time medical director for a public health agency (Lasker & Abramson, 1998).
- Donation by practicing physicians of volunteer time to a free clinic, health fair, adolescent health clinic, communitywide immunization program, or other activity sponsored by a public health agency to improve access to care for underserved and/or uninsured persons (Lasker & Abramson, 1998).
- Developing an agreement between private physicians and a public health department whereby the private physicians provide free care to a pre-specified number of indigent patients referred by the health department, using a voucher system (the health department gave the patient a voucher, which was redeemable at the physicians' practice) (Lasker & Abramson, 1998).
- Forming a partnership between a nonprofit family health clinic and a county health department whereby the two agreed to operate primary care and traditional public health clinics jointly, with staff working side-by-side but under separate governance. In one example, the two agencies provided patients with a one-stop health and human services center and a commonly shared case management system (Lasker & Abramson, 1998).
- Joint participation by private physicians and public health agency staff on a task force or committee organized at a community or state level to address health-related problems (Lasker & Abramson, 1998).
- Forming a coalition in which public health agencies and primary care medical practices jointly agree on strategies to facilitate referral of patients (e.g., persons with Medicaid) from one partner to receive services at another. For example, an individual could be referred from a public health clinic to receive prenatal care at an obstetrician's office, or from a primary care medical practice to receive health education services at a cooperative extension agency (Lasker & Abramson, 1998).
- Developing consortia dedicated to providing a system of care for the under- and uninsured through involvement of and coordination of services between public health departments and primary care practices. This model was implemented in the mid-1990s under an initiative by the Robert Wood Johnson Foundation, the Communities in Charge Program (Friedenzohn & Stoller, 2005).
- Implementing a television or radio series designed to disseminate a public health message about the community's leading health risks through interviews with and/or presentations by practicing

physicians or academic physicians (Lasker & Abramson, 1998).

- Involving both medical practices and public health agencies in a broad program aimed at influencing community health at multiple levels (DeBate et al, 2004).

Engaging physicians in office practice

One of the greatest challenges to the formation and sustenance of partnerships between medicine and public health is the apparent reluctance on the part of practicing physicians to engage in multidisciplinary collaborations. Although not documented by research, this presumption is supported by the dearth of reports in the peer-reviewed literature that are presented from a physician perspective. There are a number of probable reasons for this, including time constraints and the style of practice taught in traditional medical education, which emphasizes autonomy and the singular importance of the patient-physician relationship.

Hung et al (2007) surveyed 104 primary care practices about their use of community resources for health education classes, support groups, and/or individual counseling for patients who were smokers, drank excess alcohol, needed dietary counseling, or were physically inactive. On a scale or 0 = never, 1 = rarely, 2 = occasionally, 3 = usually, and 4 = always, the mean respondent ratings on how often patients were referred to community agencies were 1.91 for tobacco use, 2.02 for risky drinking, 2.04 for dietary patterns, and 1.87 for physical inactivity. In a multivariate analysis, three factors were independently associated with a respondent's likelihood of referral to a community agency for any of these patient problems: the degree to which their practice culture was group oriented and developmental, reflecting flexibility and innovation ($p < 0.01$); use of checklists and flowcharts by the practice ($p < 0.01$); and the presence of an electronic medical record ($p < 0.05$).

As is evident from the above study, physicians in office practice do not routinely refer patients to community resources to enhance their care. Uplekar et al (2001) enumerated several barriers to involving the *private* medical sector in public-private collaboration in a 2001 study of tuberculosis care in 23 countries. Table 1 lists these barriers, modified to be expressed more generally rather than to apply only to tuberculosis.

Table 1: Barriers to involvement of the private medical sector in public-private collaboration

- Inadequate training and lack of information
- Low priority given to public health functions
- Not remunerative
- Infrastructural limitations to performance of "public health" tasks, such as identification of non-adherent patients
- Doubts about the organization, leadership, and/or quality of the program
- Largely unorganized, so liaison and interaction is challenging

Adapted from: Uplekar M, Pathania V, Raviglione M. Private practitioners and public health: weak links in tuberculosis control. *Lancet*. 2001;358:912-916.

Thus, numerous barriers exist to greater engagement of primary care physicians in joint activities with the public health sector. Efforts to encourage partnerships will need to reflect awareness of these barriers and of methods by which they can be overcome.

Involvement of the community

The extent to which members of the community participate in a given partnerships varies. Degrees of involvement range from nonparticipation, to informing, to consultation/representation, to key membership in a coalition, to control of decision-making (Butterfoss, 2007). Common methods of community involvement in physician-public health agency partnerships include opinion gathering (e.g., using a needs assessment or satisfaction survey), representation on an advisory board, and membership of individuals and/or representatives of community organizations on a steering committee. The literature is inconsistent on the importance of community participation in program success, but some form of involvement is generally considered beneficial.

Successful partnering: challenges and recommendations from the literature

Partnerships between stakeholders are difficult to sustain under the best of circumstances. Relationships between medical and public health agencies are further stressed by differing goals, incentives, and systems of accountability and governance. Although the bulk of the literature on factors that facilitate a successful collaboration is generic, the lessons provided are in part useful for partnerships between medicine and public health agencies.

Successful collaboration between groups depends on as many as 20 separate factors, according to Mattessich et al (2001). Factors that could be particularly important for medicine/public health partnerships include:

- Environmental: history of collaboration or cooperation in the community; collaborative group seen as a legitimate leader in the community; favorable political and social climate.
- Partner attitudes: mutual respect, understanding, and trust; appropriate cross section of members; members see collaboration as in their self-interest; ability to compromise.
- Process and structure: members share a stake in both process and outcome; participation by multiple layers in each organization; flexibility in structure; development of clear roles and policy guidelines; adaptability; appropriate pace of development.
- Communication and interpersonal relationships: open and frequent; established informal relationships and communication links.
- Purpose: concrete, attainable goals and objectives; shared vision; unique mission (i.e., not identical to that of one of the partners).
- Resources: sufficient funds, staff, materials, and time; skilled leadership.

Similar conclusions were drawn by Mizrahi & Rosenthal (2001) in a study of 40 successful coalitions. One of the areas of importance to any partnership stressed by these authors was leadership that had experience, good

communication and strategic skills and vision. These factors are important to avoid conflicts about “ownership” of various activities.

Turf issues are another potential challenge facing public-private community health partnerships, in particular when real or perceived overlap or ambiguity exists between the partnership organizations in regard to core services. Coming to agreement often requires each partner to change attitudes, characteristics, or points of view that tend to separate them from one another (Linder, 1999).

Factors that can enhance the success of public-private partnerships identified in the Uplekar study include provision of training to medical students and/or physicians in practice, mandatory internships in health departments for physicians-in-training, involvement of physicians on planning groups and/or policy committees, development and dissemination of tools and guidelines for physicians, provision of subsidies to the providers themselves or for treatments (e.g., medications), sharing results of needs assessments with private physicians, and decree by a government health authority (Uplekar et al, 2001).

Another group of researchers suggested that changes in clinical practice would also facilitate successful implementation of practice-public health partnerships (Harris et al, 2005). Among the practice changes that would foster such partnerships are system redesign, as embodied in the chronic care model, with its emphasis on empowering practice staff to be more active in health promotion; increased linkages with community services; and development of the patient-centered medical home (Berenson et al, 2008; Future of Family Medicine, 2004; Green et al, 2004; Rosenthal, 2008; Starfield & Shi, 2004).

Conclusion and study rationale

System changes within both public health and medicine are setting the stage for greater collaboration between the two fields. The public health system is moving away from direct provision of health care services, instead looking to partnerships to help in the mission of serving often diverse populations. Similarly, changes underway in primary care, such as the patient-centered medical home and practice redesign, also support the development of such partnerships.

The existing literature provides much rationale for the wisdom of partnerships between the public health sector and primary medical care providers. However, examples of programs and partnerships

in which this has been accomplished, and practical guidance for the development of such partnerships, are still relatively rare. For this reason, we conducted an environmental scan and in-depth interviews of identified partnerships. Our goals were to identify successful partnerships between public health and medicine; determine how they functioned and how they served the needs of the partners involved; and learn about the barriers and strengths of their collaborations, so as to identify elements that can inhibit or promote success of future physicians and partnerships.

II. Methods

This qualitative study sought to identify and describe from the perspective of public health organizations and practicing physicians:

- Ways that successful collaborations are structured (models of collaboration) to address issues of prevention and chronic disease management;
- Barriers to and facilitators of program development; and
- Unique health care and self-management support needs of primary care patients that can be met by these models.

Subquestions included: What programs are being offered to older adults that support their health care needs? and How can primary care physicians be effectively recruited and maintained in such partnerships?

Definitions

The title of this monograph refers to collaborations between primary care physicians and public health agencies. By *primary care physicians* we are referring to family physicians, general internists, and general pediatricians. These generalist physicians practice in a number of settings, most prominent of which are for-profit private practices, ranging from small offices to large multispecialty groups; not-for-profit community health centers (CHCs), which are federal or state-supported clinics that tend to target poor and traditionally underserved populations; and settings affiliated with hospitals or other providers of inpatient care, which can be either proprietary or not-for-profit. Today, many primary care physicians employ and/or work collaboratively with nurse practitioners and/or physician assistants, and have multiple staff members to provide nursing and administrative support. Thus, this monograph's findings and conclusions relate to *primary care medical practices*, and not just to primary care physicians.

By *public health agencies* we are referring to the following three organizations: public health departments, cooperative extension services, and Area Agencies on Aging. *Public health departments* are organized at the state and county level in all states; their activities vary, but their overall goal is to preserve and improve the general health of the population. As part of that mission, many public health departments seek to provide or assure primary care and preventive services for indigent persons, women and children, and older

persons, areas of their mission in which they share common interests with primary care physicians. *Cooperative extension services (CES)* are agencies organized at the county and state level in most but not all states, with the general goal of providing assistance to persons in rural areas. An outgrowth of the old agricultural extension services, many of today's CES include activities related to nutrition and general health education, functions that coincide in many ways with the interests of primary care physicians. *Area Agencies on Aging (AAA)* are organizations that exist at the county (or multi-county) level, with the general goal of providing and coordinating services for older persons. While health care services provision is not a traditional activity of AAAs, they do provide a variety of social services, including prevention and some disease management counseling, that address issues of direct relevance to patient care in primary care settings.

A *clinical partnership* as defined in this study refers to a program or activity that includes all three of the following components:

- Involves personnel or a program of one or more of the following public health agencies (or one of their local affiliates): department of health, CES, or an AAA.
- Involves one or more primary care providers who are not directly employed by the public health agency.
- Provides direct service to clients/patients.

Programs were excluded when the physicians were employed by a health department, when the public health agency provided materials or training to physicians without collaborative planning and implementation, and when the programs were no longer being implemented. The latter was due to our effort to highlight successful partnerships; thus, programs that could not achieve sustainability were not considered a success.

Sample

A purposive convenience sample was gathered in a three-step approach. The process was restricted by time and funding yet yielded a significant number of collaborations between practicing clinicians and public health agencies.

1. An internet search as well as a search of the peer-reviewed and commercial literature allowed the investigators to identify possible sources of information on programs that potentially fit our operational definitions. Once a contact person

associated with a program was identified, he or she was called or sent an email explaining the project and requesting a brief interview.

2. A national survey of public health agencies was conducted. Contact information for each of the three public health agencies in all 50 states was collected over a three-month period (December 2007 – March 2008). Information was obtained on the internet, and in a few cases, agencies were called to clarify contact information. We sought to email as many contacts as possible while not exceeding eight at any single organization, so as to keep the search of a manageable scope. Contacts were targeted who: a) had a position that might lead to significant knowledge of activities statewide; b) were more likely to be working with programs for older adults; or c) were likely to be in email contact with a significant number of other people who could be of assistance. The emails asked recipients to reply or call if they worked with or were aware of programs that fit three criteria:

- Involves personnel or a program of the department of health, CES, AAA, or one of their local affiliates, and
- Involves one or more primary care providers who are not directly employed by the public health agency, and
- Provides direct service to clients.

For public health agencies, we were uncertain how to best elicit responses and therefore tested two different email formats. The first format sought to elicit the respondent's sympathy with the investigator. It began with "Dear [first name], I am a graduate student...", and followed with the request, with use of the words "help" and "please." This email did not mention any potential benefits of participation. The second format sought to appeal to the respondent's pride in their program and the possibility of recognition of the program as a national model in a publication. It had more formal appearance, used prefixes and titles throughout, and stressed the potential to receive recognition in a nationally distributed report affiliated with a respected professional organization. Figure 1 illustrates the two email templates. Each format was used in 15 states. Analysis demonstrated that using the sympathy method yielded a higher response rate; thus, the remaining states were contacted in that manner.

3. A separate email recruitment effort was conducted to identify physicians participating in partnerships. Representatives of the American Medical Association posted a message on a popular physician list serve requesting that physicians respond if they worked in a collaboration that fit the three above criteria.

4. A snowball sample was then used to gather additional agencies. Contacts recruited from the above procedures were asked to identify other programs that fit our definition of innovative collaborations.

These four strategies identified hundreds of programs. Email replies and phone calls were used to screen programs for their adherence to our operational definition. Exclusion criteria were:

- Did not meet the study definition of a clinical partnership between primary care and a public health agency.
- No longer functioning.

Ultimately, 48 programs that met the inclusion criteria were identified.

Informational interviews

Informational interviews were conducted by telephone with a representative of each of the 48 programs. This interview covered the following: program name, service provided, population served, partners involved, program start date, funding source, and description of activities. A copy of the instrument is included as Appendix A. In some cases, secondary data were used to fill in gaps in our understanding or in place of an initial interview.

Selection of a subsample for in-depth interviews

The 48 programs initially selected and profiled were then reviewed to identify a subsample for more detailed evaluation. The following three criteria were used:

- The type of partnership (health department services supplement physician care; physician's services supplement health department's care; or physician and health department work together to plan and implement one or more programs or joint activities).
- The type of service provided (primary, secondary, or tertiary prevention).
- The duration of the services were considered (enough time to answer partnership questions).

The project's primary research team (PS, JB, MG, CI) rated each program according to the number of criteria met. In addition, they rated each partnership (definite, maybe, no) based on the desirability of conducting an in-depth interview to learn more about the partnership's structure and function.

By conference call the research team then compared ratings and selected 18 partnerships to interview.

In-depth interviews

For each of the 18 partnerships selected for additional data collection, an attempt was made to conduct an in-depth interview with both a public health agency staff member and an involved primary care physician. Separate interview instruments were developed for both respondent types. The general goal of each interview was to ask about the history of the partnership; its structure, funding, and activities; barriers and facilitators; and maintenance and sustainability. A copy of the public health agency interview is included as Appendix B; a copy of the physician interview is included as Appendix C.

Public health agency interviews. The public health agency contacts for the 18 programs in the “definitely” and “maybe” interview categories were contacted with a request for an in-depth interview. A total of 15 programs responded and interviews were conducted; one refused and two more had been discontinued. Each interview lasted between 30 minutes and one hour, and covered the following topics in greater depth than the initial interview: origin and evolution, partners, funding, clients, activities, evaluation, sustainability, and recognition. Informed consent was obtained for the calls to be recorded. While a response was received from all programs, it became apparent that two programs no longer fit our operational definition to an extent worthy of in-depth analysis. In both of these cases, the programs had been unable to continue physician participation. In the end, a total of 15 public health agency contact interviews were conducted.

Participating physician interviews. An interview was also requested for a physician associated with each project. These interviews lasted 10 to 15 minutes, were recorded, and covered the physician’s involvement with the program as well as the challenges and benefits he or she experienced. One hundred dollar (\$100) compensation was offered to participating physicians. From the 16 programs, a total of 9 physician interviews were conducted; for the remainder of partnerships an interview was not completed because of nonresponse.

All interviews were conducted by research assistants with interview experience, who had been trained by the investigators. Interviews were digitally recorded and transcribed for later coding and analysis.

Data analysis

Our method of analyzing the data was based on Boyatzis’ (1998) thematic analysis for a data-driven approach. Initially, the research team (PDS, JB, MG, and CI) identified key themes, as each member of the analysis team read sample transcriptions of the in-depth interviews. Independence of judgments was used to measure the degree of agreement before reconciliation discussions (Boyatzis, 1998). The team then met and arrived at a consensus on tentative themes, read additional transcripts, and met again to refine these themes into codes.

A codebook was developed by the team based on the research objectives and interview guide. Transcriptions of the 26 interviews were digitized and entered into a database. A subset of three interviews were coded by multiple team members and then shared so that high interrater reliability could be established. All interviews were then coded by the study research assistant (JB), using the software package *ATLAS.ti*. Codes allowed for the distinction between data from physician interviews and public health agency personnel interviews.

Once coding was complete, the analysis team (JB, PS, KD and CI) grouped the codes into six categories: descriptive, getting started, organization and administrative, barriers and facilitators, outcomes and evaluation, and maintaining and sustaining the collaboration. Each category was then analyzed and themes were extracted. In Section IV, our findings for each of these categories are presented in depth.

Figure 1: Text of "recognition" and "sympathy" versions of the email message used to identify

partnerships. The subject line for both messages was identical.

Text of Recognition Email:

From: XXXXX, Project Manager
National Study of Primary Care / [Name of Agency] Partnerships
TO: [First Name, Last Name and Title of person emailed]
RE: Brief Request for Information or Referral to Someone Who May Help

I represent a national study that will develop a monograph describing innovative partnerships between primary care doctors and public health departments. I am writing to ask if you are aware of any programs or activities within the [Name of Agency] or the state of [name of state] that might meet these three criteria (all three criteria must be met):

1. Involves personnel or a program of the Department of Health, a Cooperative Extension, or an Area Agency on Aging (or one of their local affiliates), and
2. Involves one or more primary care providers who are not directly employed by the [Type of Agency], and
3. Provides direct service to clients.

Such programs are relatively rare. We hope to identify successful models that we can then feature in a monograph that will be distributed nationally. If you know of such a program, please respond to this email or telephone me at 000-000-0000. This study is a joint project of the American Medical Association and the University of North Carolina at Chapel Hill.

Warmest regards,
XXXXXXX

Text of Sympathy Email:

Dear [First Name of Person emailed]:

I am a graduate student in public health at the University of North Carolina at Chapel Hill. I am working on a project to identify innovative partnerships between primary care doctors and public health departments. I am writing to ask if you are aware of any programs or activities within the [Agency] or the state of [name of state] that might meet these three criteria (all three criteria must be met):

1. Involves personnel or a program of the Department of Health, a Cooperative Extension, or an Area Agency on Aging (or one of their local affiliates), and
2. Involves one or more primary care providers who are not directly employed by the [Type of Agency], and
3. Provides direct service to clients.

It has not been easy to find such programs; therefore I am emailing individuals within [Agencies] whom I hope might be able to help. If you know of such a program, please respond to this email or telephone me at 000-000-0000.

Sincerely,
XXXXXXX
This study is a joint project of the American Medical Association and the University of North Carolina at Chapel Hill.

III. Results, part 1:

Description of the programs identified

Of our target public health agencies, 41 involved health departments, three involved cooperative extension services, and six involved Area Agencies on Aging (some partnerships included more than one agency). Programs targeted a wide range of ages and problems, with many programs serving all ages. Of the 48 programs evaluated, 35 (73%) provided services to children, 34 (71%) served adults aged 18 to 64 years, and 38 (78%) provided

services to older adults. Twenty-four (50%) involved delivery of preventive services; 22 (46%) involved clinical primary care to indigent and/or underserved populations; 4 (1%) focused on disease surveillance, and 2 (.04%) on disaster preparedness. The direct services to patients were provided by the primary care practice in 24 (50%) of the partnerships, by the public health agency in 15 (31%), and by both partners in 9 (19%). Table 2 summarizes the partnerships we profiled; descriptions of each program are provided in Appendix D.

Table 2: Summary of Programs by Key Characteristics

Program Name	Public Health Agency Involved			Ages Served (in years)			Party Providing Direct Service	Service Category Provided
	HD*	CES	AAA	<18	18-64	65+		
1. Community-Based Services for Women of Reproductive Age and Adolescents	X			X	X		MD	Prevention
2. Caregiver Consultants			X			X	Both	Prevention
3. Olmstead County Falls Prevention			X			X	MD	Prevention
4. ABCD (Assuring Better Child Health and Development) Screening Academy	X			X			MD	Prevention
5. Metropolitan Area Agency on Aging Dementia ID project			X			X	MD	Prevention
6. Prescription Trails	X				X	X	MD	Prevention
7. Expanded Food and Nutrition Education Program		X		X	X		MD	Prevention
8. The Community Care of North Carolina Program/Access Care	X			X	X	X	MD	Clinical care
9. Medical Home Project	X			X			MD	Prevention & Clinical care
10. Medical Home Initiative (or Educating Practices in Community Integrated Care)	X			X			MD	Prevention & Clinical care
11. Oklahoma Primary Care Practice-Based Research Network	X			X	X	X	HD	Surveillance
12. Wyoming Immunization Registry	X			X	X	X	HD	Surveillance
13. Influenza Surveillance Program	X			X	X	X	HD	Surveillance
14. Free Colorectal Cancer Screening Program	X				X	X	HD	Prevention
15. STEPS	X				X	X	MD	Prevention
16. Kansas Diabetes Prevention and Control Program	X				X	X	MD	Surveillance & prevention
17. The Kansas Optimizing Health Program (KÖHP)	X				X	X	MD	Training
18. Free Clinic	X			X	X	X	HD	Clinical care
19. Colorectal Screening Task Force	X				X	X	Both	Prevention
20. Care Connection for Children	X			X			MD	Clinical care
21. The Diabetes Resource Coalition of Long Island	X	X			X	X	Both	Prevention
22. Columbia County Migrant Health Program	X			X	X	X	HD	Clinical care
23. Richland County Children's Obesity Intervention	X			X	X		MD	Prevention
24. Beaufort Pediatrics Partnership	X			X			MD	Clinical care
25. Chronic Disease Self-Management Program			X			X	MD	Prevention
26. Coastal Medical Access Project (CMAP)	X			X	X	X	HD	Clinical care
27. Shaken Baby Syndrome Education and Awareness Program	X			X			MD	Prevention
28. Community Primary Care Challenge Grants	X			X	X	X	MD	Clinical care
29. Brown County Aging and Disability Resource Center			X			X	MD	Prevention & training

30.	The Primary Care Network	X			X	X	X	MD	Clinical care
31.	Buncombe County Project Access	X			X	X	X	HD	Clinical care
32.	Douglas County Health Department Refugee Screening Program	X			X	X	X	HD	Prevention & clinical care
33.	Marion County Indigent Care Program	X			X	X	X	HD	Clinical care
34.	Partners Clinic	X			X	X	X	HD	Clinical care
35.	The Anne Arundel County Reach Program	X			X	X	X	HD	Clinical care
36.	The Montana Model	X			X	X	X	HD	Clinical care
37.	Improving Hispanic Elders' Health			X			X	MD	Prevention
38.	Alexandria Neighborhood Health Services Inc.	X			X	X	X	HD	Clinical care
39.	ADHS Primary Care Program	X			X	X	X	MD	Clinical care
40.	The DMH Primary/Behavioral Health Care Integration Initiative	X			X	X	X	MD	Prevention
41.	Sullivan County Health Partnership	X	X		X	X	X	Both	Prevention
42.	Communities in Charge	X			X	X	X	Both	Clinical care
43.	Coconino County Health Department	X			X	X		Both	Clinical care & prevention
44.	Fairbanks Regional Public Health Center	X			X	X	X	Both	Prevention
45.	Riley County-Manhattan Health Department	X			X	X	X	MD	Clinical care
46.	Summit County Public Health Free Clinic	X			X	X	X	HD	Clinical care
47.	Fulton County Preparedness	X			X	X	X	Both	Preparedness
48.	Disaster Response for Health in El Paso County	X			X	X	X	Both	Preparedness

* HD = public health department(s); CES = cooperative extension service; AAA = Area Agencies on Aging

IV. Results, Part 2

Lessons from qualitative analysis of interviews of partnership participants

As described in the methods section, we selected a subset of 16 (33%) of the 48 programs that we had identified and profiled for in-depth interviews and

qualitative analyses. These 16 programs are listed in Table 3 by name and state (see Appendix D for profiles of each):

# in Appendix D	Program Name	State
2	Caregiver Consultants	MN
3	Olmstead County Falls Prevention	MN
5	Metropolitan Area Agency on Aging Dementia ID project	MN
6	Prescription Trails	NM
7	NC Kids Eating Smart and Moving More (KESMM)	NC
8	The Community Care of North Carolina Program/Access Care	NC
16	Chronic Disease Electronic Management System (CDEMS)	KS
21	The Diabetes Resource Coalition of Long Island	NY
22	Columbia County Migrant Health Program	NY
23	Richland County Children’s Obesity Intervention	SC
24	Beaufort Pediatrics Partnership	SC
26	Coastal Medical Access Project (CMAP)	GA
33	Marion County Indigent Care Program	FL
37	Improving Hispanic Elders’ Health	TX
41	Sullivan County Health Partnership	PA
43	Coconino County Health Department	AZ

These programs served a variety of populations; five (32%) focused exclusively on seniors, three (19%) on children, and four (25%) focused on increased access to health care for the indigent population. They also represented a variety of collaborative models, from partnerships between single medical practices and public health agencies to broad community coalitions. Several health conditions were addressed, of which chronic disease was the most prominent.

In the remainder of this section, we provide qualitative data summaries from our interviews on the key areas identified in our interviews: partnership initiation, structure and organization, barriers and facilitators to success, program evaluation and outcomes, and maintaining and sustaining the partnership. Each of the quotes provided is attributed to the position of the person responding by noting (PH) for public health agency interviewees and (MD) for physician interviewees.

Getting Started: The Initiation of the Partnerships

To expand the prevalence of public-private partnerships, it is important to examine the origins of successful models. The beginning of a partnership requires the confluence of many variables, including soliciting and securing of partners. Origins of Partnerships includes reasons why the partnership came into being and catalysts for working collaboratively. Securing Partners describes how and why different partners joined the effort.

Origins of Partnerships

Public Health Leadership. Only one of the partnerships identified was initiated by a practicing physician. The others were initiated by public agencies and non-profit entities; however most consulted with physicians about their role in the collaboration. Physicians saw the partnership as the way health care should be delivered.

“So we had physicians at the table for sure, and they were able to guide us in

terms of what's practical for a physician to do during a clinic session.” (PH)

“Public health and medicine should not be separate, [although] they clearly are and will probably be forever in the United States.... Disease prevention, education would all be sort of one big picture instead of sort of two sides.” (MD)

State, Federal, and Foundation Initiatives. Many programs were a direct result of a state or federal funding initiative that sought to increase collaborative efforts to improve public health.

“Well, we finally got the grant through the Administration on Aging where it came to the state and state then recognized [our] county as being interested and aggressive.” (PH)

“The state... helped fund an initiative where private, providers in each of the various health department districts around the state sat down with their health department directors and talked about: what were the major barriers to health care?” (MD)

In some cases it was local government:

“One of the county commissioners appointed a group and charged that group with finding some financially feasible, reasonable alternatives to provide services to um, the residents of [the] county who had no other access to care.” (PH)

Community Need. Often surveillance reports or other needs assessments identified pressing health needs in the community that required attention.

“We had no providers in the county that were willing to see Medicaid or indigent clients. So they were ending up in the emergency rooms ... it was costing a lot of money and a lot of time and people were ... wasting valuable emergency room space and time for things that would have been... avoided by prevention or early diagnosis intervention for ... treating chronic diseases.” (PH)

Clinical Need. Both public and private health care providers identified barriers to providing the best possible patient care that could be overcome by collaborating with other local agencies.

“They would get a lot of calls from folks who, as it turned out, were not eligible for public assistance like the Medicaid or Medicaid waiver dollars. The public health office would often try to steer these folks to

other community resources, but didn't have appropriate resources or time to follow up with a lot of these families.” (PH)

“We had a lot of providers and other clinicians who were out there really wanting to make a positive difference but at times, you know, sort of feeling like they were encountering a lot of barriers with families or just trying to figure out what ... counseling strategies worked best to try move families in a positive health direction.” (PH)

“They did a BRFSS special survey and identified that foot-checks, eye exams and just some of the specific diabetes standard of care weren't happening the way they should have been happening. So, they kind of brainstormed a project that they thought could address those things and that's how this project came about.” (PH)

“The whole principle behind the prescription was that it shouldn't take a lot of time.... I consider that good patient care.” (MD)

“I was the only practicing physician in the collaborative.... I am a public health person, and so for me professionally, it made sense.” (MD)

“One of my partners said to me, XXX, you've had a lot of crazy ideas in your life, but the best idea you ever had was getting this health department care coordinator to come work with us.” (MD)

Champions. There was often a single person who made it his or her mission to build a collaborative response to a need the individual had identified and felt passionately inclined to address.

“When I was doing my Master's in Public Health, I had read about these kinds of activities, and when I started the job three years ago I actually made a concerted effort to find partners to work on this.” (PH)

“My interest in developing caregiver support services in our area was a personal one.... Over the years I developed a theory that the best way to reach them would be in the health care setting because health care itself had evolved to be primarily an outpatient type of service delivery.” (PH)

Incentives for Selecting and Securing Partners

Grant Requirements. The funding sources would often request or require the participation of certain agencies in the collaborations they funded.

"The state representatives at contract negotiations -- we had all ridden down together, you know, car pooled together -- and they encouraged us to collaborate together and if possible to come in with ... one grant for our region so that it could save everybody time and resources." (PH)

"Really, what it was, is that the state preferred to just be dealing with them under one contract rather than four separate contracts or grants, so it was kind of a nudge from the state to say, you know, you're all kind of working in the same geographic area with a lot of similar goals, and why don't you work together more collaboratively." (PH)

"This particular funding source required that Area Agencies on Aging be involved in these systems changes projects." (PH)

Mutual Benefit/Similar Goals. Often partners were solicited and "sold" on participation because the effort was mutually beneficial.

"She would sponsor fairs for people... and it just seemed like a natural fit that we can go there and help them.... And then in turn if they did have a problem and they needed to have a doctor a lot of times they would end up following, if they liked you they would follow up in your office." (MD)

"Some of the clinics I think initially joined because of the money that we offered to do the program, but I think many of them (it's not that much money), so I think many of them joined because it's a tool that they can use to improve the quality of care that they're offering patients." (PH)

"They've helped us interpret our data, they've helped us look at it. I've had no problems at all in the collaboration." (MD)

Personal and Professional Relationships.

Whether it was a champion or a group of people looking for the right partners, existing relationships often played a big role in who finally came to the table.

"Her family doctor is who she talked to and he was just, he was the right type of personality for this type of an endeavor because he was very involved in the

community, a real down to earth kind of guy you know, so he was interested and so she made the very first contact. I believe, if I remember correctly, she made that contact during a clinic visit when she had an appointment with him." (PH)

Why Primary Care Physicians Get Involved

The physicians who participated in these partnerships were public health- and community-minded. For these individuals the goals of public health and medicine were similar, and it was logical that the two work together. Accompanying this point of view was an inherent belief in interdisciplinary care.

"Public health and medicine should not be separate.... If we were more data-driven on the medicine side, then public health would just be part of what we do and how we do it. Disease prevention, education, et cetera, would all be part of one big picture instead of two sides." (MD)

"I think that the future of pediatrics is going to involve a team approach to care. That practitioners practicing by themselves in their office are not going to be able to significantly impact the morbidities and mortalities that we see today." (MD)

"Since we are getting the community-based intervention, we also have people we're collaborating with in the community...lot going on in terms of our coordination with other agencies who are working on the project with us." (MD)

Another factor motivating some participating physicians was the importance of the mission of improving care to patients or the community, sometimes even if it would require extra time on their part.

"I like to...increase the community awareness in some of our services and I think when people who wouldn't otherwise walk in our door, come in for a referral they're sometimes made aware of other services that we have and that might better their lives" (MD)

"I just think, you know, the public health issue here is just, it's too big of a thing to just sort of say ok, it's not worth a few minutes per encounter." (MD)

"Our MAs will help us sort of ... manage that and ... the providers will have to be doing some data collection but you know that's gonna take again a couple of seconds." (MD)

"As medical providers, we're looking for opportunities to try to find something that might, might help. What we see as a huge problem, and for these folks to be able to try something and then you know study it, we don't have any problem with that. It's sort of a win, win. You know even if it doesn't work we're having some tools we can try." (MD)

"Doctors spend a lot of time complaining...about how much time they spend, but there's, there's always a couple of minutes to spend with a kid whose got a problem.... The public health issue here is just it's too big of a thing to say it's not worth a few minutes per encounter." (MD)

"If people believe that they can make a difference...it's not hard to get buy-in from the staff." (MD)

The novelty of doing something new and different, and of working with a new group of people was a motivating factor for some physicians. This was especially true of research studies or demonstration projects.

"Office-based practice can get a little monotonous at times and having some other outlet to give you a change of venues can be a little stimulating." (MD)

"As medical providers we're looking for opportunities to try to find something that might help. Even if it doesn't work, at least we have some tools we can try." (MD)

Structure and Organization of Successful Partnerships

While the target population and activities varied widely among the partnerships studied, general themes cut across most successful partnerships between public health agencies and primary care medical practices. These include a common sense of mission, a formal structure with differentiated roles, regular communication by a variety of formal and informal mechanisms, and a decision-making process that is familiar to all.

Common Mission

The sense of shared mission permeates the most successful partnerships, and needs to be felt by key participants. *"We have a collaborative team....I would definitely say that we have joint goals and we work very closely together"* is a typical comment. Development of a mission statement that all participants agree upon is an early activity of successful partnerships.

Regular group meetings tend to reinforce the mission, especially when all of the partners feel they have a role in decision-making. *"We meet on a monthly basis,"* one respondent said. *"It's strictly every person at that table contributing and volunteering and working as a collaborative as best they can."*

Commitment by program staff is important. One challenge for supervisory staff is to effectively promote a mutual loyalty to the partnership as well as to the non-profit agency by whom they are employed. One important issue involves developing commitment to the partnership on the part of program staff. Since staff are typically paid by one or another of the organizations in the partnership – most commonly a public health agency – their supervisors must make it clear that their responsibility is to the partnership.

"They're hired by the non-profits, so they have tended to develop some loyalty to their non-profit of hire. And so that's been a process to change that mindset to focus their loyalty on the collaborative." (PH)

To help maintain a sense of loyalty to the shared mission, participants from one partner would at times attend the other partner's meetings.

"We communicate well; we talk to each other; we attend each other's meetings." (PH)

Formalized Structure and Roles

Partnerships varied in their structural complexity and method of organization. A number of key structural elements were identified, however. Typically, there was one lead agency, an identified project leader who was fully dedicated to the program and generally resided in the lead agency, two or more key contacts within each partnership organization, and a number of workgroups and committees that conducted the work of the partnership.

Leadership. Partnerships typically have a clear leader. Often, this is the person who spearheaded partnership development, serves as primary manager of the program's activities, and leads the fundraising effort. In most of the partnerships interviewed, the leadership rested with the public health agency.

"We are the administrators of this project and it's primarily under our program. There's like you said, other places that are involved in the project, but we're the ones who have the leadership in it." (PH)

"We are the creators and the administrators of this project and all these other people collaborate with us." (PH)

"I am the planning director here at the XXX Area Agency on Aging and I am the overall project director." (PH)

A key role of the leader is to stay in contact with all the partners, not just through formal meetings but also through informal communication.

"I see connecting people as one of my roles. I do it informally all the time and try to foster sharing of ideas and systems and documents and things like that." (PH)

The extent to which the leader and her or his agency carried the weight of project management varied across partnerships, depending on the activities of the partnership and the degree of interest and resource availability of the other partner(s). One interviewee discussed having a flexible approach on the extent to which participating primary care clinics interfaced with the project.

"We've got two different models for how to work with the primary care physician... You have to tailor [your approach] to how each system operates and the culture you work within...and so there is no one size that fits all." (PH)

Project manager. Except in the smallest of programs, each partnership was staffed by a project manager, who helped coordinate the administrative aspects of the program.

"I have a nurse who is coordinator of the program [who helps with] oversight of the budget, writing grants..." (PH)

"Each network has a medical director, has a network administrator, and then they are responsible to hire the care managers to provide support to the practices." (PH)

Liaisons/key contacts. Successful partnerships have key contacts in each participating organization – a specific person to "lead the charge" within that setting. Ideally, there should be at least two persons, so that communication is not delayed if one is unavailable or too busy to respond in a timely manner.

According to our interviewees, having two or more key contacts is especially important for participating medical practices.

"I think it is crucial that you have a key point of contact and actually multiple contacts within the practice, because oftentimes you may have a provider

champion who is on board.... We found it to be particularly helpful to have an alternate contact, and that that person could be someone [who is] equally enthused within the practice." (PH)

Having two or more key contacts was also found to be useful for participating public health agencies. As one interviewee reported:

"There are two liaisons assigned to each practice site. There's a primary liaison and that person tends to be the key point of contact. But there is also a secondary liaison that is there to assist as well... And, as you know, people gel differently, so it could be that the provider champion interfaces with one, say the primary liaison for that practice, and it could be that the office manager...[interacts] with the secondary liaison." (PH)

Physician roles. Interviewees spoke often about physician involvement. Physicians have key roles in partnerships, although none of the programs studied was led by a physician in practice. These roles include inspiration of others (especially practice staff), guidance to the project team, and direct service.

"We had physicians at the table for sure, and they were able to guide us in terms of what's practical for a physician to do during a clinic session." (PH)

"Physicians did come to the first session...and say something like 'you know it's great that you're here. I support you being here' and, you know, rah rah, go team." (PH)

In large projects involving multiple physicians, one lead physician is typically needed.

"Each network has a medical director." (PH)

The physicians emphasized their commitment to the partnership, even though it involved uncompensated time.

"I was the only practicing physician in the collaborative, and doing the meetings and trainings, it was extra work." (MD)

"I may be losing a little bit of money, but I think it's made up for in how well we're taking care of people." (MD)

The physicians emphasized how the partnership helped coordinate care and/or complete their job.

"The screening happens in the hospital. That information gets transmitted to the care manager who then tries to make sure that the physician basically doesn't ignore it" (MD).

"They help coordinate ... health care. They connect them with resources and I would say [it] was an encouragement to do ad hoc counseling." (MD)

Workgroups and Committees. The partnerships studied described a variety of workgroups and committees, often using different terms to describe committees with similar or overlapping functions. Larger partnerships tended to have more complex structures. Among the groups discussed by interviewees were:

- *Inter-partner Workgroups (also called project teams).* Each project had a core group, representing both participants in the partnership. In smaller projects this team included individuals who were involved in both leadership and implementation; larger projects tended to have a leadership group or steering committee. Whatever the form, these groups of key players tended to meet monthly and to communicate frequently between meetings. Each participating unit in the partnership must be represented. Some of these groups are quite large.

"Each clinic was asked to have a member on the committee. We meet monthly." (PH)

"We have a monthly meeting and by and large we have 15 to 20 participants." (PH)

- *Subcommittees.* To accomplish the actual work of the partnership, many of the programs studied reported forming subgroups or subcommittees. One large program had eight separate working groups:

"We also have eight committees... We've got one committee that's meeting actually once a week, on our building project, and then the other committees meet anywhere from once a month to once every other month." (PH)

- *Steering Committee or Board of Directors.* Larger organizations with ongoing funding often have a committee with the ultimate authority to make decisions. This group typically consists of the leaders of each of the partners; it also may include representatives of constituent groups and other stakeholders. Meetings are held

every one to three months, though at first they may need to be more frequent.

"There has been a [project] steering committee that is made up of representatives of several of the [partners]. You know, people who can implement change." (MD)

"The board meetings are quarterly and all business is discussed there. If there's an issue in between, they'll do conference calls." (PH)

"Our board members include representatives of the health departments, representatives from all the hospitals or hospital systems in our areas, departments of social services, physician representatives. So it's a very broad-based board and definitely we do interact... In the early formative stages the meetings were more frequent. I've been here for about three years and...it's been quarterly." (PH)

Program staff prepare for these meetings, "do a lot of behind-the-scenes work." In this way they can both be respectful of board time and maximally utilize the board for guidance, support, and decision-making. As one project manager said:

"If you want busy people to partner with you, you really need to make sure that you bring them value with meetings, and that means doing a lot of the leg work behind the scenes, so that by the time you go to a board meeting most people have a good idea of what's going on...so when people come to the meeting they've got the facts and data they need to make a decision." (PH)

- *Advisory Board.* Many of all of the program directors interviewed spoke of having an external advisory board or advisory council that meets infrequently, often only once or twice a year. Typically, the membership consisted of individuals in leadership positions of stakeholder organizations, who are too high in the organization to be involved in day-to-day management of the program, but instead can advise on general direction and policy. One interviewee recommended including the directors of granting agencies on such a board.

- *All-Stakeholder Meetings.* One complex partnership makes a point to involve all potential stakeholders in meeting together periodically, as a means of identifying areas of unmet need, undetected problems, or new opportunities. That interviewee described it thusly:

"Yes, we have a network meeting...two to three times a year. All of our partners, probably 20 different partners, including the state health department, would come down to our meetings. And clergy, because many of the [target population] attend one or two of the local churches.... We've had the mayor come down, since many of the migrants live in that town, and then the department of labor and all the other partners I talked about. WIC, alcohol resources, the local libraries.... So many, many partners come to the meeting and we exchange, we talk about any issues we have, trends that we see changing. We just share ideas. It last about an hour and a half or more." (PH)

Volunteers. Volunteers are a cornerstone of many of the partnerships interviewed. Creative use of volunteers characterized many of the respondents.

"The YMCA volunteered their staff to do, as part of the DVD, an exercise regimen." (PH)

"We've partnered with the XX County Public Library as a free meeting space." (PH)

"We--through networking--had some teachers apply to help over the summer, to volunteer and help provide interpretation. Local school teachers or college... who speak fluent Spanish. On occasion we have a student." (PH)

"We actually had doctors who are involved in the indigent care system who volunteered to provide primary care services to this population until we could get [someone] an appointment here." (PH)

Volunteer status does not mean lack of commitment. As one physician interviewee stated: *"I consider [it is] like a partnership with them, if that makes sense, even though they call me a volunteer."*

Programs that successfully use volunteers spend time and effort recruiting and training them. *"We have gone out to search for people who are willing to be trained,"* one public health interviewee said. Another spoke of having *"master trainers who train volunteers."*

Adding new partners. All of the partnerships studied had a clear sense of whom they were serving, and their focus was on improving services to that target population. For this reason, additional

partners were often brought on board as needed to address these needs. For large organizations, the choice of partners can be made at a local level:

"Our local network operates within their own communities, and they bring to the table the community partners that they feel will strengthen the ability to provide these resources and provide the care." (PH)

Ongoing Communication

Regular communication typifies successful collaborations. Meetings are important for problem-solving and decision-making. Informal communication is important, too, for quick discussions and problem solving. Because partners are typically in multiple locations, face-to-face meetings tend to be infrequent, and conference calls and web-based communications are often utilized.

Meetings and conference calls. All of the collaboratives held meetings, most commonly on a monthly basis and by conference call. A hallmark of the successful programs was a commitment to participate in these regular (usually monthly) meetings or conference calls, although it was understood that at times some individuals (particularly physicians) would not be able to attend.

"By and large, we have good participation.... If they don't make it...they'll get to me via email or phone calls or things like that." (PH)

"I don't know if we've ever had a call where every single clinic is on, and we understand--I mean, they're physicians, they're busy people, and it's not always physicians on the phone, sometimes it's nursing staff, it's probably whoever's not busy at the moment." (PH)

Informal communication by telephone and email. Telephone and web-based communications were the mainstay of everyday communication, according to most interviewees. No matter what the size of the partnership – but especially in smaller ones – informal communication by telephone or email (including program-specific list serves) was critical.

"In the early stages of development it was all about meet to figure out what we're gonna do and actually that's the way an organization like this begins. But once you figure out what your mission is and once you start implementing your mission, your

partnerships are more about relationships." (PH)

"Emails fly back and forth." (MD)

"When you need to talk to somebody you pick up the phone or the email." (PH)

"Nothing formal. It's just phone calls. When I have time I'd call and ask who was there and what they wanted and were they getting the information that they needed... I think we're all so busy that it was hard to set up a real meeting." (MD)

"I just finished putting together a list serve." (PH)

Web-based communication. In some instances, more sophisticated applications were used for communication, such as web pages and interactive systems that could be accessed remotely.

"We have a remote desktop, a website where they have the articles, all the publications from each team, all the tracking, sharing of questions... a virtual office where we can connect and share information." (PH)

"We have tool kits that have been developed specifically with the providers in mind. We have a variety of web-based tools." (PH)

In-person meetings or site visits. When partners are scattered, for example, in programs involving multiple primary care sites, face-to-face contact is considered important, although it may be done quite infrequently. One program, for example, makes it a point to visit each of 44 participating primary care practices every year or so, to talk face-to-face about *"how they're doing with the program, if they're having any barriers or any successes, so that's another way that we have a relationship with the clinic and make changes and stuff like that."*

Communicating with primary care physicians. Even when primary care physicians were highly committed to a partnership, communication was challenging.

"Physicians are so incredibly busy. At times we've been able to have face-to-face with them." (PH)

"[The project coordinator] invites me to something and if I'm available I tell her 'yes, I can make it.' And if I can't, I tell her 'you know, unfortunately that doesn't work into my schedule.' That's how my interaction with the coalition works." (MD)

Meetings typically had to be short and to occur either very early in the morning or at noon.

"We had two initial planning phases. We met with them in the 30 minutes that they allow themselves for lunch and they ate and talked at the same time. And in some cases they weren't even there 30 minutes because they kept getting pulled out. We had one meeting that began at seven AM before the office [hours] started and we found that that was our best time." (PH)

While occasional face-to-face physician involvement was considered essential, most communication tended to be by email or telephone.

"Ongoing communication has occurred through telephone for the small part. For the larger aspect has been email... So the physician has been actively engaged even though we haven't engaged in a lot of face-to-face planning meetings." (PH)

"A physician's office is so busy, it took us a little time to figure out the best time to meet and how we can connect. So in this case email really has been terrific. We've gotten pretty rapid response from the physicians, at least the same day or the next day... And we've been able to telephone and leave messages and then they called us back." (PH)

Decision-Making by Consensus

The method of decision-making in successful partnerships respects the different positions and perspectives of the various participants. Consensus is the favored method. When consensus cannot be achieved, then programs must work hard to arrive at a solution that comes as close to consensus as is possible:

"We have consensus agreement, and if we don't have consensus as we roll this out we bring in an outside facilitator to help us work through, because every once in a while we run into turfs." (PH)

Program Evaluation and Outcomes Achieved

Both external and internal funders are increasingly demanding evidence of program effectiveness as a condition of continued support. Thus, ongoing evaluation was an integral part of successful programs. While many of the program evaluations were not yet complete at the time of the interview,

there was often some evidence that establishing *accountability* collaboratively was beneficial to the partners and improved patient outcomes.

Drivers of Program Evaluation

Grant Requirements. Many funders required some amount of data on the activities of the grant recipients.

“We as project managers manage in terms of the outcome measures that we have promised to our grantor which is the [state] department of human services.” (PH)

“One of the things that we’ve been trying to assist the project on is a better data collection or client tracking system because what’s been required by the state has been pretty weak. If you were to look at their quarterly reporting that they submit to the state you wouldn’t get much information out of that.” (PH)

Pilot Projects. Several of the partnerships studied were small pilot programs. Evaluations were conducted to assess program feasibility and potential for scale-up.

“We’re piloting that right now and we’ll have some with three or four clinics in [city], and we should have some results this summer on how that’s working, and then we’ll launch it to other communities as well.” (PH)

Outcomes Evaluated

Clinical Data. Some of the most common indicators of success were measured in the clinical setting.

“We also are looking at lab values so we have labs before the program started and then after the sessions end at 20 weeks.” (PH)

“We did chart reviews on a sample of folks and we did some phone interviews with a sample of families post-discharge.” (PH)

“We’re really looking at the two measures. A greater adherence, you know, this is what percentage of folks should be getting these certain tests, and are we getting, are we hitting that at the target or higher in terms of adherence to the clinical peer protocol?” (PH)

“We have two different measures that we’re using. We have specific data that are being collected from our patients in

[the program] that includes a variety of different measures ... such as BMI, weight, height waist circumference. We’re also collecting blood pressure and urine and we’re asking families ... some questions in terms of their eating habits and physical activity, so you know those kind of psychosocial measures, demographic ah, that sort of thing and we’re measuring those at, you know, over time at three different points in time.” (PH)

However, it may be likely that the results are positive, but are never published.

“It was a great project, we had some interesting data that we got out of it that shows that it was a form of intensive well child care and we got some positive results which unfortunately we’ve never published.” (MD)

Cost Savings. Some partnerships in which clinical services were provided to patients who would either otherwise go untreated or receive remedial treatment sought to estimate real savings accrued.

“Cost savings that have been made both by the program and last [report] to my recollection was about a quarter of a billion dollars.” (PH)

“We have received from the [state] since our founding... a total of \$180,000; that’s it. We also know that the value of our services since the beginning [is] conservatively calculated at about \$15 million.” (PH)

Quality Improvement. A quality improvement approach was often listed as the framework used to identify improvements in patient care.

“We’re trying an IRB method but in these kind of systems we’re thinking that we have to really be creative about keeping the evaluation processes within a quality improvement kind of framework so that we can actually do a better follow up evaluation to see what happens.” (PH)

“There’s been a little bit of, of kind of healthy competition in ..., wanting to do what the other [hospital] partners are doing in terms of ... their quality measures and efforts.” (PH)

Behavior Change. Many of the public health agencies were looking at behavior change as their outcome.

“When you look at this project, from an educational standpoint it makes a lot of

sense to me, we look at, you know, how do you really effect behavior change and one way that we know that you effect behavior change the most is that individuals hear the same message from different sources.” (PH)

“So really what we wanted to look at was change in knowledge, change in behavior and a change in ... lab values or clinical values.” (PH)

Partner satisfaction. Partners often indicated increased knowledge and/or satisfaction with their ability to accomplish their mission or serve their target population as a result of the partnership.

“I was feeling alone out there and I think this is one of the greatest features of our group, that everybody feels so connected and from that connection they’re all able to have their needs met.” (PH)

“I have always found that [public health agency staff] are very approachable and, and knowledgeable. So it’s been a good interaction all the way around and pretty much if we come up with something, if we’re like ‘oh, gosh, we really need help doing such and such’ or ‘we really need the resources to do such and such’ they work very hard to connect us with the resources we need. (MD)

“We did do a survey that was distributed in the clinics and we got some responses from doctors who indicated that they really appreciated the position.” (PH)

“We are all finding that we have significantly increased the connection between public health and aging, and the clinical side of aging, and the social service side of aging. All of us have felt this total shift in communications.” (PH)

“The main benefit would be developing the good will. You do some increase in patient volume having your name exposed at the events.” (MD)

“Having some other outlet to give you a change of venue can be a little stimulating ... obviously you went into medicine to try to help people.” (MD)

Anecdotal Positive Outcomes. Finally, many of the interviewees provided anecdotal evidence of the partnership’s success.

“Patients were excited... I did not know they would be as excited as they are – they love it.” (MD)

“I think any time as a physician you start paying attention to how you’re doing, I mean you actually collect data on something, just the fact that you’re paying attention to it means it gets better.” (MD)

Barriers and Facilitators of Partnership Success

Primary care practices and public health agencies bring different health care perspectives and different language to a collaborative partnership, yet both have similar goals to improve health. Given their differences, it is important to examine both barriers and facilitators to successful partnership. *Barriers to partnership* include anything that hinders or prevents progress to goals. *Facilitators to partnership* include anything that promotes or makes it easier to reach the goals of the partnership.

Barriers to Establishing a Partnership

When planning a partnership, it is important to be aware of several potential barriers. These include time pressures, budget constraints, staff turnover, poor communication methods and lacking evidence of effectiveness.

Time pressures. Time is a recurring issue mentioned by several interviewees. This includes finding time to meet and time to share resources or provide services.

“The big issue always seems to be time. Everybody complains, we don’t have time to do anything else.” (MD)

“Physician time is pretty well scheduled on a day-to- day basis so to break off an hour and a half to two hours at seven o clock in the morning is not very appealing to many physicians these days.” (PH)

Budget constraints. A limited budget was frequently discussed as a problem when trying to get stakeholders to the table and also provide resources and services.

“They’re good people trying to do good things on very limited budgets.” (PH)

“We have not had dedicated funds. There are people that aren’t gonna come to

the table until you have money so we know the people that have come to table ... they're probably good for the long haul." (PH)

"We're having some difficulties with this partnership because it's dependent upon revenue streams rather than the needs that we've identified here in the community" (MD)

"Grant funding died and there was a new [leader of the partner organization] who had additional thoughts in terms of how she would like to use the space that we were using." (MD)

Staff turnover. When key people in the partnership leave or are replaced, the relationships need to be rebuilt.

"When you do a project of this duration and leadership changes you have different pressures and sense of priorities, and so that was difficult to keep the momentum going. The momentum actually dropped for a while they went through a hiring process and had trouble kind of getting back." (PH)

"Your collaborative is only as strong as its weakest partner. That when your weakest partner disappears the whole collaborative falls like a house of cards and that's, that's essentially what happened." (MD)

"When one organization has staff change it's always difficult but that happens and you start all over again working with a new person." (PH)

Poor communication. Communication difficulties can arise between the community program and the physician. There may be poorly attended meetings as well as too many meetings.

"They were referred back to their primary care physicians primarily through a written letter, which we all knew was gonna be problematic but we did not have a better way to do that with the primary care physicians. And the project wasn't designed well to follow up on them." (PH)

"We've tried to develop a long-term care task force but we just weren't successful with getting them to be part of that and attend the meetings on a regular basis." (PH)

"If I'm going to 20 meetings a month. When am I going to do the work here?" (PH)

Lacking evidence of effectiveness. Documenting evidence that the program works was a common interest and concern.

"He said if I come in with this legislation ... people are gonna tell me a 150 reasons why that won't work. He wanted evidence and we weren't able to find any evidence. And so we actually tried and worked at trying to get some money to do our research but we couldn't get any." (PH)

"We're working on an outcomes evaluation that has been tricky to do. It's not gonna be what we hoped to do because of the need for consent and IRB approval." (PH)

"We still have work to do to prove the financial value of this. Unfortunately that's just the way it is with health care" (PH)

Facilitators of Partnership Establishment

Although there are numerous potential barriers to partnership, there are also several common supports. These include multi-method communication, financial support, having a local champion and looking for the "win-win" situation.

Multi-method communication. The need for regular communication must be balanced with the time pressures. Various methods of communication can address these issues.

"We communicate regularly via phone, via emails, on activities that are going on so there's always--you know, constant communication is going on." (PH)

"There's an executive board that the community health services report to in terms of what they're doing and how much it costs. The board meetings are quarterly and all business is discussed there. If there's an issue in between they'll do conference calls or do whatever they need to but it's very difficult to get that many partners in one place at one time. So with the quarterly ones everybody's able to show up because they're planned in advance." (PH)

"We had one meeting that began at seven AM before the office started and we found that that was our best time to be able to have the physician before their staff

came in, but the majority of the ongoing communication has occurred through telephone and email” (PH)

Sometimes the communication efforts involved an individual who served as a liaison between the practices and the community.

“Practice liaisons we’ve really found do serve a key role, in terms of really moving things forward with the practices on multiple levels and they’ve done an excellent job establishing rapport with the practices and helping to ... identify dates and times that are gonna work best for scheduling” (PH)

“We have implemented the strategy of having the practice liaisons who are kind of our key points of contact with the practices ... to make sure that they ... are maintaining regular communications via phone, via email, via fax, via letters that are sent out, via specialized communications. Just periodic communications that are sent.” (PH)

“The case manager is the liaison, literally, between the physician, the family and the program; it is the case manager that refers the family to the program and makes sure that that connection is made.” (PH)

Financial support. Sometimes funders will encourage collaboration among the groups they are funding; this brings groups with similar goals together to work on a specific issue, and relieves the burden of budgetary concerns. Money was also helpful to achieve initial buy-in from clinics until they can see the benefits of the partnership.

“The state preferred to just be dealing with them under one contract rather than four separate contracts or grants, so it was a nudge from the state to say, you’re all working in the same geographic area with a lot of similar goals, and why don’t you work together more collaboratively? So, it was the funder, the state at that point in time that nudged them into this collaboration.” (PH)

Having a local champion. Someone who can speak positively about the partnership to others is important to sustain a high level of interest. The ideal is to have a champion within each public health organization and medical practice involved in the partnership.

“There’s doctors who are very involved and who are champions in the

project and those are the clinics that are the most successful, is when they have a doctor or kind of a higher level provider who is a champion for the program.” (PH)

“I think it is crucial that you have to have a key point of contact and actually multiple contacts because often times you may have a provider champion who is on board and you know clinicians tend to be very busy. You also need ... kind of like a secondary that can help ... to move things forward.” (PH)

“It’s all locally driven. It wasn’t the [state] capital coming into these communities saying ‘you’ve got to play nicely together.’ It was their local leadership saying, ‘hey, let’s work together on this.’ And so local physician leaders making their own decisions has been quite a strength.” (PH)

Creating a win-win situation. When organizations with similar goals come together, turf issues can be a potential problem; thus, it is important to highlight ways all partners can benefit.

“How do we implement this, respecting everybody’s clients so that there’s not a feeling that somebody is out to take ... patients from one system to another system and that’s what we are working through; we’re having a series of meetings and we’re figuring out what’s the win-win, keeping the focus on what’s the best for the community.” (PH)

“As medical providers we’re looking for opportunities to try to find something that might help...and for these folks to be able to try something and then study it... It’s sort of a win-win” (MD)

“Helping [primary care providers] realize that everyone is there to try to help the patient... reduces a lot of the work on the provider because again the population is very challenging. So when they see the benefit our case managers add to their ability to reach these patients, to find them, to bring them into the office, to make sure they’re taking their medications, to get them to the eye doctor or whatever, then that has been a strong selling point.” (PH)

“The perception that you have to avoid is that, because we are funded by Medicaid is that we’re here for Medicaid, and you go to somebody and say we’re here from the government and we’re here to help you, you know what the immediate

reaction is. Ah, but we really are and when you get a chance to explain to people, they really do see the value Physicians want to do the best job they can and ... you can show that you're there to help them facilitate, get better outcomes." (PH)

Accommodation to the time pressures on primary care providers. The severe time pressure under which primary care physicians operate was a recurring theme of our interviews both with public health agency staff and with participating physicians.

"Clinicians tend to be very busy." (PH)

Consequently, successful partnerships often involve accommodation to the time pressures on primary care physicians. In a previous section, we discussed how communication strategies must accommodate the busy schedules of primary care clinicians, as well as the time pressures on public health agency personnel. In addition, actions that are required of the primary care practice need to be tailored so that they take little or no physician time.

"The providers will have to be doing some data collection, but you know that it's going to take [only] a couple of seconds." (MD)

"There's going to be some sort of coordination and tracking that might take extra time, but it's not going to take extra provider time." (MD)

Maintaining and Sustaining the Collaboration

Partnerships must be both maintained and sustained. Operationally, we defined *maintaining the partnership* as the processes by which, on a day-to-day and week-to-week basis a partnership is able to effectively function. In contrast, we defined *sustaining the partnership* as the processes by which programs are able to successfully continue operating on a long-term basis and to move from initial start-up funding to having ongoing support and existence.

Maintaining the Partnership

Successful partnership maintenance requires committed leadership, buy-in within and connections between individuals in each organization, regular communication, perceived benefits for the primary care practice, and an expansion mindset.

Committed leadership and physician champion. The importance of committed leadership on the part of both participants in a partnership was emphasized by several interviewees. On the primary medical care side a provider champion is critical. Also important is a staff member who can help attend to the day-to-day business of the partnership work:

"We found it to be particularly helpful to have an alternate contact. That person could be someone who's equally enthused... It could be a nurse; it could be a case manager; it could be an office manager; it could be a patient care coordinator." (PH)

Sometimes the initial buy-in will be diminished either through increased demands or through turnover. When that happens, success depends on someone stepping forward to increase his or her involvement.

"We had some changes in leadership and... there was a different level of commitment and sense of priority by the middle management leadership who inherited this project. So we had to do much more...to keep them on track and help them continue to keep staff engaged." (PH)

Buy-in within each organization. Along with committed leadership, and fostered by that leadership, is a sense of buy-in on the part of individuals working within both organizations. This requires that both partners have the same vision of the goals and activities to be carried out.

"I think one of the things that we have to do is kind of align our incentives and to have kind of some standard uniform expectations." (PH)

"[For] any project like this to succeed [it] really needs to get the primary care physicians actively involved in understanding how it works and it's design and then their willingness." (PH)

Regular multimodal communication. To sustain the buy-in and interest in the partnership requires regular communication.

"The collaborative meets regularly, I'm guessing it's once a month." (PH)

"We have a list serve for all of our grantees that ... you can send email, ask the question of the whole group essentially, and ... everybody can benefit from everybody's knowledge." (MD)

Providing clear benefits to the primary care practice. While belief in the importance of improving community health often is a key motivator for primary care physicians becoming involved, maintaining their interest tends to require clear benefit in terms of their ability to provide quality, cost-efficient patient care. Thus, physician interviewees participating in successful partnerships frequently pointed out enhancements that their practice accrued from participation.

"One of my partners said to me...you've had a lot of crazy ideas in your life but the best idea you ever had was getting this health department care coordinator to come work with us." I think that both the care coordinator and the social worker are greatly appreciated by the other 30 employees that work for me here in this office." (MD)

"We just implemented an electronic health record in March and [the partner] is working to try to help connect us with people [so] that we can actually pull our data straight out of our electronic health record instead of having to manually re-enter it...which we are doing right now." (MD)

"They've helped us interpret our data; they've helped us look at it." (MD)

The marketing potential of community exposure is another benefit identified by some participating primary care physicians.

"You do get some increase in patient volume...having your name exposed at the events." (MD)

"Not only are you potentially building good will, but you're making contacts, where patients may end up finding you back in your office.... People who wouldn't otherwise walk in our door come in for a referral [because] they're made aware of our services." (MD)

An expansion mindset. In addition to the core structural characteristics of leadership, buy-in, and communication, many of the successful partnerships interviewed had an entrepreneurial mindset, whereby they appeared to be continuously open to new partners, new activities, modifications of current activities, and other activities that would allow the partnership to grow.

"They're looking at expansion, new partners." (PH)

"I would expect expansion versus reduction." (PH)

"Branch, branch, maybe branch out a little bit." (PH)

Sustaining the Partnership

For a partnership to continue beyond its initial funding and start-up requires continued existence of all of the features discussed above that maintain a partnership. In addition, it requires acquisition of ongoing, often diversified, funding; conduct of regular evaluations aimed at generating data supporting the effectiveness of the program; and a long-range vision and planning process.

Acquisition of ongoing funding. The majority of the partnerships studied began with grants from state legislatures, health departments, or a foundation, and continued to depend on grants for support. This situation leads to ongoing anxiety about the program's ability to continue to operate in the long term.

"We have had cuts this year, but I'm thinking that this will be stable but I really don't know." (PH)

Thus, the need to acquire ongoing funding is a common issue discussed by all respondents. This leads to a mindset of forever looking for additional sources of funding and for expansion opportunities.

"We are always looking for money. We're always looking for new programs. We're growing by leaps and bounds, so depending on who you talk to there's different funding sources [that] we're all individually looking at. So collectively as an organization we're always looking for new money sources." (PH)

Sources of ongoing funding include government, private foundations, businesses, charitable giving by individuals, and endowments. For example, programs sustained by grants from state funders explain:

"Right now it is a project that is very much in favor with the state. It's really consistent with the state's strategies." (PH)

"We became a grantee of the XXX Department of Health and...I think this is our fourth grant cycle." (MD)

"Because I have worked on that grant now for eight years, it put me into a position to be at the head of the line.."(MD)

Programs that obtain a succession of grants from private foundations indicate that they remain anxious about continued funding:

"...it's kind of year-by-year, grant-by-grant." (PH)

Yet another source of funding is businesses or other local donors, especially if the project involves improving services to underserved persons living in the community. Such fundraising requires significant organization and effort.

"We have a letter that's going out to the area businesses, and last year we received \$38,000." (PH)

Typically, in the most successful programs diversified funding is the key to success. In the best of circumstances, several of these sources – state funds, grants, and support from practices – can be used to secure ongoing support. Often this success goes hand in hand with program modification.

"It's an ongoing thing, as we identify a problem we look at possible ways we can meet it." (PH)

"Since 1999...our funding...even doubled which is really great. But we added on an additional project." (PH)

Funding by primary care practices was rare; however, many acknowledged that a good method of ensuring sustainability would be to incorporate the partnership into the ongoing budget of a practice or health system. In today's challenging economic climate for primary care this is not easy, however, and in these interviews it was presented more as a wish than as an accomplishment:

"We're going to present it to the clinics and say 'you still need it,' or 'we'd like for you to keep doing this.'" (PH)

"It is our hope the clinics will see the benefit...and that we can form a lasting partnership with them." (PH)

"I think we will eventually get sponsorship from these very large health maintenance organizations." (PH)

Ultimately, the goal most of the programs identified was to become institutionalized, with funding from internal sources. Virtually none had made this transition, however. Instead they continued to apply for short-term funding from foundations and from state sources. One respondent took a long view, seeing this as an intermediate step toward transitioning to permanent status:

"Our plans, of course, are to eventually embed us in the health care system and in the community, so that it's going to be a viable part of people's health care. I would suspect that it's a 10- to 15-year process, and yes we're going to continue to apply for grants." (PH)

"It hasn't gotten to the point of being institutionalized -- that of course is the ultimate goal." (PH)

Evidence of cost-effectiveness of the partnership. An important key to making the transition from temporary to permanent funding is demonstration of the program's value in terms that matter to decision-makers. Depending on who is holding the purse strings, the key outcome of interest could be money saved, clients served, or improved patient outcomes. Acquiring these data requires careful attention to designing and conducting a program evaluation – ideally implementing it from the beginning.

"That's why we have more funding this year. We actually were able to drill down the numbers to show that we were serving so many people out of our county." (PH)

A long-range vision and plan. Applying for funding, conducting evaluations, and having an eye for expansion and change require a forward-thinking mindset on the part of the project leadership.

"We have to have a [service provision] plan and a business plan and both of these have to be marching forward with progressive evaluations." (PH)

V. Conclusions and recommendations

Collaboration: An Ongoing Challenge

Collaboration between public health agencies and primary care medical practices is logical and could be cost-effective (Lasker, 1997; Bazzoli et al, 1997). Furthermore, collaboration could allow both the public health agencies and the medical practices to expand their capacity and expertise and, therefore, better serve their goals of improving individual and population health (Halverson et al, 2000).

However, in spite of much interest and encouragement, longstanding, self-sustaining partnerships remain rare. In our search for successful partnerships, we sorted through numerous false leads to find true examples. Particularly disappointing to us was following up on programs that had been described as successful or innovative in prior reports, only to find that the programs no longer existed. Even the 48 we chose to profile included partnerships where physician participation was minimal or had declined, and programs that were struggling, often because of a lack of ongoing funding.

Indeed, in spite of much interest and many efforts over the past decades, such collaborations are very much “swimming upstream” against the strong current of fragmentation that exists in our health care system and its financing. This fragmentation, as well as limited resources, combine to limit most public health agencies and medical practices to what they can directly control (i.e., their staff), to what they traditionally have done, and (in the case of medical practices) to the activities that directly generate revenue.

However, given the widespread dissatisfaction with the current health care system, the time is opportune to consider new and alternative ways of doing things. Breaking down existing silos to develop a more integrated way of managing individual and community health problems appears to be one logical and cost-effective approach to system change. Thus, in spite of the barriers, we feel that the time is right to be optimistic about the potential for future collaboration between medical practice and public health.

Opportunities for Collaboration

Our evaluation of existing programs found that most addressed one of three common themes: a) increasing access of underserved individuals and

populations to primary medical care; b) enhancing prevention resources for individuals and communities; and c) improving quality of care for persons with chronic diseases such as diabetes.

Building on our review of prior research (Mattessich et al, 2001; Mizrahi & Rosenthal, 2001) and our own research, we have identified the following areas as particularly ripe for collaboration between public health agencies and medical practitioners:

- Disease surveillance (e.g., influenza)
- Disaster preparedness
- Care of underserved (e.g., joint free clinics; referral of indigent patients to primary care providers for direct services)
- Chronic disease management (e.g., diabetes care)
- Health promotion/healthy lifestyle (e.g., nutrition counseling)
- Children's obesity (collaboration to address an emerging community problem)

Engaging Physicians.

Attracting primary care physicians and keeping them involved is a particularly challenging barrier. Primary care medical practice has become more stressful in recent years, due to a combination of the increasing complexity of medicine, growing overhead expenses, and diminishing reimbursement (Woo, 2006). This increasingly limits the ability of primary care physicians to participate in the development and implementation of activities that are not directly related to seeing patients and generating revenue. Of the 48 programs we profiled, leadership by a physician in practice was unknown, and many programs reported going to great lengths to not overly impinge on the time of their physician partners.

Our data indicated that the physician's roles included inspiring and supporting practice staff, guiding the project, and delivering patient services. Physicians reported recognition of the need for partnerships between public health and community health practices, which outweighs the demand for time and lack of reimbursement. Moreover, they reported significant satisfaction with accomplishing the mission of the partnerships and improving the care of patients.

Based on our research we recommend the following strategies to attracting and retaining primary care physician involvement:

- Communicate regularly but succinctly.
- Find out the communication method the physician prefers and use it.
- Involve physician partners early in the planning process
- Make sparing demands on physician time
- Be sure that the collaboration provides the physician and practice with tangible benefits, such as improved care of patients, expansion of services, reduction in costs/overhead, and/or enhanced status and visibility in the community.
- Pay for physician and staff time.

An additional consideration is the type of practice with which a public health agency engages. Our environmental scan found that community health centers (CHCs) especially appeared to be commonly involved in successful collaborations. This likely reflects a closer alignment between the missions of CHCs and of public health agencies.

Improving the Health Care of Older Persons

Health issues of older persons represent a particularly ripe opportunity for collaboration. Persons aged 65 years and older make up only 13% of the U.S. population, yet comprise 26% of all physician office encounters (Cherry et al, 2007) and consume 36% of the U.S. health care dollar (Stanton & Rutherford, 2005). Several factors in regard to older persons in the United States make this population especially important to both primary care physicians and public health departments:

- The number of older persons is expected to grow rapidly.
- Many older persons are below or near the poverty level.
- There is a high concentration of health risks among older persons.
- The Medicare trust fund is projected to be exhausted by 2019 (Healey, 2008).

Of the 48 programs we profiled in this project, six (12.5%) specifically targeted older persons. While, we did not stratify our sample to equally interview partnerships providing older adult services, the researchers were able to conduct interviews with all six of these partnerships, which resulted in gathering data for 38% of the 16 interviewed programs.

Many potential areas exist for collaboration between public health agencies and primary health care providers in regard to senior health. Examples of areas that address concerns of both fields include: promotion of function-enhancing

community innovations (e.g., community safety and universal design); involvement of older persons in exercise and physical activity; falls prevention; optimization of medication regimens; improvement of transitional care across settings (e.g., treatment in emergency department); self-management of chronic illness; and support for persons with chronic illnesses (e.g., Alzheimer's disease, stroke, Parkinson's disease) and their families.

Overcoming Barriers to Collaboration

Effective collaboration has been defined as "a mutually beneficial and well-defined relationship entered into by two or more organizations to achieve common goals" (Mattessich et al, 2001). In addition, these data support numerous studies that identify elements of successful collaboration (Lasker, 1995; Mattessich et al, 2001; Mizhari & Rosenthal, 2001). What is less clear from existing studies, but became evident in our interviews, is how the lack of some or all of these elements can serve as barriers to and often lead to the demise of collaborations between public health agencies and primary care medical practices.

In addition to a number of publications that discuss barriers and strategies (Lasker, 1997; Mattessich et al, 2001; Mizhari & Rosenthal, 2001; Winer & Ray, 1994), our investigation of the subjective experience of both public health administrators/providers and physicians supports the conclusion that the benefits of collaboration to provide and improve health care outweigh the challenges. However, our results and those of others indicate that overcoming barriers to collaboration is demanding. Persons entering into collaborations would benefit from knowing the pitfalls that they may encounter, and working from the beginning on strategies to minimize the impact of these factors. Table 4 (next page) summarizes many of the common barriers identified in our research, and suggests possible strategies for addressing them.

Table 4: Barriers to Collaboration and Potential Strategies for Overcoming Them		
Barrier	Explanation and Examples	Potential Strategy
Forming a Partnership		
Different orientations	Public health is population-oriented; primary care medicine is patient-oriented	Find common ground, learn to understand and speak the other's language
Nature of physician office practice	Poor remuneration for public health activities such as prevention; infrastructural limitations (e.g., record systems); time pressures	Provide tangible benefits to the practice
Nature of public health practice	Slow pace. New initiatives tend to require specific public funding or grants	Accommodate physician preferences; plan for sustainability from the onset
Resources	Each sector has its own resources	Seek outside funding and/or identify tangible mutual benefits
Tradition	Collaboration with the other partner is not standard practice or a job requirement for either	Identify areas of common interest and reach out
Time pressure	Formative months are described by successful programs as the most time consuming	Acknowledge the need to spend time in start-up; celebrate successes at each step
Maintaining a Partnership		
Maintaining physician participation	Time pressures may lead to physicians gradually reducing involvement (e.g., skipping meetings)	Communicate regularly but succinctly; provide benefits/payment
Maintaining engagement of public health agency	Pressures from other priorities may reduce staff effort and enthusiasm	Involve multiple staff; include activities in agency timelines and reporting; celebrate successes
Time-limited grant funding	Most partnerships were begun with grant funding, which is time limited	Plan to look for sustainable funding from the beginning
Staff turnover	Loss of a key individual can derail a program	Cross-train; have multiple people from each partner involved
Inability to achieve permanent status	Partnerships are initially (and often permanently) viewed as outside the core activities of participating organizations	Seek to incorporate partnership activities and goals in policies, procedures, and routines
Lack of evidence of effectiveness	Without clear evidence of success, funds for continuation are hard to generate	Plan evaluation from the beginning, using outcomes of importance to potential funders

Principles of Effective Collaboration

Based on our review of the literature and our interviews with participants in partnerships, we recommend the following principles for public health agencies and primary care medical practices that are interested in establishing and maintaining a successful partnership.

1. Agree on joint goals and a strategy that creates a “win-win” situation for both partners.

The goals should address an identified community need. Addressing the goals should expand the capability of each partner to accomplish its mission or a portion of its mission. The goals should be

agreed on in face-to-face meetings and be part of a written (formal or informal) agreement.

In coming to an agreement to partner together, leaders in each of the partnering organizations should seek to understand the mission and interests of the other and to identify strategies that lead to tangible benefits for both parties. Examples of such benefits are: a) a desired new service or activity; b) increased availability and/or expansion of a desired service and/or outcome; c) cost reduction or revenue generation; and d) enhancing image and marketability in the community.

2. Decide who will do what. For the partnership to work smoothly, roles and

responsibilities of each participant should be clarified. These should be written down as policies and procedures, as a memorandum of understanding, or (in rare occasions) as a contract.

3. Involve multiple persons in each organization, including at the leadership level.

Within each participating organization, multiple individuals should be invested in, involved with, and knowledgeable about the partnership. Having one or more champions at the leadership level in each organization is crucial. Furthermore, the involvement of multiple individuals assures that the partnership's activities will become integrated into the organization's everyday work. This helps maintain continuity and sustainability over time.

4. Communicate regularly and in ways that fit into the culture of each group.

Because public health and primary care medical practices speak different languages, communication and mutual understanding must be actively pursued. Multiple methods of communication are key, with the preferred mode of communication at any given time depending on the issue at hand, the time pressures, and the mode that best addresses each partner's preferences. Given staff turnover, it is valuable to have both a champion and secondary points of contact within both partnership groups. Consider adding a liaison between the groups. Building in an evaluation plan is crucial because this will help the partnership demonstrate successes and foster a win-win situation.

5. Solve problems informally. Successful partnerships depend on informal mechanisms of decision-making and problems solving. Mutual respect should characterize interactions, and decisions should be made by consensus whenever possible.

6. Cultivate interpersonal connections and solve problems informally. Because informal mechanisms are important to partnership success, the most successful collaborations involve strong interpersonal ties at multiple levels across organizations. Such connections are fostered by informal meetings and socializing together, as well as by actions that consistently demonstrate dependability and a concern for mutual well-being. This is especially true at the beginning of partnerships or in small partnerships. With increased size and complexity, formal mechanisms and legal agreements often develop; however, strong interpersonal connections remain crucial to partnership success.

7. Cultivate community good will and visibility. If the community knows about and values the activities of a partnership, this adds value to the partnership itself. Therefore,

engagement of other community members (e.g., on an advisory board), participation of the partnership in community events, and publicity through engagement of the local media are activities that can strengthen the partnership through the cultivation of community good will.

8. Be flexible regarding what, who, and how.

Only involve the necessary partners in a specific function. Big governing boards, for example, rarely will maintain physician interest, whereas they may be necessary to engage certain community groups.

9. Conduct an outcomes-oriented evaluation from the start. Demonstration of success is the key to obtaining ongoing financial and community support. Therefore, desired outcomes should be determined, observable measures of those outcomes identified, and a process of evaluation initiated as part of the process of partnership formation.

10. Get started early and at a small scale.

While planning and goal-setting is important as the first step in partnership development, it is important to begin the desired work early and, ideally, at a small scale. In this way, ideas can be tried and problems in the implementation plan worked out before the partnership activities are rolled out more broadly. In addition, an early start on carrying out the desired mission will help motivate partners to continue devoting energy and effort to the collaboration.

11. Celebrate successes. It is important to bring partners together to celebrate successes. Ways to do this range from talking about them at meetings to having a formal gathering.

12. Plan for sustainability from the beginning. Some collaborations are time-limited, because the parties get together to accomplish a single activity that has a specific deadline. However, the majority of collaborations between public health agencies and primary care practices address needs that are ongoing. Therefore, even (and perhaps especially) if financial support is initially solid (e.g., due to a grant from a foundation), leadership should from the beginning establish a process of planning and then actively working toward achieving ongoing support.

Towards Future Integration of Services

In a rational health care system, public health agencies would work in tandem with primary care providers to address the health care needs of all citizens, and integration of services between and across these sectors would be commonplace. While currently such an integration of services is rare, there have been developments at a community level that could serve as models. One

example of such an integrated system was described by Lasker and Abramson (1998), in which a partnership between a nonprofit family health clinic and a county health department operated primary care and traditional public health clinics jointly. Although under separate governance, staff from the two partner organizations worked side-by-side in the same building, providing patients with a one-stop health and human services center and a commonly shared case management system. Several of our case studies (e.g., #43, Appendix) provide additional examples of steps in that direction. We hope that the current interest in reorganizing the U.S. health care system will make integration of public health and primary care services the rule rather than the exception.

Conclusion

Over the past 20 years, much work has been done to encourage partnerships between public health agencies and primary care physicians. At the

same time, both public health and primary care have become increasingly complex and financially stressed. Also, as is clear from the results reported in this monograph, much is now known about how successful partnerships can be initiated and sustained, and the kinds of work that they can accomplish.

Nevertheless, much more needs to be done before the nation's public health and primary care systems work harmoniously, in tandem. It is our hope that the lessons learned from this and other efforts will inform those who wish to further the process of partnership. Ultimately, we both hope and believe that integration of public health and primary care will be a key component of the health system reform that will inevitably result from the current widespread discontent with America's health care system.

References

- Barr VJ, Robinson S, Marin-Link B, Underhill L, Dotts A, et al. An integration of concepts and strategies from population health promotion and the chronic care model. *Hosp Q*. 2003;7:73-82.
- Bazzoli GJ, Stein R, Alexander JA, Conrad DA, Sofaer S, Shortell. Public-private collaboration in health and human service delivery: Evidence from community partnerships. *Milbank Q*. 1997;75:533-561.
- Berenson RA, Hammons T, Gans DN, Zuckerman S, Merrell K, Underwood WS, Williams AF. A house is not a home: keeping patients at the center of practice redesign. *Health Affairs (Millwood)*. 2008;27:1219-30.
- Bodenheimer T, Wagner EH, Grumbach K. Improving primary care for patients with chronic illness. *JAMA*. 2002;288:1775-1779.
- Boyatzis RE. *Transforming Qualitative Information*. Thousand Oaks: Sage Publication; 1998.
- Burton OM. Community-level child health: a decade of progress. *Pediatrics*. 2005;115:1139-1141.
- Butterfoss FD. *Coalitions and Partnerships in Community Health*. Hoboken NJ: John Wiley & Sons; 2007.
- Cherry DK, Woodwell DA, Rechtsteiner EA. National Ambulatory Medical Care Survey: 2005 Summary. Advance data from vital and health statistics; no. 387. Hyattsville, Maryland: National Center for Health Statistics; 2007.
- DeBate R, Plescia M, Joyner D, Spann L. A qualitative assessment of Charlotte REACH: an ecological perspective for decreasing CVD and diabetes among African Americans. *Ethnicity Dis*. 2004;14:S1-77–S1-82.
- Flocke SA, Gordon LE, Pomieck GL. Evaluation of a community health promotion resource for primary care practices. *Am J Prev Med*. 2006;30:243-251.
- Friedenzohn I, Stoller T. State and community collaboration: lessons from the Communities in Charge program and other local initiatives. *Academy Health: State Coverage Initiatives Issue Brief*. April 6, 2005.
- Future of Family Medicine Project Leadership Committee. The Future of Family Medicine: A Collaborative Project of the Family Medicine Community. *Ann Fam Med*. 2004;2(Suppl 1):S3–32, 2004.
- Glasgow RE, Orleans CT, Wagner EH. Does the chronic care model serve also as a template for improving prevention? *Milbank Q*. 2001;79:579-612.
- Green LA, et al. Task force 1. Report of the task force on patient expectations, core values, reintegration, and the new model of family medicine. *Ann Fam Med*. 2004;2 Suppl 1: S33-50.
- Halverson PK, Mays GP, Kaluzny AD. Working together? organizational and market determinants of collaboration between public health and medical care providers. *Am J Public Health*. 2000;90:1913-1916.
- Harris MF, Hobbs C, Davies GP, Simpson S, Bernard D, Stubbs A. Implementation of a SNAP intervention in two divisions of general practice: a feasibility study. *Med J Australia*. 2005;183:S54-S58.
- Healey TJ. The coming crisis for Medicare. *Boston Globe*, June 9, 2008. http://www.boston.com/news/globe/editorial_opinion/oped/articles/2007/06/09/the_coming_crisis_for_medicare. Accessed November 15, 2008.
- Hung DY, Rundall TG, Tallia AF, Cohen DJ, Halpin HA, Crabtree BF. Rethinking prevention in primary care: applying the chronic care model to address health risk behaviors. *Milbank Q*. 2007;85:69-91.
- Larson K, Levy J, Rome MG, Matte TD, Silver LD, Frieden TR. Public health detailing: a strategy to improve the delivery of clinical preventive services in New York City. *Public Health Rep*. 2006;121:228-234.
- Lasker R. *Medicine and Public Health: The Power of Collaboration*. New York: Academy of Medicine; 1997. <http://www.nyam.org/pubhlth>.
- Lasker RD, Abramson DM. *Pocket Guide to Cases of Medicine & Public Health Collaboration*. Perris CA: Experienced Books; 1998. http://www.nyam.org/library/pages/access_to_staff_publications.
- Linder SH. Coming to terms with the public-private partnership: a grammar of multiple meanings. *Am Behav Scientist*. 1999;43:35-51.

- Mattessich PW, Murray-Close M, Monsey BR. *Collaboration: What Makes it Work*, 2d ed. St. Paul MN: Amherst H. Wilder Foundation; 2001.
- Mizrahi T, Rosenthal BB. Complexities of coalition building: leader's successes, strategies, struggles and solutions. *Social Work*. 2001;46: 63-78.
- Rosenthal TC. The medical home: growing evidence to support a new approach to primary care. *J Am Board Fam Med*. 2008;21:427-440.
- Stanton MW, Rutherford MK. The high concentration of U.S. health care expenditures. Rockville, MD: Agency for Healthcare Research and Quality; 2005. Research in Action Issue 19. AHRQ Pub. No. 06-0060.
- Starfield B, Shi L. The medical home, access to care, and insurance: a review of evidence. *Pediatrics*. 2004;113(5 Suppl):1493-1498.
- Steiner BD, Denhan AC, Ashkin E, Newton WP, Wroth T, Dobson LA. Community care of North Carolina: improving care through community health networks. *Ann Fam Med*. 2008;6:361-367.
- Uplekar M, Pathania V, Raviglione M. Private practitioners and public health: weak links in tuberculosis control. *Lancet*. 2001;358:912-916.
- Weiner BJ, Alexander JA. The challenges of governing public-private community health partnerships. *Health Care Manage Rev*. 1998;23(2):39-55.
- Winer M, Ray K. *Collaboration Handbook: Creating, Sustaining, and Enjoying the Journey*. St. Paul MN: Amherst H. Wilder Foundation; 1994.
- Woo B. Primary care--the best job in medicine? *N Engl J Med*. 2006;355:864-846.

Appendix A: Telephone Informational Interview – Interview Guide

Hi there,

My name is [name] and I'm calling from the University of North Carolina at Chapel Hill. Is right now an okay time?

Thanks. I am working with Dr. Philip Sloane here at UNC, and we are trying to identify programs that demonstrate collaboration between primary care doctors and a [public health] agency such as yours. We know that sometimes doctors are employed by health departments, but we are looking for **other** ways that collaboration can occur.

In particular we are interested in collaborations in which physician offices and [XXX] agencies work together to improve the health of patients or populations. Does your agency or any of your local affiliates do this in any way, or do you know of such a program?

If No, We are especially interested in services for the aging. Do you have any innovative programs that serve that population?

If No, Any idea why not? That would be of interest to us as well. (probes: have you encountered barriers? Is it not a priority or not fit into your mission?).

What do you think it would take for your agency to get involved in this form of collaboration?

Are there any areas you're involved in where it may be useful to provide services jointly with private physicians?

Thanks so much for your time today. I will send you an email with my contact information, and would appreciate it if you'd let me know if you become aware of any collaborative programs. Have a great day.

If Yes, Thanks! Who would be the best person to speak with about that project?

If someone else, Do you have their contact information handy? ... And is it okay if I tell them that you suggested I speak with them? ... Thanks, I really appreciate your time today.

If it is this person, Great. Do you have time right now to provide some information regarding the program? We're really interested in learning about what you're doing. I think it will take about 20 minutes.

If No, I'd be happy to give you a call back at your convenience. Would [suggest time within a week] work? ... I look forward to speaking with you then.

If Yes, Thanks...

...So you know why I'm asking, we are conducting research on public health and primary care collaborations nationwide, and will then be creating a document that includes case studies of some of the projects we have identified as well as recommendations on collaboration for other public health agencies. I am gathering public information so please do not share anything that you would not consider public, and at this point the information you provide will be presented in aggregate form and not connected to your name. I will be recording the information that you provide and your contact information in typed notes which will be saved on a password protected computer. We can stop at any time. The only risk to you is that your name and contact information could be revealed and connected to your responses if this confidentiality was compromised. A potential benefit is that, if we are interested in developing a case study on your program and you consent, we could highlight your work in a publication. I will contact you for further consent if we are interested in developing a case study on your program. Do you have any questions? You can also contact Dr. Sloane, the principal investigator, at 919-XXX-XXXX. Do I have your permission to continue?

1. What's the name of [the project/program/collaboration]?
2. What organizations/practices are involved?
 - a. What services are provided?
 - b. What does each organization do?
3. Who is your target population?
 - a. Who are the actual clients? (Do they represent the target population?)
 - b. How many are served?
 - c. What geographical area does [the project] cover?
4. How long has this been in operation?
5. How is it funded? (probes: absorbed, special, line item)
6. How are you involved in this project? (Make sure you have job title).

Great. I really appreciate your time today! Can I confirm that I have your contact information correct so that I can follow up with you? (confirm with spreadsheet).

Okay, that's it for now. I'll send you a follow-up email so that you have all of my and Dr. Sloane's contact information. Don't hesitate to call or email. Thanks again and have a great day.

Appendix B: Public Health Agency Staff Interview Guide

Hi, this is [name] calling from the University of North Carolina at Chapel Hill. Is this still a good time?

If NO → may I call another time?

If YES →

To remind you, we are conducting research with the American Medical Association on real working collaborations between public agencies and primary care practitioners, and will create a document that includes case studies of some of the programs we've identified, plus recommendations for others on how to build such collaborations. We are interested in asking more questions about your program and it is a candidate to become a case study. Because some of this information may be published, I need to request your verbal consent to record the interview.

Here's what you need to know: With your consent I will be making an audio recording of this phone call and taking written notes. All files will be saved on a password protected computer. Your participation is completely voluntary and we can stop at any time. The interview should take about 30 to 45 minutes. The only risk is that your name and contact information would be revealed and connected to your responses. A potential benefit is that, if we develop a case study on your program, we could highlight your work in a publication. If we include any identifying information, I will contact you for further consent, but an ongoing time commitment is not required. Do you have any questions? In case you do, you can call Jessica Bates at 919-XXX-XXXX or the principal investigator, Dr. Philip Sloane, at 919-XXX-XXXX. Do I have your permission to continue and record our conversation?

If NO → thank you.

If YES → Great, let's begin.

Here is what I know about [program name]: *(summarize what is in partnerships document and your understanding of the program we are interested in)*

Have I got that right?

Okay, now I am going to ask to a few questions about that program.

Origin and Evolution:

How did this program come about? (History, founder, what needs were identified and then met?)

What was your motivation and initial goal for creating this partnership?

Interviewee:

Can you tell me a bit about yourself?

What exactly is your role with the project? How long have you been involved with the project?

Partners Involved:

Who are all of the partners involved?

Who are the physicians/clinicians involved? What is their role?

Is there anyone else involved?

Do the organizations have joint goals?

Where and when do the activities occur? Does the program reside at one space in particular?

Is there an ongoing sharing of ideas? Or refinement of the program?

Do you meet as a group or with point people from each site/ partner?

Did you have to get buy in from higher levels?

What barriers have you encountered in forming or sustaining the partnership?

What have been the biggest factors in the partnership's success?

Personnel and Organizational Structure:

Which personnel are involved?

Whose employees are they?

What is the organizational structure?

To whom is the program accountable? (board? Steering committee? Informal group?)
Where does the program reside? (in an organizational chart)

Funding support:

What was the source of funding/support for program initiation?
How is the program supported now?
What is the program's annual budget? Who controls the money?

Clients:

Would you please tell me about the patients./clients:
What are they like?
What demographics are you serving:
How many clients are you serving?
What portion are older adult?
How do you share patient information?

What barriers do they face in finding you?

Activities:

What difficulties did you encounter in reaching potential clients of the program?
How do you do planning? ...recruitment? ...service provision?

What challenges are involved in developing and maintaining the partnerships?

Evaluation:

What stage of the project is it in?
Beginning, middle, end,
How is the program being evaluated? This can be formally or informally.
How are you measuring success in the program?
What outcomes are looked at?
Who is conducting the evaluation?
Have any program changes come about because of feedback or formal evaluation?

Has this helped physicians?
If so how?
If not why not?

Has this affected your capacity to serve a greater population?
Has it impacted your ability to acquire internal or external funding?

Sustainability:

Has the program and its funding become institutionalized (in other words, a regular part of the operating expenses of both partners)?
What are the future plans?

Information sharing and Recognition:

Has the program received recognition? (e.g. awards, newspaper articles)
Have you sent out any notices or press releases about the program?
Have there been any articles or papers about the program?
Has any recognition helped generate more resources for the program?

(Any outstanding questions).

Thanks, we are just about done. I was wondering if you were aware of any other programs that involve innovative partnership between private practice physicians and public health agencies, area agencies on aging, or cooperative extensions?

Okay thanks. Before we finish up I'd like to be sure that I have your job title and contact information correct. Again, you will be contacted for further consent if we publish any identifying information.

Contact Person and Additional Programs

NAME:

JOB TITLE:

MAILING ADDRESS:

EMAIL ADDRESS:

PHONE NUMBER:

Do you have anything else to add that we haven't discussed today?

Do you have any questions?

Thanks so much for your time! I will definitely be in touch. Please don't hesitate to contact Jessica Bates or Dr. Philip Sloane know if you have any questions. Have a great day.

Appendix C: Physician Partner Interview Guide

Hi, this is [name] calling from the University of North Carolina at Chapel Hill. Is this still a good time?

If NO → may I call another time?

If YES →

To remind you, we are conducting research with the American Medical Association on real working collaborations between public agencies and primary care practitioners, and will create a document that includes case studies of some of the programs we've identified, plus recommendations for others on how to build such collaborations. We are interested in asking more questions about your program and it is a candidate to become a case study. Because some of this information may be published, I need to request your verbal consent to record the interview.

Here's what you need to know: With your consent I will be making an audio recording of this phone call and taking written notes. All files will be saved on a password protected computer. Your participation is completely voluntary and we can stop at any time. The interview should take about 10 to 15 minutes. The only risk is that your name and contact information would be revealed and connected to your responses. A potential benefit is that, if we develop a case study on your program, we could highlight your work in a publication. If we publish any identifying information, I will contact you for further consent, but an ongoing time commitment is not required. Do you have any questions? In case you do, you can call Jessica Bates at 919-XXX-XXXX or the principal investigator, Dr. Philip Sloane, at 919-XXX-XXXX. Do I have your permission to continue and record our conversation?

If NO → thank you.

If YES → Great, let's begin.

Can you tell me a bit about yourself?

What exactly is your role with the project? How long have you been involved with the project?

What organizations and people are involved?

How did you advise your patients of this partnership? Did you announce it by notice, or some other public way, or individually to the patients?

How did you expect your patients to respond to the partnership? Has that been the case? If not, what has been the response? Based on their response, have you revised the way that you provide care for them? Based on their response, have you revised the partnership at all? If so, was this in terms of content, format, duration?

How has your staff responded to the partnership? Were they involved in its planning? If yes, in what capacity?

Are you collecting data for this partnership? If yes, did you receive any training from your partner for this? And what are you collecting, who is storing it, and how will it be analyzed? What about confidentiality issues? How will the results of the analysis be utilized and disseminated?

How has the partnership impacted your practice, both positively and negatively?

What do you think is the next step to what you have done to date?

Given your experience to date, is there anything you would need but don't have to meet your goals in the partnership?

Did your partnership involve connecting your patients to community resources such as local health department preventive care programs on nutrition, smoking cessation, etc? If so, please describe the referral process.

What barriers have you encountered in forming or sustaining the partnership?

What have been the biggest factors in the partnership's success?

(Any outstanding questions)

I am going to stop the recording now. Thanks so much for your time today. The American Medical Association can offer you \$100 for your time. This would require providing me with the address you would like the check mailed to. The address will not be published and we will treat it with the same care and respect for confidentiality as your interview responses. Are you interested in receiving the payment?

If yes → collect information.

If no or after collecting information → Thanks, well I will let you know when the monograph is ready. Have a great day.

Appendix D: Descriptive Profiles of Programs Identified

This section provides examples of activities nationwide that fit our operational definition when we conducted a national scan of programs involving primary care practices (including community health centers) and public health agencies (i.e., departments of public health, cooperative extension service offices, and Area Agencies on Aging). A summary of the programs is provided as Table 2. Some of the text in the descriptions was extracted from secondary sources such as websites and/or written materials; others from telephone interviews conducted in early 2008. Since programs change and descriptions may vary, the authors cannot guarantee that all details in these descriptions are current.

1. Name of Program: Community-Based Services for Women of Reproductive Age and Adolescents

Location: Massachusetts

Target Population¹: Women of childbearing age, children

Funding Source(s): State funds for community-based health centers (CHCs) and the state Bureau of Substance Abuse Services; Maternal and Child Health federal block grant

Participating Public Health Agency: Massachusetts State Department of Health (MDOH)

Role of Public Health Agency: Funds and trains the CHCs

Participating Medical Practice(s): Thirty-two state-wide independent community-based health centers

Role of Medical Practice(s): Receive funds and training to conduct risk screening for substance abuse, alcohol, tobacco, violence, and depression/mental health on women of reproductive age and adolescents at well visits

Service Provided: Behavioral risk screening

Start Date: November 2007

Description: The concept came from the success of SBIRT (Screening Behavioral Intervention Referral and Treatment) programs in emergency rooms. The MDOH decided to bring it into the primary care setting, and funded independent CHCs in the state to conduct risk screening on women of reproductive age and adolescents at well visits. (While these are not state health clinics, the state does have a role in licensing these facilities.) Primary care physicians, nurses, social workers, and/or medical assistants at the clinics are trained by the MDOH to conduct motivational interviews that screen for substance abuse, alcohol, tobacco, violence, and depression/mental health risk. If there are responses that indicate risk, the primary care physician determines if either brief immediate intervention or a referral to another agency is warranted. Clinics are expected to screen 500 individuals in the 2008 fiscal year. Data are being provided to the MDOH but it is too early in the project to determine any outcomes.

2. Name of Program: Caregiver Consultants

Location: Minnesota

Target Population: Older persons

Funding Source(s): Older Americans Act and state dollars for program development – Community Service/Service Development Funds

Participating Public Health Agency: Area Agency on Aging

Role of Public Health Agency: Employ one of the consultants; administer the grants for 10 caregiver consultants statewide

Participating Medical Practice(s): Primary care clinics statewide

¹ Target Population Categories:

- older persons
- chronic diseases that have increased prevalence in older persons
- all adults
- women of childbearing age
- children
- children and parents
- indigent persons
- Latino

- all

Role of Medical Practice(s): Allow for the presence of the caregiver consultant and refer to the consultant – some have office space or desk in doctor's waiting room

Service Provided: Caregiver consulting

Start Date: Caregiver consultants: 2002; reached out to clinics 2005/6

Description: Ten Caregiver consultants statewide are employed by nonprofits but received grants administered by the Arrowhead Area Agency on Aging. About half of these consultants have a presence in the office of a private physician, and the consultants have varying arrangements with the doctors. The consultants allow the doctors to spend more time on medical priorities and to make an easy referral to the consultant who can discuss independent living and the availability of community resources. This stemmed from the National Association of Area Agencies on Aging's *Making the Link* program, which was an effort that offered outreach tools for Title 3E-funded programs (caregiver support programs) to make connections with primary care physicians' offices, including letters of introduction.

3. Name of Program: Olmsted County Falls Prevention

Location: Minnesota

Target Population: Older persons

Funding Source(s): Minnesota Board on Aging

Participating Public Health Agency: Area Agency on Aging (AAA) and health department

Role of Public Health Agency: The AAA has formed the Olmsted County Falls Prevention collaborative, which serves many roles. Members include the AAA, representatives from the health department, two local hospitals, two physicians, and representatives of eldercare nonprofits. The AAA also worked with the fire department to alert primary care providers of falls, and the department of health created a falls prevention DVD.

Participating Medical Practice(s): Mayo Clinic and OMC Hospital

Role of Medical Practice(s): Members of the falls collaborative. These clinics have also agreed to receive and review letters of alert of a fall from the fire department, and are considering distribution of a falls prevention DVD to patients (*Slips, Trips, and Broken Hips*).

Service Provided: Report falls to primary care providers, provide falls prevention materials, in home fall evaluations

Start Date: 1991

Description: The collaborative has many functions. One initiative was started due to realization that falls are a major contributor to nursing home admission, and on an annual basis, the fire department goes out 200 times to help a senior get up after a fall without injury. To prevent further falls, after assisting the senior, the firemen ask the senior if a record of the event can be sent to their primary care physician informing him or her that the fall occurred. The program has not reached the numbers of those that had been hoped, so it is trying to gain greater awareness in the community. In a second initiative, the health department created a falls prevention DVD and it is working to distribute this at the clinics. Lastly, the Mayo Clinic has an innovative fellowship program that allows residents in geriatric training to make home visits to seniors referred either internally or from the county health department or human services. Seniors must fail a vulnerable elder questionnaire to qualify; however, if the fire department offers an in-home evaluation and the senior accepts, this requirement is waived.

4. Name of Program: Assuring Better Child Health and Development (ABCD), ABCD Screening Academy

Location: 19 states

Target Population: Children

Funding Source(s): The Commonwealth Fund

Participating Public Health Agency: Lead Medicaid agencies and other state health agencies

Role of Public Health Agency: Provide technical assistance and to coordinate the project, conduct policy analysis and disseminate the results

Participating Medical Practice(s): One in each of the 19 states

Role of Medical Practice(s): Providing objective developmental screening to clients according to American Academy of Pediatrics guidelines

Service Provided: Early childhood developmental screening

Start Date: ABCD: 2000; Screening Academy: 2007

Description: The ABCD program is designed to assist states in improving the delivery of early child development services for low-income children and their families by strengthening primary health care services and systems that support the healthy development of young children, aged 0-3 years. Since 2000, the ABCD program has helped eight states create models of service delivery and financing through a laboratory for

program development and innovation. The ABCD Screening Academy began in April 2007 and provides technical assistance (but not funding) to 19 states/territories (AL, AK, AR, CA, CT, DE, DC, KS, MD, ME, MI, MN, MT, NJ, OH, OR, PR, VA, WI) to implement policies and practices to move the use of standardized screening tools as part of well child care from a "best practice" to a "standard of practice." This 15-month initiative's primary focus is to increase use of a general developmental screening tool as a part of health supervision during well-child care provided by primary care providers who act as young children's medical homes, as recommended by the American Academy of Pediatrics. The application required that the initiative have a Medicaid agency as the lead, as well as another state agency partner and physician champion. Each state also has a pilot site at a private pediatric clinic.

5. Name of Program: Metropolitan Area Agency on Aging Dementia ID project

Location: Minnesota

Target Population: Older persons

Funding Source(s): State Department of Human Services

Participating Public Health Agency: Metropolitan Area Agency on Aging (AAA)

Role of Public Health Agency: Administrators of grant and project managers, hire and train staff, facilitate work groups, purchase evaluation consultation, provide other technical assistance and consultation

Participating Medical Practice(s): Health East (St. Joseph's) hospital in downtown St. Paul and North Memorial Medical Center on the Minneapolis side, as well as affiliated clinics. There are also physician champions from other systems.

Role of Medical Practice(s): Screen for dementia, add it to discharge summary

Service Provided: Dementia screening

Start Date: 2003

Description: For four years the AAA has worked to implement dementia screening into normal acute intake of a senior (aged >70 years at one hospital and 75 years at another). This year they are piloting training sessions with clinic systems connected to hospitals (but not wholly owned by the hospital) to train clinic personnel to implement this screening. The goal is to achieve diagnosis at primary care.

** The Minnesota Alzheimer's Demonstration Project is statewide. The five original Memory Care Sites are each lead by a community agency that employs a caregiver coach who works with and supports the caregiver and person with dementia in managing both their medical and community care. The Memory Care Sites have each developed a working relationship with a local clinic or clinics.*

6. Name of Program: Prescription Trails

Location: New Mexico

Target Population: Chronic diseases that have increased prevalence in older persons

Funding Source(s): New Mexico Department of Health (NM DOH)

Participating Public Health Agency: NM DOH

Role of Public Health Agency: The NM DOH Chronic Disease Bureau coordinated creation of the intervention materials and dissemination to physicians

Participating Medical Practice(s): Currently, three to four primary care clinics in Albuquerque

Role of Medical Practice(s): Use tool at clinical encounters

Service Provided: Tailored physical activity prescriptions

Start Date: 2006

Description: Prescription Trails was developed with many partners, including the Alliance for Active Living. Other partners are the National Park Services, planners from the city of Albuquerque, and the mayor of Albuquerque. Piloted in the Albuquerque area, the program involves getting physicians to write prescriptions for physical activity, such as exactly how many times a day or a week their patients should exercise. An additional component is a trail guide; when the prescription is issued, it is accompanied by a trail guide that the park service developed for the city of Albuquerque. It is designed around zip codes so the doctor can look up the patient's zip code and recommend one or two of the trails in the guide.

7. Name of Program: NC Kids Eating Smart and Moving More (KESMM)

Location: North Carolina

Target Population: Children and parents

Funding Source(s): National Institute for Child Health and Human Development (NICHD)
Participating Public Health Agency: North Carolina State University Extension Expanded Food and Nutrition Education Program (and the UNC Center for Health Promotion and Disease Prevention)
Role of Public Health Agency: Implementing KESMM interventions at clinics randomized into treatment
Participating Medical Practice(s): Pediatric clinics selected for the study
Role of Medical Practice(s): Recruit families for the intervention and educational classes at the clinic
Service Provided: Childhood obesity intervention
Start Date: 2005

Description: KESMM is a pediatric obesity intervention. This study is funded by the NICHD and built on four years of pilot work. A total of 24 primary care practices serving Medicaid families throughout the state of North Carolina are participating. The study primarily focuses on improving primary care providers' and case managers' abilities to identify and assess children at risk for or already overweight, communicate effectively with families/link them to community resources, and influence local policies related to improved nutrition and opportunities for physical activity. The intervention is delivered by the NCSU Extension.

8. Name of Program: Community Care of North Carolina (CCNC) Program/Access Care

Location: North Carolina

Target Population: Indigent persons

Funding Source(s): The program office is based in Raleigh at the North Carolina Office of Rural Health and Community Care, the entity charged with administering the Community Care of North Carolina program (Access II and III). The program office is sponsored by the Office of the Secretary, the Division of Medical Assistance (the state's Medicaid agency) and the North Carolina Foundation for Advanced Health Programs, Inc. Additional grant funding has been obtained for start-up and for pilot demonstrations from the Kate B. Reynolds Health Care Trust, the Commonwealth Fund, and the Center for Healthcare Strategies. The North Carolina Foundation for Advanced Health Programs, Inc., is a private non-profit organization that also serves to provide staffing and grant funding opportunities.

Participating Public Health Agency: North Carolina Division of Public Health

Role of Public Health Agency: Funder

Participating Medical Practice(s): CCNC physician networks

Role of Medical Practice(s): See below

Service Provided: Prenatal and postpartum care; diabetes patient education

Start Date: 2002

Description: The CCNC program (formerly known as Access II and III) is building community health networks organized and operated by community physicians, hospitals, health departments, and departments of social services. By establishing regional networks, the program is establishing the local systems necessary to achieve long-term quality, cost, access and utilization objectives in the management of care for Medicaid recipients. In August 2002, state leaders from representative organizations met to determine potential areas of collaboration between the CCNC Program and the North Carolina Division of Public Health. The team identified two areas for collaborative projects: high risk maternity care and a community educational approach in self-management of diabetes.

The Community Care Plan of Eastern Carolina (CCPEC) for Craven and Pamlico County will pilot a maternity initiative project for CCNC. The intent of this project is to provide consistent, high quality, efficient prenatal and postpartum care to Carolina Access women in Craven and Pamlico Counties. The project will work with the maternity program already in place and will try to find ways to decrease some of the high costs associated with high-risk maternity clients through nurse case management.

The North Carolina Diabetes Prevention and Control (DPCP) Branch received a grant from the Centers for Disease Control and Prevention, Division of Diabetes Translation, to support "Systems-Based Diabetes Prevention and Control Programs" in this state. CCNC is collaborating with the DPCP in this initiative to improve community and self-management efforts for diabetes in select networks. Within CCNC, Forsyth and Surry counties in the Northwest Community Care network are working in tandem with public health resources to maximize patient education and support activities. The goal of this collaborative effort is to develop a comprehensive, population-focused approach to addressing diabetes through health systems, health communications and community initiatives.

Note: The HRSA's Maternal and Child Health Bureau has funded Medical Home projects in 18-20 sites, and many funded health departments to support the needs of other providers. The two profiled here (#s 9 and 10) are the programs in Minnesota and Pennsylvania.

9. Name of Program: Medical Home Project

Location: Minnesota

Target Population: Children

Funding Source(s): Maternal and Child Health Bureau

Participating Public Health Agency: Minnesota Department of Health

Role of Public Health Agency: Support providers in serving children with special needs; support families in finding a medical home Participating Primary Care Practices

Participating Medical Practice(s): Private physicians

Role of Medical Practice(s): Provide a medical home to children with special needs

Service Provided: Comprehensive medical home services

Start Date: 2005

Description: The Minnesota Medical Home Project is a partnership between the Minnesota chapter of the American Academy of Pediatrics (MNAAP), PACER Center, and the Minnesota Department of Health, Minnesota Children with Special Health Needs Section. Through this project, primary care providers for children with special health needs will understand the benefits of having a medical home and more specifically identify their own role as a medical home provider. They will also possess the resources needed to implement a medical home approach within their clinical practices. Families will have the tools to identify a medical home and participate more fully in the medical home partnership between parent and provider.

10. Name of Program: Educating Practices in Community Integrated Care (EPIC-IC)

Location: Pennsylvania

Target Population: Children

Funding Source(s): Health Resources and Services Administration, Maternal and Child Health Bureau and the state Title V program

Participating Public Health Agency: Pennsylvania Department of Health Division (PA DOH)

Role of Public Health Agency: Train practices in the EPIC-IC Medical Home Initiatives

Participating Medical Practice(s): > 60 primary pediatric practices

Role of Medical Practice(s): Train in Educating Physicians In their Communities (EPIC-IC, enact medical home initiatives

Service Provided: Physician training, comprehensive medical home services

Start Date: 2002/2004

Description: The Pennsylvania Medical Home Initiative (MHI) is a collaborative effort of the PA DOH of Special Health Care Programs (DOH Title V), family organizations (Family Voices, Parent to Parent and others), and the Pennsylvania chapter of the American Academy of Pediatrics (PA AAP). This public-private partnership is managed by the Pennsylvania American Academy of Pediatrics. The purpose of MHI is to improve the quality of life for children with special health care needs and their families by building sustainable medical home teams in primary care practices throughout the state. The MHI will establish a statewide infrastructure to provide practical team and community-based medical home education and quality improvement programs using an established format, Educating Physicians In their Communities (EPIC). Health professionals and families work together as partners to identify and arrange all of the services needed to help the child with special health care needs reach his/her potential. Pennsylvania's medical home program is the largest such program nationally, based on the number of participating medical home practices and the number of children identified in the patient registry.

Note: Many states work with primary care physicians on immunization, influenza, and preparedness efforts. Oklahoma (example 11), Wyoming (#12), and New Jersey (#13) are examples.

11. Name of Program: Oklahoma Primary Care Practice-Based Research Network (OKPRN)

Location: Oklahoma

Target Population: All

Funding Source(s): U.S. Department of Health and Human Services, Health Resources and Services Administration, Agency for Healthcare Research and Quality

Participating Public Health Agency: Oklahoma Department of Health

Role of Public Health Agency: Integral part of network, provides influenza reports, runs immunization documentation portal

Participating Medical Practice(s): Primary care physicians statewide

Role of Medical Practice(s): Utilize tools such as influenza and immunization surveillance portals; integral members of network

Service Provided: Surveillance

Start Date: 1994

Description: The OKPRN was established in October 1994, as a collaborative project of the Oklahoma Academy of Family Physicians and the University of Oklahoma Department of Family and Preventive Medicine, Oklahoma City. Important collaborations include:

-Influenza Surveillance Network, with many statewide providers providing influenza data, receive tailored reports in return, since 2003

-Immunization and documentation: conducted needs assessment and determined usability of immunization system needed updating. Medicaid program was able to make improvements, and since 2001 it has used a complete preventive health delivery model.

12. Name of Program: Wyoming Immunization Registry (WyIR)

Location: Wyoming

Target Population: Children

Funding Source(s): State

Participating Public Health Agency: Wyoming Department of Health

Role of Public Health Agency: Immunization data management

Participating Medical Practice(s): Many statewide

Role of Medical Practice(s): Document immunizations via registry

Service Provided: Surveillance

Start Date: 1999

Description: The registry serves primarily as a centralized immunization records center; however, the Wyoming is looking outside of the box to meet the requirements for a preparedness solution. The Wyoming Immunization Program has approached various partners to explore opportunities for building WyIR beyond its current immunization base to achieve a more comprehensive preparedness, surveillance and response application.

13. Name of Program: Influenza Surveillance Program

Location: New Jersey

Target Population: All

Funding Source(s): State

Participating Public Health Agency: New Jersey Department of Health and Senior Services (NJDHSS)

Role of Public Health Agency: NJDHSS, along with local health departments, enrolls physicians throughout the state to participate in this program.

Participating Medical Practice(s): Statewide primary care providers

Role of Medical Practice(s): Report influenza-like cases

Service Provided: Surveillance

Start Date: A least since 2000

Description: NJDHSS, with local health departments, enrolls physicians throughout the state to participate in this program. All of the surveillance information is analyzed and a weekly ILI (influenza-like incidences) report is produced and provided to participating physicians. NJDHSS also sends data on statewide influenza activity levels to the Centers for Disease Control and Prevention for inclusion in the weekly national influenza report.

14. Name of Program: Free Colorectal Cancer Screening Program

Location: Minnesota

Target Population: All adults

Funding Source(s): Comprehensive Cancer Control Program

Participating Public Health Agency: Minnesota Department of Health (MDH)

Role of Public Health Agency: Participated in event planning, recruited patients

Participating Medical Practice(s): Fairview Southdale Hospital, Minnesota Gastroenterology and Colorectal Surgery Associates

Role of Medical Practice(s): Donated free colonoscopy and any required follow-up services to un/underinsured Minnesotans who have incomes at or below the 250% of the federal poverty level

Service Provided: Colon cancer screening and follow up

Start Date: November 2007

Description: Under the auspices of the Colorectal Cancer Subcommittee of the Minnesota Cancer Alliance, a free colorectal cancer screening event was piloted November 17, 2007 at Fairview Southdale Medical Center. Patients were recruited from MDH's Sage Screening Program (Cancer Control Section). Partners included Fairview Southdale Hospital, Minnesota Gastroenterology, Colon Rectal Surgery Associates, Limited, Get Your Rear In Gear (an advocacy group that works to raise funds for and public awareness of colorectal cancer), and the Cancer Control Section, with the support of the Minnesota Cancer Alliance, which is funded by the Comprehensive Cancer Program. A decision was made to hold two additional events during the first six months of 2008 in order to establish a model that could be followed by medical facilities interested in holding similar events in the future. The American Cancer Society played a significant role in this event in addition to those listed above.

**Note: the Steps for Partnership and Prevention (STEPS) program is an initiative of the U.S. Centers for Disease Control and Prevention (CDC) that exists in many locations. Santa Clara County (#15) is just one example.*

15. Name of Program: Steps to a Healthier Santa Clara County

Location: California

Target Population: Chronic diseases that have increased prevalence in older persons

Funding Source(s): Centers for Disease Control and Prevention

Participating Public Health Agency: Santa Clara County Public Health Department

Role of Public Health Agency: Implementing comprehensive, community-wide intervention, managing partners/collaboration

Participating Medical Practice(s): Kaiser Permanente

Role of Medical Practice(s): Participate in STEPS collaboration; collect body mass index data at clinic visits

Service Provided: Chronic disease prevention

Start Date: 2003

Description: The STEPS Program funds states, cities, and tribal entities to implement community-based chronic disease prevention efforts that are focused on reducing the burden of obesity, diabetes, and asthma and addressing three related risk factors: physical inactivity, poor nutrition, and tobacco. In Santa Clara County, partners include the YMCA, Diabetes Society, American Lung Association, Catholic Charities, a community clinic consortium, and the five school districts. The Santa Clara County STEPS Program is working with local leaders to build a healthier community through health promotion efforts in work sites, health care settings, and 66 county schools.

16. Name of Program: Chronic Disease Electronic Management System (CDEMS)

Location: Kansas

Target Population: Chronic diseases that have increased prevalence in older persons

Funding Source(s): Centers for Disease Control and Prevention

Participating Public Health Agency: Kansas Department of Health and Environment

Role of Public Health Agency: Coordinate and train physicians on utilizing an electronic chronic disease management system; fund clinics to implement systems change

Participating Medical Practice(s): The 43 funded clinics in the project represent a variety of health care organizations, including primary care clinics, Indian health services, home health agencies, local health departments, the state voucher program, and community health clinics.

Role of Medical Practice(s): Use the chronic disease electronic management system (CDEMS)

Service Provided: Chronic disease patient tracking

Start Date: 2004

Description: The Kansas Diabetes Prevention and Control Program is implementing an initiative to track the standards of care for patients with diabetes. The program utilizes the CDEMS, which is a free access-based database for tracking patients. It funds approximately 43 clinics to implement CDEMS to track the standard of care indicators for patients with diabetes in addition to other preventive care measures. In July 2007, 15 of the 43 clinics were funded to begin tracking hypertension in addition to diabetes.

Note: CDEMS is implemented in many states, and information on the program is available at CDEMS.com. Kansas is just one example of its implementation.

17. Name of Program: The Kansas Optimizing Health Program (KÖHP)

Location: Kansas

Target Population: Chronic diseases that have increased prevalence in older persons

Funding Source(s): Kansas Diabetes Prevention and Control Program

Participating Public Health Agency: Kansas Department of Health and Environment (KDHE)

Role of Public Health Agency: Train doctors and others in chronic disease self-management

Participating Medical Practice(s): Any

Role of Medical Practice(s): Participate in training and then implement self-management in patients

Service Provided: Chronic disease self-management training

Start Date: 2007

Description: Wichita State University's Center for Physical Activity and Aging is also a partner. This is a non-disease-specific self-management program for anyone with chronic disease. Two members of the KDHE Office of Health Promotion team were trained to be master trainers at Stanford University. They are beginning to offer leader training for primary care clinics (or anyone) interested in leading or hosting these classes.

18. Name of Program: Free Clinic

Location: Ohio

Target Population: Indigent persons

Funding Source(s): Formerly Ohio Department of Health, now federal

Participating Public Health Agency: Zanesville Muskingum County Health Department

Role of Public Health Agency: Ran the clinic

Participating Medical Practice(s): Volunteer physicians

Role of Medical Practice(s): Physicians volunteer hours in the clinic

Service Provided: Clinical care

Start Date: 1994

Description: Clinic provided direct medical service to "no insurance" and some Medicaid patients. Local primary care doctors worked at least once a month as a volunteers physician for a couple of hours and some worked a one-half day a week or more. This clinic has been rolled over into a federally funded clinic as of January 1, 2008.

19. Name of Program: Colorectal Screening Task Force

Location: Cambridge, Ohio

Target Population: All adults

Funding Source(s): American Cancer Society and other small grants

Participating Public Health Agency: Ohio Department of Health (ODH)

Role of Public Health Agency: Helped with screening protocol and participated in task force to promote screening

Participating Medical Practice(s): Southeastern Ohio Regional Medical Center

Role of Medical Practice(s): Made up most of the task force, provided free colonoscopies to the un/underinsured.

Service Provided: Colon cancer screening promotion

Start Date: 2006

Description: A colorectal summit in 2005 led to discussions between the hospital, the health department, and the American Cancer Society. A task force was formed and began work in 2006. The "Bear the Facts: Colorectal Screening Saves Lives" campaign was launched. Team members include many hospital doctors and nurses, the health department, and other partners. They conducted community education and promoted free

colonoscopies for the un/underinsured, fecal occult blood test kits, and educational DVDs. The ODH also collaborated on improving screening protocol in the Southeastern Ohio Regional Medical Center (Blue Sticky Note project). This program continues to hold screening fairs and promote screening to primary care physicians.

20. Name of Program: Care Connection for Children

Location: Virginia

Target Population: Children

Funding Source(s): Health Resources and Services Administration-Maternal and Child Health Services Title V Block Grant with state matching funds

Participating Public Health Agency: Virginia Department of Health

Role of Public Health Agency: Fund sites that hire care coordinators for children with special health care needs (CSHCN)

Participating Medical Practice(s): Any statewide

Role of Medical Practice(s): Work with care coordinators to provide best care to CSHCN

Service Provided: Special needs coordination

Start Date: 2001

Description: Care Connection for Children is a statewide network of centers of excellence for CSHCN that provides leadership in the enhancement of specialty medical services; care coordination; medical insurance benefits evaluation and coordination; management of the CSHCN pool of funds; information and referral to CSHCN resources; family-to-family support; and training and consultation with community providers on CSHCN issues. Two sites are based in local health departments, but four are contracted with university/teaching hospitals. Private practice physicians are used as specialty consultants and each site has an identified medical director who is not an employee of the health department.

21. Name of Program: The Diabetes Resource Coalition of Long Island

Location: New York

Target Population: Chronic diseases that have increased prevalence in older persons

Funding Source(s): New York State Department of Health

Participating Public Health Agency: Cornell Cooperative Extension of Suffolk County, Suffolk County Department of Health

Role of Public Health Agency: Participate in coalition

Participating Medical Practice(s): Brookhaven Memorial Hospital Medical Center, North Shore University LIJ Health System, North Shore University Hospital, Manhasset: The Northshore Center for Diabetes and Pregnancy, 13 privately practicing physicians

Role of Medical Practice(s): Participate in coalition

Service Provided: Diabetes awareness, foot screening

Start Date: 1998

Description: The Diabetes Resource Coalition of Long Island is an alliance of community-based organizations, agencies, businesses and health care professionals committed to identifying resources and raising awareness through the provision of information and education about prevention and treatment of diabetes. The coalition has resulted in many programs, including an awareness campaign ("Wake Up and Smell the Coffee"), hospital- and clinic-based education programs, and community diabetes fairs. The coalition is moving toward involving more private practice physicians. One of the most successful collaborative efforts is the foot screening program, in which podiatrists volunteer their time to provide screening at health fairs. This was initiated in 2001 in response to data indicating that the counties had a higher-than-average amputation rates.

22. Name of Program: Columbia County Migrant Health Program

Location: New York

Target Population: Latino

Funding Source(s): New York state grant and additional state and federal funds

Participating Public Health Agency: County and state health department, Cornell Cooperative Extension

Role of Public Health Agency: Provide services, coordinate program

Participating Medical Practice(s): Hudson River Health Care, Columbia Memorial Hospital, and Saint Claire's Hospital

Role of Medical Practice(s): Provide health services

Service Provided: Clinical and dental care

Start Date: 1994

Description: Services include outreach health clinics that are offered at multiple Columbia County and Rensselaer farms, as well as a walk-in clinic hosted by Columbia Memorial Hospital's Center Care (Family Care Center) in downtown Hudson. Migrant farm workers are offered dental evaluations, blood pressure screenings, vision screenings, immunizations and PPD (tuberculosis) testing. Starting in July (growing season) nurses and staff from the Columbia County Health Department and Hudson River Healthcare visit migrant camps in the evening and provide health screenings. That same week on another evening they hold a clinic for migrants needing to see a primary care provider. Follow-up from the screenings and clinic is provided by a county health nurse. Some services are also provided during the winter and spring. Primary care clinics in parts of the county receive voucher payments from the Hudson River program. Migrant workers have a copay of \$10 to \$20. This partnership also includes the Department of Social Services for Medicaid enrollment and the Cornell Cooperative Extension for interpreters. Since 1994 more than 1800 patient care visits have been completed.

23. Name of Program: Richland County Children's Obesity Intervention

Location: South Carolina

Target Population: Children and parents

Funding Source(s): Health Resources and Services Administration (HRSA) Maternal and Child Health Services Title V funds

Participating Public Health Agency: South Carolina Department of Health-Region 3

Role of Public Health Agency: Conduct intervention

Participating Medical Practice(s): Large private pediatric practices

Role of Medical Practice(s): Recruit and refer participants

Service Provided: Obesity intervention

Start Date: 2008

Description: Personal connections were made at a children's health conference because the pediatricians had the motivation but not the time or resources to deal with obesity. The pediatric practice identifies children at well visits who are between age 6 and 10 years and in the 95th percentile of body mass index (BMI). Consent is obtained from the parents, and the health department then takes over the intervention. However, the pediatricians conduct health screens once during intervention and once post-intervention. The health department provides interventions for both the children ("Taking Charge in Meadowland") and the parents ("Families Eating Smart, Moving More") at the local library. The intervention is just beginning and is still a pilot; the program hopes to eventually expand into other counties.

24. Name of Program: Beaufort Pediatrics Partnership

Location: South Carolina

Target Population: Children

Funding Source(s): Multiple

Participating Public Health Agency: South Carolina Department of Health and Environmental Control (SC DHEC)

Role of Public Health Agency: See below

Participating Medical Practice(s): Beaufort Pediatrics

Role of Medical Practice(s): See below

Service Provided: Prenatal and postpartum care, pediatric clinical care, special needs coordination

Start Date: 1993

Description: The Beaufort Pediatrics group has a series of partnerships with the SC DHEC including:

1. Family support services: Public health nurses in the pediatric office on a regular basis
 2. Well Baby Plus: Collaboration between the health department, the local medical homes and the school system to provide enhanced well child visits
 3. Post Partum Home Visit: Public health nurse visits every Beaufort Pediatrics patient shortly after discharge and reports back to the medical home
 4. Nutritionist services: Health department nutritionist works with and in the medical home
 5. Health department social worker provides social work and care coordination for children with special health care needs directly in an office within Beaufort Pediatrics, provided by the practice.
-

25. Name of Program: Chronic Disease Self-Management Program (CDSMP)

Location: Ohio

Target Population: Chronic diseases that have increased prevalence in older persons

Funding Source(s): U.S. Administration on Aging

Participating Public Health Agency: Area Agency on Aging 10B, Ohio Department of Aging

Role of Public Health Agency: Coordinate CDSMP activities

Participating Medical Practice(s): SummaCare, a Medicare-managed care organization

Role of Medical Practice(s): Identify participants

Service Provided: Chronic disease self-management training

Start Date: 2006

Description: The Ohio Department of Aging received a grant from the Administration on Aging to provide evidenced-based programs in the state of Ohio. They partnered with SummaCare to present the CDSMP to consumers who receive home care services from the Area Agency on Aging and to members of SummaCare. This training covers: 1) techniques to deal with problems such as frustration, fatigue, pain and isolation; 2) appropriate exercise for maintaining and improving strength, flexibility, and endurance; 3) appropriate use of medications; 4) communicating effectively with family, friends, and health professionals; 5) nutrition; and, 6) how to evaluate new treatments.

26. Name of Program: Coastal Medical Access Project (CMAP)

Location: Brunswick, GA

Target Population: Indigent persons

Funding Source(s): State, local, private donations

Participating Public Health Agency: Georgia's Department of Family and Children's Services

Role of Public Health Agency: Provides technical assistance

Participating Medical Practice(s): Local hospital and private practice physicians

Role of Medical Practice(s): Volunteer time to provide primary care

Service Provided: Clinical care

Start Date: 2002

Description: CMAP serves residents of Coastal Georgia who are un/underinsured. CMAP has partnered with faith communities, housing authority officials, service organizations, private businesses, the Southeast Georgia Health System, Coastal Health District, Georgia's Department of Family and Children's Services, school systems, and volunteers to assist in the planning, design, and implementation of CMAP services. With about 200 licensed professional volunteers, including approximately 70 physicians, CMAP provides two free clinics, specialty referrals, prescription assistance, and chronic disease management.

27. Name of Program: Shaken Baby Syndrome Education and Awareness Program

Location: Pennsylvania

Target Population: Children and parents

Funding Source(s): Initially the Pennsylvania Department of Health, now the US Centers for Disease Control and Prevention

Participating Public Health Agency: Pennsylvania Department of Health

Role of Public Health Agency: Create materials, train maternity ward nurses

Participating Medical Practice(s): The Penn State Milton S. Hershey Medical Center

Role of Medical Practice(s): Deliver intervention, collect commitment statements

Service Provided: Shaken baby syndrome (SBS) prevention

Start Date: 2002

Description: The SBS Prevention and Awareness Program is a hospital-based parent education program developed through a partnership to train nurses on maternity wards and neonatal intensive care nurseries about SBS, provide ongoing technical assistance and educational support, and offer educational information and materials on SBS to hospitals. In 2002, the Shaken Baby Syndrome Act required the department of health to establish a program to focus on awareness, education and prevention of SBS. Information about SBS is provided to both parents of all newborn infants after the child's birth and before discharge from the hospital. Nurses on the maternity wards and neonatal intensive care nurseries administer the program. Parents are provided a department of health brochure that describes the dangers and consequences of violently shaking an infant and describes alternative behavioral responses to infant crying. Parents are required to view

an 8-minute video called "Portrait of a Promise: Preventing Shaken Baby Syndrome." A commitment statement must also be signed by the parent(s) prior to discharge from the hospital or birthing center acknowledging that they received the educational and instructional materials.

28. Name of Program: Community Primary Care Challenge Grants

Location: Pennsylvania

Target Population: Indigent persons

Funding Source(s): State

Participating Public Health Agency: Pennsylvania Department of Health

Role of Public Health Agency: Provide challenge grants (with matching requirements)

Participating Medical Practice(s): Nonprofit entities that employ physicians

Role of Medical Practice(s): Provide primary or dental care

Service Provided: Clinical or dental care

Start Date: 1993

Description: The Challenge Grants increase access to primary medical and dental care in the community. Nonprofit entities can apply for seed funds; they pay for hands-on services, including salaries and equipment. The applicants could be new project or expansion (e.g., hospital, community group, partnerships, dental group, etc). Most physicians are full-time employees of the clinic, but that is not a requirement.

29. Name of Program: Aging & Disability Resource Center of Brown County

Location: Wisconsin

Target Population: Older persons

Funding Source(s): Department of Health and Human Services' Aging and Disability Resource Center grant initiative

Participating Public Health Agency: Brown County Aging and Disability Resource Center is associated with the Bay Area Agency on Aging

Role of Public Health Agency: Coordinate intervention delivery

Participating Medical Practice(s): When contacted, participating providers had not been identified.

Role of Medical Practice(s): Enrollment, participant evaluation, provision of education and facilities

Service Provided: Fall prevention and chronic disease self-management training

Start Date: Unknown

Description: The Brown County Aging and Disability Resource Center hoped to partner with the health provider systems in the area to offer two fall prevention programs and one program for chronic disease self-management; all are evidenced based.

1. Stepping On consists of seven weekly 2-hour group sessions with a three month booster follow up session
 2. Sure Step is an in-home fall prevention assessment
 3. Living Well With Chronic Conditions in Wisconsin is a chronic disease self-management program with six 2.5-hour weekly self-efficacy group sessions.
-

30. Name of Program: The Primary Care Network (PCN)

Location: Utah

Target Population: Indigent persons

Funding Source(s): Medicaid 1115 waiver program

Participating Public Health Agency: Utah Department of Health

Role of Public Health Agency: Provides a health plan, reimburses providers

Participating Medical Practice(s): Any

Role of Medical Practice(s): Apply for grants to cover services to un/underinsured

Service Provided: Clinical and dental care

Start Date: Unknown

Description: The PCN is health plan offered by the Utah Department of Health. It covers services administered by a primary care provider. Primary care services include visits to a primary care provider; four prescriptions per month; dental examinations; dental x-rays, cleanings, and fillings; immunizations; eye examinations (no glasses or contacts); routine laboratory services and x-rays; emergency room visits (restrictions apply); emergency medical transportation; and birth control methods.

31. Name of Program: Buncombe County Project Access

Location: North Carolina

Target Population: Indigent persons

Funding Source(s): Buncombe County

Participating Public Health Agency: Buncombe County Health Department

Role of Public Health Agency: Refer for specialist treatment; technical assistance

Participating Medical Practice(s): More than 600 practicing physicians in Buncombe County

Role of Medical Practice(s): Provide free care to a few patients

Service Provided: Clinical care

Start Date: 2000

Description: Project Access is a partnership between county government, county physicians, county service agencies, the hospital, and pharmacists. The health department could handle primary care needs, but specialty care had always been a problem until Project Access. The community doctors wanted to do their share but not get "slammed." Through Project Access 90% of practicing physicians in Buncombe County (more than 600) now see 10 to 20 individuals referred into their program with no expectation of payment. The county provides seed money, the medical society runs the program, and the hospital absorbs patient costs. Access to primary care services has been raised from 78% in 1995 to 93% in the year 2000.

32. Name of Program: Douglas County Health Department Refugee Screening Program

Location: Nebraska

Target Population: Indigent persons

Funding Source(s): Nebraska Health and Human Services and Douglas County Health Department

Participating Public Health Agency: Douglas County Health Department (DCHD)

Role of Public Health Agency: Screen refugees

Participating Medical Practice(s): Creighton University Medical Center (CUMC) Family Health Clinics

Role of Medical Practice(s): Accept refugee referrals, follow up on screening

Service Provided: Communicable disease screening and immunization

Start Date: < 2005

Description: The Douglas County Health Department Refugee Screening Program targets refugees who are entering Omaha, Nebraska, as their primary city of entry. They are being resettled through two local refugee resettlement agencies. The goal of this program is two-fold. The first is protection of each refugee's health through the earliest possible identification of communicable disease(s) endemic to where the refugees have lived, in combination with facilitating the timeliest entry into the health care system for further evaluation, diagnosis and treatment. The second part is primary prevention against vaccine-preventable diseases through administration of appropriate adult immunizations. The subgoal is the ability to accomplish initial health screening within the required 30-day time frame. To accomplish this, the DCHD partnered with the CUMC Family Health Clinics. It is through this partnership that each refugee receives indicated laboratory work, pre-screening for endemic communicable disease, all indicated adult immunizations and facilitated referral to CUMC for in-depth health screening.

33. Name of Program: Marion County Indigent Care Program

Location: Florida

Target Population: Indigent persons

Funding Source(s): Unidentified

Participating Public Health Agency: Marion County Health Department

Role of Public Health Agency: Coordinate program

Participating Medical Practice(s): Hospitals and physicians in private practice

Role of Medical Practice(s): Provide care to un/underinsured, participate in program decision-making

Service Provided: Clinical care

Start Date: At least 2005

Description: The Marion County Indigent Care System was established to address issues of limited accessibility and availability of primary and specialty health care to the medically underserved, low income, un/underinsured residents of Marion County. This partnership, under the auspices of the Indigent Oversight Board, provides coordinated health care services that include preventive and comprehensive primary health

care, immediate medical care for minor emergencies, specialty physician services, and hospital-based inpatient and outpatient services. The Indigent Care System provides health care to residents with limited access to care, facilitates cooperation among health care providers in the community, helps promote volunteerism among providers, and conserves valuable resources by reducing unnecessary emergency department visits and decreasing inpatient hospitalizations.

The Indigent Care Oversight Board provides guidance in problem solving and a forum for communication to the public-private partnership. No individual provider runs the system and all perceive themselves as part of a team working together for a common purpose. All providers participate in the program decision-making. Oversight Board Members include the CEO's of the two local hospitals, the county's public health director, three representatives from the Marion Medical Society, representatives from the local mental health provider, the county's hospital district, county commissioners, the school system, the Department of Children and Families, churches, businesses and residents of Marion County.

34. Name of Program: St. Lucie County Partners in Medicine Clinic

Location: Florida

Target Population: Indigent persons

Funding Source(s): Sliding scale fees, donations, board of county commissioners

Participating Public Health Agency: St. Lucie County Health Department

Role of Public Health Agency: Participates in program management, provides reports to county, provide speakers

Participating Medical Practice(s): Volunteer medical providers, HCA Lawnwood Regional Medical Center

Role of Medical Practice(s): Provide services; hospital donates space, participates in program management

Service Provided: Clinical care

Start Date: 2003

Description: The St. Lucie County Partners in Medicine Clinic opened in March 2003 as a direct result of a collaborative community effort to address an identified community need—lack of access to health care for primarily un/underinsured adults in St. Lucie County. The private for-profit hospital contributes \$50,000 for lease of space and hiring clerical support, as well as diagnostic tests. It uses paid staff supplemented by volunteer licensed medical providers, who receive sovereign immunity to contain costs. This eliminates the liability concern for providers because they are unpaid volunteers, but allows the health department to mitigate some costs by receiving reimbursement from third party providers. Currently, more than 60 volunteers physicians, registered nurses, licensed practical nurses, and medical assistants provide volunteer services to clinic patrons. The clinic also provides medications to qualified clients. The county health department director meets quarterly with the hospital CEO to discuss challenges and promote ongoing financial support. Comprehensive annual reports are submitted to the county annually. The county health department director and staff regularly attend organization meetings and provide speakers to meet community requests.

35. Name of Program: The Anne Arundel County Residents Access to a Coalition of Health (REACH) Program

Location: Maryland

Target Population: Indigent persons

Funding Source(s): Department of Health

Participating Public Health Agency: Anne Arundel County Department of Health

Role of Public Health Agency: Coordinate contracts, network development, refer patients, eligibility determination, enrollment, and ongoing case management.

Participating Medical Practice(s): Many local hospitals and providers

Role of Medical Practice(s): Provide care at deep discounts to un/underinsured

Service Provided: Clinical care

Start Date: 1999

Description: The Anne Arundel County Department of Health, in collaboration with the Anne Arundel County Medical Society, developed the REACH Program, which provides access to primary, specialty, and ancillary care to eligible, uninsured low income county residents. This was accomplished by building a network of partners, who formally agreed to accept discounted fees for services provided. Anne Arundel County Department of Health convened meetings with the leaders of the local hospitals, detailing the objectives of the program, and requested the cooperation and support of their organizations and medical staff. Meeting individually with providers helped allay any fears about unmanageable paperwork, low reimbursement rates,

and reimbursement hassles. The REACH network has partnered with over 440 Anne Arundel County providers and vendors and three local hospitals to care for county residents enrolled in the program.

36. Name of Program: The Montana Model

Location: Yellowstone County, Montana

Target Population: Indigent persons

Funding Source(s): The residency program is funded through the ability of the two local hospitals to generate payments according to the Graduate Medical Education portion of Medicare. Additionally, residency revenue is generated when Deering Community Health Center/Montana Family Practice Residency (DCHC/MFPR) patients are admitted to one of the local hospitals.

Participating Public Health Agency: Yellowstone City-County Health Department

Role of Public Health Agency: Funded and houses community health center (CHC) and residency program

Participating Medical Practice(s): Deering CHC, but partnered with others (see below)

Role of Medical Practice(s): The CHC is embedded within a city-county health department, and provides services to low/no income and uninsured patients; a non-profit family practice residency is also based at the CHC

Service Provided: Clinical care

Start Date: 1984 CHC/1995 residency program

Description: The Montana Model encompasses these two important stakeholders: the Yellowstone City-County Health Department (YCCHD), which provides the base for a federally qualified health center, the DCHC and the MFPR. Two target populations are the focus: the low/no income, uninsured patient needing primary health care and the resident physicians of a family practice program. The aim is to provide health care to the 11% of county citizens living below the federal poverty level and the many more living in near poverty, while simultaneously providing a medical clinic with diversity and complexity for family practice residents to obtain enriched training with the public health perspective. In 1995, the non-profit, MFPR was formed as an affiliate of the University of Washington Medical School and was based at the DCHC of the Yellowstone City-County Health Department. The original entities that incorporated under the MFPR included: St. Vincent Healthcare, Deaconess Medical Center, DCHC, Montana Associated Physicians Inc., Billings Clinic, and the Missouri and Yellowstone Rural Training Sites of Glasgow and Sidney Montana. Location within a health department gives patients greater access to the myriad functions that complement and support health care (WIC, MCH, hospice, environmental health, visiting nurse service, medication assistance program, health care for the homeless, breast and cervical health, HIV/AIDS services, school nurse program, vital statistics).

37. Name of Program: Improving Hispanic Elders' Health

Location: San Antonio, Texas (as well as Chicago, Ill., Houston, Texas; Los Angeles, Calif., McAllen, Texas; Miami, Fla.; New York, NY; and San Diego, Calif.)

Target Population: Older persons, Latino

Funding Source(s): U.S. Department of Health and Human Services

Participating Public Health Agency: The Alamo and Bexar Area Agencies on Aging (of the Alamo Area Council of Governments)

Role of Public Health Agency: Implement clinical scorecards for diabetes, participate in partnership

Participating Medical Practice(s): The University Health System, as well as health clinics and physician offices in several targeted zip codes

Role of Medical Practice(s): Implement clinical scorecards, participate in partnership

Service Provided: Improved diabetes care

Start Date: 2007

Description: There is a national partnership between the Administration on Aging, Agency for Healthcare Research and Quality, Centers for Disease Control and Prevention, Centers for Medicare & Medicaid Services, and Health Resources and Services Administration with the goal of developing strategies to reduce health disparities among Hispanic elders. The San Antonio partnership includes the public health department, the University Health System, CentroMed (federally qualified health center), Catholic Charities, University of Texas at San Antonio Health Science Center Barshop Institute for Longevity and Aging Studies, and the Bexar Area Agency on Aging. They will work with public health clinics, health clinics, and physician offices to improve the use of clinical protocols that reduce complications from diabetes and implement a scorecard to measure progress. Community organizations will provide wrap-around supports like the Stanford Chronic Disease Self-

management classes at neighborhood locations to improve self-care and adherence, as well as evidence-based physical activity to reduce development of diabetes.

38. Name of Program: Alexandria Neighborhood Health Services Inc. (ANHSI)

Location: Alexandria, VA

Target Population: Indigent, Latino

Funding Source(s): Currently federally qualified health center

Participating Public Health Agency: Alexandria Health Department

Role of Public Health Agency: Founded and partnered with a community health center

Participating Medical Practice(s): Alexandria Neighborhood Health Services Inc. (ANHSI)

Role of Medical Practice(s): Provides comprehensive, community-based, quality primary health care to those who have been denied access due to lack of health insurance, limited financial resources, or an inability to navigate the health care system.

Service Provided: Clinical care

Start Date: 1993/7

Description: The Alexandria Health Department (AHD) has a partnership with a community health center called the Alexandria Neighborhood Health Services Inc. (ANHSI). The *Arlandria Health Center for Women and Children* was created by the AHD in 1993 to improve access to basic health services for low-income, primarily Hispanic women and children living in the Arlandria community of Alexandria. The health center, initially funded by a four-year federal grant, was located in a low-income apartment complex in the heart of Arlandria. At the end of the federal demonstration grant, a 501(c) (3) non-profit organization was formed and became ANHSI. Later the city health director obtained a shortage designation and funding was applied for as a federally qualified health center. Today ANHSI is independent, but the health department still has a seat on the board of directors and they collaborate on a number of projects for mental health, dental and women's health services, among others.

39. Name of Program: ADHS Primary Care Program

Location: Arizona

Target Population: Indigent persons

Funding Source(s): In November 1994, Arizona voters approved the Tobacco Tax and Health Care Initiative. This imposed additional state taxes on tobacco products for the purpose of generating revenue for various health programs.

Participating Public Health Agency: Arizona Department of Health Services (ADHS)

Role of Public Health Agency: Fund primary care in community health centers (CHCs)

Participating Medical Practice(s): 19 statewide contractors receive funds, all of whom provide comprehensive primary care services at 143 sites statewide.

Role of Medical Practice(s): Provide primary care for fees on sliding scale using ADHS grants

Service Provided: Clinical care

Start Date: 1995

Description: The ADHS funds contractors to provide comprehensive primary care statewide. The purpose of the ADHS Primary Care Program (PCP) is to develop and maintain an enhanced statewide capacity for delivery of comprehensive, community-based primary (health) care services to low-income, uninsured residents of Arizona. Primary care and preventive health services include: prenatal care and family planning services; preventive dental services; early periodic screening and diagnostic testing (EPSDT); diagnostic laboratory and imaging services; pharmacy; outreach; health education and health promotion activities; medically necessary, non-emergent ground transportation; patient referral, tracking and follow-up; emergency stabilization services; and 24-hour medical coverage.

40. Name of Program: The DMH Primary/Behavioral Health Care Integration Initiative

Location: Missouri

Target Population: All

Funding Source(s): Missouri Department of Mental Health (DMH), Missouri Foundation for Health

Participating Public Health Agency: Missouri Department of Mental Health

Role of Public Health Agency: Fund and support grantees

Participating Medical Practice(s): Seven statewide sites that partner with federally qualified health centers (FQHCs) and community mental health centers (CMHCs).

Role of Medical Practice(s): Provide clinical integration of primary and behavioral health care for individuals with serious mental illness, as well as health promotion activities, wellness programs, and chronic illness and disease management initiatives

Service Provided: Behavioral health screening and intervention

Start Date: 2006/2007

Description: The Missouri Department of Mental Health (DMH) sought to implement a project of collaboration between behavioral health and primary care for persons living with mental illness served by an FQHC or a CMHC. Each site includes at least one CMHC and one FQHC. The goal is to increase recognition of behavioral health problems in primary care settings; ensure that all individuals are appropriately screened for behavioral health problems; ensure that those who appear to require behavioral health services are appropriately diagnosed; and ensure that those who are diagnosed with a behavioral health problem and require behavioral health services receive brief behavioral health interventions in the primary care setting, receive collaborative or stepped care involving both primary and behavioral health specialists, or are appropriately referred and enrolled in specialty behavioral health services. Other partners include the Missouri Primary Care Association and the Missouri Coalition of Community Mental Health Centers. Some sites focus on adults only, while others focus on children.

41. Name of Program: Sullivan County Health Partnership

Location: Pennsylvania

Target Population: All

Funding Source(s): None - all donations, staff time

Participating Public Health Agency: Pennsylvania Department of Health in Sullivan/Bradford County, PSU Cooperative Extension

Role of Public Health Agency: Participate in partnership (may coordinate)

Participating Medical Practice(s): One private practice dentist, Sullivan County Medical Center, Memorial Hospital, Geisinger Regional Cancer Center

Role of Medical Practice(s): Participate in partnership

Service Provided: Varied

Start Date: 2002/2004

Description: The Sullivan County Health Partnership has many participating members, including Sullivan County Children and Youth, Sullivan County Victims Services, Kiwanis Club, Sullivan County Commissioners, state congressmen and women, the school district, and Bradford County Mental Health (which services Sullivan County under a joint agreement). This began as an effort to provide greater dental services – this is a rural county with only one dentist. Now the dentist has expanded services and the partnership does a variety of health-related activities. The group meets monthly to share knowledge and plan events. Community events include a health fair with many health tests offered by local medical groups. Free mouth cancer screenings and dental exams are offered at a yearly event. The partnership sponsors a program for parents on underage drinking, and is trying to reinstate a sexually transmitted diseases clinic at Sullivan County Medical Center. A suicide task force includes the coroner as a member; an increase in suicides is being addressed with outreach and education. Because transportation is a problem, the partnership, along with the American Cancer Society, have positioned a van in the county with two drivers who are certified to transport patients to cancer treatment appointments. The partnership would like to develop volunteer driver programs for all patient health problems. The partnership was recently taken under the wing of a nonprofit and now has 501(c)3 status.

42. Name of Program: Communities in Charge

Location: Nationwide

Target Population: Indigent persons

Funding Source(s): The Robert Wood Johnson Foundation

Participating Public Health Agency: Local health departments

Role of Public Health Agency: Varied; see below

Participating Medical Practice(s): Physicians or hospitals

Role of Medical Practice(s): Varied; see below

Service Provided: Clinical care, prenatal care

Start Date: 1997

Description: The Robert Wood Johnson Foundation's Communities in Charge program involves 12 communities that receive funding to create community consortia to provide a system of care for the un/underinsured in their community. Consortia can involve a variety of partners such as physicians, pharmacies, local public health departments, social service agencies, and hospitals. Communities in Charge grantees operate by convening community coalitions, developing partnerships, assessing the needs of the community, and designing a delivery and financial system tailored to these needs.

One example of a grantee: The Tri-County Communities in Charge Initiative spans Clackamas, Multnomah, and Washington Counties in Oregon and their health departments, with Multnomah County Health Department serving as the lead and convener. In May 2004, private non-profit clinics, hospitals in the service area, county clinics, the three health department directors and county commissioners negotiated an intergovernmental agreement. This entity was entitled "The HealthCare Safety Net Enterprise" and was created to address issues affecting all providers in the area. For example, the Enterprise used its federally qualified health care center status and the State Children's Health Insurance Program (SCHIP) to create access to prenatal care for the uninsured. This was accomplished by establishing a single phone line used to obtain referrals to private and clinic practice. Beyond this referral system, funding for the provision of care is provided through community contributions. Outreach strategies have stretched beyond core provisional care entities such as health departments and area clinics to other community partners, including school districts and social support agencies.

43. Name of Program: Coconino County Health Department

Location: Arizona

Target Population: Children and parents

Funding Source(s): Various

Participating Public Health Agency: Coconino County Health Department

Role of Public Health Agency: Referrals, offers classes, vitamins

Participating Medical Practice(s): North Country Community Health Center (NCCHC), a community health center

Role of Medical Practice(s): Offers prenatal care, dental screening, counseling and diabetes management

Service Provided: Prenatal and postpartum care, education, and screening

Start Date:

Description: Coconino County Health Department (CCHD) and the NCCHC serve primarily the Flagstaff community in northern Arizona. A great deal of cross-referral exists between the two organizations in an effort to educate pregnant women about the wide array of available services and ensure they can access those services. A small community setting both necessitates and eases the ability to work collaboratively. The CCHD offers childbirth classes, courses for new fathers, opportunities for families to share outgrown children's items, and multivitamins containing folic acid for women of childbearing age. Minimizing duplication of services, NCCHC's Maternal/Child Health Program offers family-oriented, integrated prenatal care, which involves a dental screening, behavioral health counseling, and diabetes management.

44. Name of Program: Fairbanks Regional Public Health Center

Location: Fairbanks, Alaska

Target Population: All

Funding Source(s): Unknown

Participating Public Health Agency: Fairbanks Regional Public Health Center (FRPHC)

Role of Public Health Agency: See below

Participating Medical Practice(s): the Interior Health Clinic (IHC), a CHC

Role of Medical Practice(s): See below

Service Provided: Prevention and outreach

Start Date: Unknown

Description: The FRPHC and the Interior Health Clinic (IHC) are located in a large, rural area of Alaska, which necessitates collaboration and coordination of services in order to ensure access to comprehensive care in the two boroughs, two census areas, and 42 villages in the jurisdiction. The FRPHC and IHC participate in the following outreach programs:

"Got Health Care" Campaign: IHC regularly places ads in newspapers and distributes flyers in food boxes at the local food bank. Additionally, outreach workers from IHC visit a domestic violence shelter; a center for the poor,

homeless, and transient; Head Start programs; and other entities in the Interior Region to provide health information.

“Denali KidCare” Program: FRPHC and IHC staff, public health nurses, and outreach workers often refer eligible children, teens, and pregnant women to this Medicaid program.

Advisory Groups and Boards of Directors: The Regional Nurse Manager at FRPHC in Alaska’s Interior Region sits on the IHC’s board of directors, which meets monthly. This ensures that any overlap in services is minimized and that the health center is aware of the health department’s activities and vice versa.

45. Name of Program: Riley County-Manhattan Health Department

Location: Kansas

Target Population: Indigent persons

Funding Source(s): Kansas Department of Health and Environment

Participating Public Health Agency: Riley County-Manhattan (KS) Health Department

Role of Public Health Agency: Hired nurse practitioner, refers cases to physicians

Participating Medical Practice(s): Many local volunteer physicians

Role of Medical Practice(s): See un/underinsured individuals referred by health department

Service Provided: Clinical care

Start Date: at least 2004

Description: The Riley County-Manhattan Health Department is working to provide access to care for low-income, uninsured residents through collaborating with a number of health care entities in the community. The Riley County-Manhattan Health Department used a \$100,000 state health department grant to provide basic care through hiring a nurse practitioner. The local medical laboratory and hospital donate services and the nurse practitioner refers complex cases to a local network of volunteer physicians. The health department contacted area physicians individually to solicit their participation in this network. Program coordinators conducted public outreach through newspaper and other media, but many residents learned about these services by word of mouth. Only low-income individuals without insurance who lived within the county were admitted. In 2004, 696 patients were seen, with a total of 2019 visits being made to the health department.

46. Name of Program: Summit County Public Health Free Clinic

Location: Colorado

Target Population: Indigent persons

Funding Source(s): Fees, grants, donations, county

Participating Public Health Agency: Summit County Public Health

Role of Public Health Agency: Founded clinic

Participating Medical Practice(s): Summit Medical Center, local volunteer physicians

Role of Medical Practice(s): donate services, time, laboratories

Service Provided: Clinical care

Start Date: Unknown

Description: Summit County Public Health decided, after conducting a statewide Blue Ribbon Community Assessment, to tackle language and cultural barriers by implementing an indigent care clinic. The assessment results showed the need for a safety net of care for the working poor in the community. The support of the county and local physicians in the private sector was a key element of the clinic’s success. The clinic started as a strictly volunteer venture offering services by health department personnel and other community service providers two evenings per week. As the Summit County population grew, the need for the clinic’s services grew as well. The Summit Community Care Clinic is now open two days and one evening per week. The clinic recently acquired 501 (c) (3) status, hired a new director, and moved into a county building in 2006. More than 50% of the population the clinic serves speaks only Spanish. Some staff members are bilingual; in addition, volunteer and paid interpreters staff the clinic. The clinic has various forms of funding, including minimal fees and grants from private statewide foundations, private donations, and county in-kind funding to cover health department staff. The Summit Medical Center donates laboratory and other services to the clinic.

47. Name of Program: Fulton County Preparedness

Location: Georgia

Target Population: All

Funding Source(s): Various

Participating Public Health Agency: The Fulton County (GA) Department of Health and Wellness (FCHW), Public Health District 3-2, the Georgia Division of Public Health, and five other local health departments in greater Atlanta

Role of Public Health Agency: See below

Participating Medical Practice(s): Four community health centers (CHCs), local hospitals (e.g., Grady Health System)

Role of Medical Practice(s): See below

Service Provided: Emergency preparedness

Start Date: Unknown

Description: The Fulton County Department of Health and Wellness (FCHW), Public Health District 3-2, engages in regional preparedness planning with the following partners: four local CHCs, local hospitals, emergency responders, 101 local municipalities, local health departments, the Georgia Division of Public Health, four local universities, the Atlanta Community Access Coalition, 26 neighborhood planning units, the American Red Cross, and major corporations. FCHW participates in the following preparedness activities:

Strategic National Stockpile (SNS): The FCHW is responsible for distributing medications or immunizations in the event of an emergency, while CHCs in the county serve as alternate care facilities in response to a disaster.

Exercises: Simulated exercises (tabletop, function, or full-scale) take place over an 18- month period and gauge response time and capabilities and assess missing components. The FCHW works with local hospitals and CHCs to develop protocols and conformities to respond to medical disasters.

Surge Capacity: The emergency preparedness planning team at FCHW regularly confirms the number of available beds at local hospitals. The goal is for the FCHW, local hospitals, and the CHCs to have the ability to cover the geographical area in which they currently see patients and clients. In the event that more space is needed, the FCHW has access to 100 portable hospital beds that can be transferred to a CHC to support surge capacity.

Strategic Plan Development: FCHW's partners in Greater Atlanta developed a strategic plan to outline goals and delineate responsibilities. FCHW staff understands and respects the role of CHCs in the county, which enhances the ability to communicate.

Regular Meetings: The partnership coordinator at FCHW facilitates monthly meetings with the agency's partners, primarily the CEOs of the local hospital and four CHCs, to discuss preparedness issues. The partnership deliberately includes the CEOs to ensure that decision makers are active participants.

Co-location Agreement: The FCHW currently has a co-location agreement with one of four CHCs in the county and is looking to develop similar agreements with the other three CHCs.

48. Name of Program: Disaster Response for Health in El Paso County (DR HELP)

Location: Colorado

Target Population: All

Funding Source(s): Program costs have been an issue and to date have been covered by the hospitals and the medical society. Grants have been applied for but not procured at time of interview

Participating Public Health Agency: El Paso County Department of Health and Environment (EPCDHE)

Role of Public Health Agency: Planning and education

Participating Medical Practice(s): Hospitals, more than 100 El Paso County Medical Society physicians and other health providers

Role of Medical Practice(s): Volunteer in case of emergency; hosting continuing medical education training and providing standardized identification cards for credentialing using the Medical Reserve Corps logo.

Service Provided: Disaster response

Start Date: < 2003

Description: The El Paso County/Colorado Springs community collaboration has formed DR HELP. This partnership was created by the efforts of the El Paso County Medical Society (EPCMS), El Paso County Department of Health and Environment, city and county offices of emergency management, hospitals, schools, and other agencies. It is working to meet the challenges of medical and public health response to a massive disease outbreak or bioterrorist event, as well as other occasions involving overwhelming mass casualties. Combining forces to make DR HELP the community's Medical Reserve Corps are: 100-150 EPCMS physicians, 75 area mental health professionals, approximately 450 nurses, approximately 50 physician assistants, the dental society, the veterinary society, the City of Colorado Springs Office of Emergency Management, El Paso County Office of Emergency Management, Colorado Springs School District 11, and the El Paso County Department of Health and Environment. This program is innovative in that it takes the President's recommendation of a Medical Reserve Corps and realistically distributes authority and responsibility

throughout the medical community to minimize demand on community hospitals, which are already operating at near capacity and unable to accept much additional surge capacity. The EPCMS began DR HELP because it realized that the hospitals in the region would be overwhelmed should a massive catastrophic event occur.

Note: *Many communities have disaster response plans that involve primary health physicians and health departments. This is one example.*