CALIFORNIA'S

HOSPITAL COMMUNITY BENEFITS LAW

A PLANNER'S GUIDE

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CHAPTER ONE

HISTORY

Revised June 2003

Chapter 1

History

In the mid-1980s, the first rumbles began. They were initially heard in Utah and moved quickly into New York. The rumbles then increased in both volume and intensity while moving into Texas, Indiana, California, Pennsylvania and Idaho. This ever-growing noise was the sound of questions and a clamoring for answers. Those asking the questions came from a wide range of sources, from consumer advocates to local tax assessors. Those fielding the questions were the private, not-for-profit (NFP) hospitals. The primary question, albeit seemingly simple, was found to be profoundly complex upon further examination. The oft-asked question was: "What do NFP hospitals provide that entitles them to tax-exempt status?"

As the opposing sides began to take shape, consumer advocates expressed alarm at the increasing number of uninsured patients who could not find care, while local tax assessors (whose tax coffers were depleted due to changed federal fiscal policies)¹ began to look in earnest at the property value of the NFP hospitals. The NFP hospitals, meanwhile, staunchly defended their century-long history of providing charitable care.²

It is important to note that, up until the mid-1800s, those patients able to pay received care in their own homes rather than in hospitals. At that time, hospitals were for "the pauper sick or those without kin or friends to care for them."³ For example, John Hopkins Hospital in Baltimore was founded under this premise: "The indigent sick of the city and state, without regard to sex, age, or color, who required surgical or medical treatment or were stricken by any casualty, were to be received free of charge. A limited number of patients who were able to pay were also to be provided for, and the income thus raised was to be applied to the relief of the poor."⁴

Historically, NFP hospitals have been exempt from paying taxes because they are organized and operated exclusively for charitable, scientific or educational purposes, and their net earnings do not benefit any private shareholder or individual [IRS law, 501(c)(3) reported annually in Form 990]. Only within the last 15 years have state and local governments begun to challenge the tax-exempt status of NFP hospitals. California still uses the federal definition (IRS ruling 69-545, 1969) as the base definition for determining NFP status. This ruling states that NFP hospitals must have:

- 1. A Board of Trustees composed of prominent citizens.
- 2. Medical staff privileges open to all qualified physicians.
- 3. A full-time emergency room that denies care to no one.
- 4. Admissions to all who are able to pay which includes Medicaid and Medicare recipients (as opposed to a private, physician-owned hospital which may deny admittance to those who are not their patients).
- Operating surpluses applied to one of the following: capital replacement and expansion, debt amortization, improvement in patient care and medical training, education and research.⁵

The tax-exempt status of NFP hospitals became a subject of debate in California when Assemblyman Johan Klehs (D-San Leandro) began expressing concern about the number of uninsured patients being treated by some NFP hospitals in the early 1990s. Without any legislatively-established requirements, grassroots efforts by the NFP hospitals opened the discussion on charity care.

At the request of the NFP hospitals, then-Senator Art Torres (D-Los Angeles) agreed to author a bill in which the California Health Policy and Data Advisory Commission would study the tax-exempt status of NFP hospitals, followed with recommendations to the Legislature. The Senate approved Senate Bill (SB) 697 in 1993, but the legislative clock ran out before the Assembly was able to vote on the bill. As such, SB 697 became a two-year bill.

During the following year, Assemblyman Phil Isenberg (D-Sacramento) recommended that SB 697 be amended from a study bill to a bill that established reporting criteria and process requirements for hospital community benefits by NFP hospitals. With these amendments, the bill read, "Significant public benefit would be derived if private, NFP hospitals reviewed and reaffirmed periodically their commitment to assist in meeting their communities' health care needs by identifying and documenting benefits provided to the communities which they serve." NFP hospitals were now required to reaffirm their mission statements, conduct needs assessments every three years, develop and implement community benefit plans, and annually submit a copy of the plan to the Office of Statewide Health Planning and Development (OSHPD) within 150 days after the hospital's fiscal year end. Community Benefits Plan was defined in the legislation as: "the written document prepared for annual submission to the OSHPD that shall include, but shall not be limited to, a description of the activities that the hospital has undertaken in order to address identified community needs within its mission and financial capacity. and the process by which the hospital developed the plan in consultation with the community." (The full text of SB 697 can be found in section XXX).

The OSHPD were then to report the following information to the Legislature:

- The names of hospitals that did not file plans on a timely basis
- The primary community needs identified and emphasized by the plans
- Recommendations for standardized plan formats and guideline

In January 1998, OSHPD published the following report: *NFP Hospital Community Benefit Legislation (SB 697): Report to the Legislature.*⁹ Of the 555 operating hospitals in California in 1995-1996, 384 were NFP hospitals. Of the 384, only 205 hospitals were required to comply with SB 697, due to the exemption of State, County, and University of California hospitals. Also exempt were "small and rural" facilities, eight NFP alcohol/drug rehabilitation facilities and two children's hospitals operated by the Shriners. The Report documented that 166 hospitals met the June 1996 deadline and indicated the remaining 39 were to submit their plans by February 1998.

The Report also included an analysis of the reporting hospitals' mission statements, needs assessments, community benefits, measurable objectives and timeframes, and information regarding the economic valuation of their community benefit activities. Other sections of The Report included examples of the community benefit plans, public comment and advisory group discussions.

As required by the legislation, OSHPD also reported its recommendations for standardization of plan formats in addition to recommendations regarding community benefits and community priorities that should be emphasized.

Recommendations for the standardization of community benefit plan formats asked for the inclusion of the following:

- 1. Clear and specific definitions of the communities targeted by the plan.
- 2. The hospital's mission statement (including and values or vision statements) and a description of the organizational framework in which the planning and implementation process will take place.
- 3. A summary of the needs assessment process undertaken at the local level and the method used to prioritize needs for inclusion in the benefits plan.
- 4. A summary of all community benefits currently provided by the hospital as well as new benefit activities proposed in the plan. These should correspond to one or more needs identified in the community, and, if possible, an economic valuation should be attached to the benefit.
- 5. An implementation timetable that includes goals/objectives and time frames/interim milestones for each benefit activity.
- 6. A description of the methods the hospital has used to publicize and distribute the plan to its local community.
- 7. At a minimum, the elements listed in OSHPD's Outline for Annual Community Benefit Reports.¹⁰

Recommendations for community benefits and priorities to be emphasized included:

- 1. The board of trustees and senior management of the hospital should be responsible for overseeing the development and implementation of the community benefits plan, which includes the allocation of resources and a mechanism for periodic evaluation.
- 2. Hospitals should include the broadest possible representation of communities in their needs assessment and community benefits planning processes.
- 3. Hospitals should plan collaboratively with other organizations and facilities in their community that share their mission, service area/population, and/or scope of services.
- 4. Benefits and priorities in community benefit plans should not be limited to those services, service areas, or target populations that have been historically served by the hospital.

- 5. Benefits and priorities should reflect a prioritization process based on community input, available data and anticipated impact on the target community.
- 6. Hospitals should, at a minimum, conduct one public meeting to present their community benefit plan to the public.¹¹

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CHAPTER TWO

OVERVIEW

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Chapter Two

Overview

A premise of the hospital community benefit statute is that NFP hospitals provide substantial contributions to their communities in addition to charity care, but they have not been required, in the past, to document these community benefit activities.

According to the statute a private NFP hospital had to do the following:

- By July 1, 1995, reaffirm its mission statement that requires its policies integrate and reflect the public interest in meeting its responsibilities as a NFP organization.
- By January 1, 1996, complete, either alone, in conjunction with other health care providers, or through other organizational arrangements, a community needs assessment evaluating the health needs of the community serviced by the hospital, that includes, but is not limited to, a process for consulting with community groups and local government officials in the identification and prioritization of community needs that the hospital can address directly, in collaboration with others, or through other organizational arrangement. The community needs assessment shall be updated at least once every three years.
- By April 1, 1996, and annually thereafter adopt and update a community benefits plan for providing community benefits either alone, in conjunction with other health care providers, or through other organizational arrangements.
- Annually submit its community benefits plan, including, but not limited to, the activities that the hospital has undertaken in order to address community needs within its mission and financial capacity to the OSHPD. The hospital shall, to the extent practicable, assign and report the economic value of community benefits provided in furtherance of its plan. Effective with hospital fiscal years, beginning on or after January 1, 1996, each hospital shall file a copy of the plan with the office not later than 150 days after the hospital's fiscal year ends. The reports filed by the hospitals shall be made available to the public by the Office. Hospitals under the common control of a single corporation or another entity may file a consolidated report.
- The hospital shall include all of the following elements in its community benefits plan:
- (a) Mechanisms to evaluate the plan's effectiveness including, but not limited to, a method for soliciting the views of the community served by the hospital and identification of community groups and local government officials consulted during the development of the plan.
- (b) Measurable objectives to be achieved within specified timeframes.

- (c) Community benefits categorized into the following framework:
 - (1) Medical care services.
 - (2) Other benefits for vulnerable populations.
 - (3) Other benefits for the broader community.
 - (4) Health research, education, and training programs.
 - (5) Nonquantifiable benefits.

Starting Point: How to begin the community benefit planning process

This resource manual is designed to assist California hospitals in developing, implementing and assessing their community benefit programs. Hospitals express their commitment to their communities in part by the submission of their annual plan. This is, however, an ongoing process. It takes time and assistance to partner with community stakeholders in addressing unmet health-related needs.

This section of the manual has been created for the new hospital community benefit planner (HCB planner). The following questions should help the HCB planner in finding the background information needed for a better understanding of where their hospital stands in the hospital community benefit planning process.

1. What has the hospital reported in previous years?

Many have found it helpful to have a central location for community benefit program information.

Typical documents would include:

- Past community benefit plans
- Past needs assessments
- Charity care policies
- Hospital mission statement
- Hospital strategic plan
- Inventory of community benefit programs or services and contact information
- Financial statements related to the plan
- Program evaluations
- Contact information for community benefit program staff
- Contact information for community partners
- Related publications
- Related meeting minutes

2. What is due and when?

- Every three years, conduct a community needs assessment. Prioritize identified needs and develop a plan of action with measurable objectives and timeframes. Community needs assessments were conducted in 1995, 1998, and 2001. Upcoming community needs assessments (2004, 2007) should be complete by the end of the calendar year (December 31st).
- Annually update the plan, including prior year's progress and next year's plan. Submit the plan to OSHPD 150 days after the hospital's fiscal year end.

3. Does the hospital (or system) have internal community benefit reporting policies?

Before developing standards for the community benefit planning process, determine the standards or methods that already exist. Consider the following:

- Reporting pathways for financial and program information.
- Internal approval process prior to the community benefit plan being submitted to OSHPD.
- Policies or standards dictated by the hospital's strategic plan and budget process that relate to community benefits.
- Methods of program planning and evaluation currently practiced by the hospital.

4. Which community partners have been involved in the hospital's community benefit planning process?

It is likely that the hospital collaborates with community organizations to provide services. Involving those organizations and other community members in the community benefit planning process has been invaluable (as well as required by law).

- Identify collaborative efforts in which the hospital participates along with the involved partners.
- Identify how community partners have been involved in the community benefit planning process.
- Identify potential community partners:
 - Community Leaders
 - Staff and board members from community-based organizations
 - Public health officials
 - Members from the general public
 - Local businesses and other employers

- Local labor organizations
- Law enforcement agencies
- Local government
- School districts
- Faith community
- Neighborhood and civic associations

5. What community benefits are other NFP hospitals and specialty hospitals (i.e. children's, rehabilitative, academic) providing in the community?

Other NFP hospitals in the local community can be a valuable resource. Therefore it may be helpful to:

- Identify NFP hospitals and HCB planners in the local community.
- Obtain their community benefit plans from OSHPD.
- Note how they conducted their community needs assessment.
- Note their process for prioritizing community needs.
- Identify the programs or services implemented to address community needs.
- Note the collaborative efforts in which the hospital is involved.

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CHAPTER THREE

COMMUNITY ASSESSMENT AND PRIORITY SETTING

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Chapter Three

Community Assessment and Priority Setting

Over the long term, many hospitals have found that leading or participating in community building efforts has been as important—and, often, more important—than conducting very focused health promotion projects that serve relatively small numbers of people. In this broader collaborative role, the hospital is truly seen as part of the community. Communities come to acknowledge and appreciate the hospital's contribution in assisting collaborations that create sustainable resources in the community.

This chapter will include:

- An Overview of the Community Benefit Planning Process.
- Key Community Planning Definitions and Concepts.
 - Step 1 Convening a Community Health Coalition.
 - Step 2 Conducting a Community Assessment and Setting Priorities.

An Overview of the Community Benefit Planning Process

Hospitals have been providing charity care and free health screening and support services to their clients and communities for many years. A major provision of the community benefit legislation, SB 697, is to engage not-for-profit hospitals in a comprehensive community-wide process of assessment and community benefit planning. The intent is that hospitals take a broad view of health that acknowledges and responds to the mix and interaction of environmental, social, political, educational and economic factors. Based on this broad view, hospitals' community benefit programs will take a population–based approach to improving the health of defined communities.

The Community Health Planning Framework

The traditional community health-planning framework is easily adapted for the purposes of community benefits planning. It is a process similar to the cycle that hospitals use in their continuous internal quality-improvement activities and to the community-oriented primary care model used by some health plans and hospitals. The process is continuous and iterative, logical and systematic. A planning group is convened, identifies health indicators and other relevant factors, and gathers the data. There is an analysis of those data, including asset identification, prioritization of problems, analysis of prioritized problems, setting of goals, objectives and performance measures and the development and implementation of an intervention action plan. Finally, there is an evaluation of the intervention(s). The process is repeated at regular intervals, building on the evaluation of previous cycles. *Diagram 1* is a graphic representation of this planning cycle.

Community health planning, conceptually, begins with the convening of a coalition or planning group. However, in reality, the process can begin at any point, steps often happen simultaneously and it is usually necessary to go back and forth between steps.





Key Community Planning Definitions and Concepts

Before describing this process, it is important to define and discuss key terms and concepts used in this guidance.

Population Health - The term "population health" can be used interchangeably with community health. Population health is a relatively new term that began to appear as managed care organizations recognized that it was in their interest to provide a set of health promotion and disease prevention services in order to prevent or ameliorate many common diseases that result in the costly use of health services by their members. Health plans began to assess the health and social conditions of the communities in which their members lived. They collected data on the prevalence of disease, risk factors and, costly clinical conditions. This data was then used to develop specific community wide health education and promotion efforts. These have included services such as free health screening, health focused media campaigns, support groups for those with chronic illnesses, distribution of either free or low cost children's car seats or bicycle helmets, telephone information lines, and participation in coalitions with other health providers and advocates. Although, initially, most hospitals' population health efforts were clinically focused, the mounting evidence that many medical problems are related to environmental, socio-economic, cultural and behavioral factors has increasingly led hospitals and clinical providers to take a broader, community-wide view of health.

Population health is an approach to health that aims to improve the health of an entire population. A population can be defined as an entire geographic community, a specific group within the community, such as children or persons with disabilities, or persons living in specific low-income neighborhoods. Population health addresses the broad range of factors and conditions that influence the health of communities or identified populations within the community including socioeconomic, environmental, behavioral and biological. It combines the methods of primary care, epidemiology, and public health and managed care.

Key to the population health approach is the emphasis on the principle of equity, examination of the wide array of "determinants" of a community's health, and the development of population-targeted interventions to promote health, reduce risk and prevent specific diseases. The focus of population health is prevention. Interventions may be targeted to the community, systems within the community or individuals. Many hospitals and health plans are joining with community organizations, health departments and consumers in their attempts to understand and address problems such as health care access issues, community violence, and childhood obesity.

Determinants of Health - The determinants of health are factors that positively or negatively impact health status. Examples of health determinants include income and social status, nutrition, exposure to disease, social support networks, housing, neighborhood conditions, heredity, access to food, access to health care, safety, cultural customs and values and behavior choices. The interaction of these factors is complex

and probably more important than any one factor taken in isolation. Consequently, community-based interventions that address multiple factors (often through the collaborative efforts of many different organizations and entities) are likely to be most successful in addressing problems or promoting healthy environments and behavior.

Levels of Prevention - Prevention is anticipatory action taken to prevent the occurrence of an event or to minimize its effect after it has occurred. The three levels of prevention are primary, secondary and tertiary. Primary prevention aims to prevent a problem from developing. Secondary prevention detects and treats problems in their early stages. Tertiary prevention aims to prevent problems or conditions from becoming worse.

Types of Population Health Interventions - Population health interventions may target an identified community, the systems operating within the community or individuals within the community. Community level interventions include changing community awareness, community environments and community norms. An example is a community-wide media campaign. Interventions that aim to change systems include those, which change the structure/operations of organizations, laws and policies. An example is a change in eligibility requirements for low-income housing. Interventions may also be aimed at changing the knowledge, attitudes, practices and behaviors of individuals. An example is providing infant car seats to parents of young children.

Transition from Clinical to Population Health Focus - For many hospital administrators, marketing directors and professional staff, the community benefits program requires a paradigm shift from one-on-one clinical care to a population health focus. Within the population health framework, medical care is only a part of a continuum of health promoting services. It will take time and patience to establish this new approach.

Sharing Responsibility and Control - Moving from a clinical solution under the control of a professional staff to a collaborative intervention that depends on the participation of many individuals and organizations that are not under the control of the hospital will be a challenge. A different set of skills will be needed to engage and organize such an effort.

The hospital staff is accustomed to a professional relationship with patients with health needs, professionals that work within the hospital, and health professionals that refer patients to them. However, in order to intervene positively in community health, it will be necessary to work *collaboratively* with community residents, community based agencies, and community advocates. Whether the Community Benefits Program and other hospital staff are in a lead or a participative role, the intent of the community benefits process is to maintain a community perspective on health priorities and activities and to establish an environment in which many stakeholders can work together. The importance of the process within this context cannot be overstated. Health professionals will have to listen carefully to understand and work effectively with coalition members.

Stakeholders - Stakeholders are individuals, groups, or organizations that have a significant interest in the community benefits program. Examples include: community members and community advocacy organizations, those with decision-making authority over it (legislators), State oversight agency, Office of Statewide Health Planning and Development (OSHPD), community organizations, civic leaders and local governmental agencies, such as the local health department, and potential funders of programs developed in a community planning process.

Defining the Community - SB 697 defines community as "the service area or populations served by the hospital". In its "Not-for Profit Hospital Community Benefit Legislation Report to the Legislature, January, 1998", OSHPD recommended that hospitals should not be limited by the statutory definition of community, but, instead, should provide a description (including geographic, demographic and/or other descriptive factors) of the *target communities identified as a result of the community planning process*.

This suggests a two-step process. The first, the definition of the community (ies) for assessment purposes and, subsequently, based on the results of the assessment and priority problem analysis, a specific definition of the target intervention communities.

A community is a group/population who share a common place, identity or experience.

Examples of a common place include: a region, count, city, zip code, neighborhood (defined locally), census tract(s) and a school district. Examples of a common identity include: adolescents, African Americans, elders, and people of common experience (homeless people, persons with diabete and HIV positive women.)

Thus, the first broader definition of community may be adopted by the hospital previous to convening a planning group or by the Coalition in which the hospital participates. The definition of the target communities should be determined as a result of the problem priority setting process and the subsequent problem analysis. The spirit of the law is to focus on populations with disproportionate unmet needs. Your hospital is encouraged to consider responding to unmet population needs identified through a collaborative process, even if the population of need is outside of the hospital's traditional service area.

Common Problem:

During the Coalition building and assessment steps of the planning cycle, one of the first challenges will be to define the community of interest. For general hospitals, the community of interest is usually the geographic areas in which the majority of their patients reside. Thus, the target area could be those zip codes in their service area. However, this area may not be one with high numbers of people with disproportionate unmet health needs.

How is this handled?

Response

Regardless of the hospital's historical utilization patterns, the intent of SB 697 and public expectations associated with hospital non-profit status is for populations with disproportionate unmet health needs to be the primary focus of health assessments and community benefit activities.

Some hospitals have specialty areas of focus (e.g. children, chronic lung disease, and cancer) and serve patients from a very widely dispersed geographic region. The hospital's community benefit program will need to be more specific in defining its community of interest.

Examples

A chronic disease hospital may receive patients from a very large geographic area like Northern California. In this case it would not be feasible to target such a large area. It may focus on the county or city in which it is located or a specific area within the county where data has shown higher rates of chronic disease than the overall county population. Factors such as the location of groups with disproportionate unmet health needs, consistency with priorities already established by a community coalition in which the hospital participates, and the potential to focus resources effectively, as opposed to spreading inadequate resources over a large geographic area, should be considered in defining the community.

Many larger hospitals have joined with other hospitals and community partners to conduct county or even multi-county community health assessments. Thus their initial community of interest is very broad. As they analyze the assessment findings and prioritize problems, the community of interest will be a defined segment of the population, e.g., infants and their families residing in identified low-income neighborhoods or persons with, or at high risk for, AIDS.

Asset Versus Deficit Approach to Assessment - A growing movement in public health and in community health coalitions is to focus on identifying community strengths or assets that are associated with positive health outcomes. There is evidence that building capacity in the community in those assets is a more effective health promotion strategy than focusing on negative factors. Further, when working collaboratively with a community group, it is vital to recognize that community advocates efforts are often targeted at promoting and maintaining health rather than treating disease. Communities frequently look at what health promoting assets exist and want to work toward increasing these.

Examples:

A hospital community benefits program may work in collaboration with innovative high school staff to develop or expand a student peer-counseling program to address the problems of school dropout and absenteeism.

In a low-income community where access to "healthy, high quality" foods is a problem, a hospital community benefit program may collaborate with the local community center and several churches in the area to develop a community garden.

Public Health: A Key Partner - Public health is what we, as a society, do collectively to assure the conditions in which people can be healthy (The Future of Public Health, Institute of Medicine, National Academy Press, Washington, DC, 1988). The mission of a public health department is to assure the health of the entire community, generally within specified geographic borders.

The local Public Health Department will be a natural resource and/or partner with a hospital community benefit program in identifying and addressing the needs of a community of mutual interest.

Core functions of these departments include: providing ongoing community wide health assessments through the routine collection of data on a set of health indicators; planning and policy development based on the results of the assessment; and assurance that those programs or functions operating in the community to meet the health needs of the population are in fact functioning well.

Public health departments also provide a set of core services upon which residents and health providers depend. These include: environmental health (inspection and licensing for food safety, surveillance and enforcement for toxic substances), communicable disease surveillance, screening and treatment (AIDS, STD, reportable infectious diseases), immunization services (vaccine distribution, vaccine administration), and community wide health education (health screening, distribution of literature, media campaigns, telephone information and referral for health services). These departments sometimes provide clinical services for those without access to other providers because of a lack of health insurance or social and cultural barriers to care (mental health, substance abuse, primary care). Public health departments generally work closely with schools, social service agencies, public safety organizations, local health care providers and mental health agencies to accomplish their goals. It will be very important to your program to seek out, obtain as a partner, and incorporate and build on the work of the local public health department.

Ready to Begin the Planning Process

Are you ready to step into the community benefit planning process? If you are new to your job and this process, you will probably want to start with step 1 and proceed sequentially. If your hospital and you are well into the cycle of planning, we suggest you choose the step appropriate to the planning stage you are in and proceed accordingly. You will probably find yourself going back and forth between steps. This is part of a successful process; the process and the product may be refined with each revisit.

Community Planning Step 1: Convene a Planning Group

Background

One of the important features of SB697 is the requirement of a community planning process. It is expected that hospitals will collaborate with community partners in a community health assessment and the design and implementation of community benefit program activities. SB 697 directed OSHPD to make recommendations to the Legislature regarding community benefits and priorities that should be emphasized by hospitals. Rather than identify specific community benefits and priorities, OSHPD's recommendations focused on "the elements of a local planning process that will identify benefits and priorities most appropriate to communities". Two of its six recommendations and this chapter focus on the inclusion of the broadest possible representation of the community in the hospital assessment and community benefits planning. OSHPD has emphasized the need for a strong community-based process, empowered to develop plans and interventions that reflect local consensus. In order to identify, understand and address complex population health problems, it is necessary to engage a broad array of community stakeholders.

Hospitals with a small amount of resources for this activity and expertise primarily in clinical care will not be able to impact population health problems on their own. Hospitals with a larger resource base can maximize benefits by combining their efforts with other community organizations, as well as highlight their contribution and community responsiveness, by their participation in collaborative efforts.

Options for Structured Planning

Your hospital community benefits program can meet its obligation to engage in a community-wide assessment and community benefit planning in different ways, as described below.

The hospital participates in an established planning group/coalition

A hospital can join an existing coalition and, thus, may be able to preserve resources for actual community benefit services. Many counties in California have ongoing health coalitions with a broad array of community participants including consumers of services. Joining a coalition can be very effective because the hospital gains entrée into the wealth of experience of other members without having to do the research to identify and engage the members. It can join as a member organization, providing its particular expertise to the group. When joining an existing group, it is important to come to the group with a commitment from hospital leadership to participate fully in the planning and decision-making processes. If there are restrictions on what the hospital can provide or commit to, these restrictions need to be clearly and honestly presented. This approach is recommended for smaller hospitals that don't have the resources to form their own community-planning group or where there are existing coalitions that conduct community assessments and form other coalitions would be duplicative. However, it may still be necessary to do some additional data collection and analysis if the community benefit program plans to target a specific smaller geographic area or population group.

Hospitals join together. A number of community hospitals can come together in a combined effort (Example: West Los Angeles). In some cases hospitals have come together and gone on to establish a larger coalition with their public health department and other community agencies interested in health.

Example:

In Orange County, twenty-seven NFP hospitals have pooled resources to establish an ongoing organization with staff to conduct an annual comprehensive countywide needs assessment. They have expanded their initial group into a coalition that includes community-based organizations interested in health care, such as Orange County's United Way, the local medical association, CalOPTIMA, March of dimes, the local Mental Health Association and the Orange County Business Council. The individual hospitals then use the assessment to work within their particular communities. The Solano Coalition for Better Health is another example where hospitals, health plans, the local public health department and non-profit agencies came together to establish a broadly based group to address community health problems. In both of these situations, resources are maximized and can have far greater impact than those of one hospital alone.

The hospital forms a new planning group/coalition This is the most challenging and resource-intensive approach. In this case the hospital must devote a significant amount of staff time identifying and building relationships with community organizations and members with which they may not have a history of collaboration or have worked with in any way previously. When a non-profit Hospital Community Benefit Program embarks on a process to convene a community-planning group, it is entering into a process potentially fraught with politics and power struggles. Many have encountered these politics as they worked through the first cycle of assessment and planning. Among the challenges were the presence of other stakeholders with very specific interests and agendas. To assure a fair, objective outcome, building a broad constituency that is committed to using the findings of a community assessment for planning and decision-making is important.

By establishing an inclusive process, the Community Benefits Program will accomplish the following:

- Gain access to and understanding of the community's perception of the overall health status of the community, including the existence of particular problems or assets
- Promote community ownership of the process and results
- Obtain community support on interventions and funding recommendations
- Build a foundation of trust upon which to explore future possibilities for collaboration and for making the kind of tough decisions that are critical to maximizing the use of resources
- Create compatible objectives for health promotion activities and interventions among agencies working on a particular problem
- Lead to the emergence of an informed and enthusiastic constituency for addressing identified needs

The rest of this section will discuss this last option and will incorporate tips relevant to all three approaches.

Define the Purpose of the Planning Group

It is important to delineate the purpose and scope of what you are trying to accomplish in order to determine who should be part of the planning group and the time commitment required of members. We suggest that Community Benefit Program staff and administration first develop a framework for the process.

Answers to the following questions will be helpful in guiding the development of the Coalition:

- What is the purpose of the planning group? Is it a time-limited group with a goal to produce a community health assessment and identify population health problems? Or, is it a group that will stay together over a longer term to work together to address identified problems? Is it possible it will evolve from one type of group to another over time?
- What is the intended role of the planning group? Is it to provide input, to advise, to work collaboratively and share in decision-making?
- What is the scope of the group? Is its scope countywide, citywide or specific to a population group? Will it only include physical health? Will it include only recommendations for hospital activities or is it anticipated that the group will develop a comprehensive plan?
- What resources will be available from the hospital to support the work of the group? Be honest about the hospital's limits. It is important not to build expectations that the hospital will provide resources where it is not feasible. Would participant organizations be willing to contribute to the group's support?
- Who are the stakeholders in the work of this group? (e.g., the public, advocacy groups, the Board of Supervisors or health commission, the hospital administration and/or others?)

Whatever form the planning group takes, the first agenda item will be to review and agree on the purpose of the group and its planning process. The staff can present the intended focus and preliminary guidance, but once the group has been established, the members must participate in shaping it to meet their needs as well as the hospital's needs.

Example:

Although the hospital's first responsibility is to develop a community assessment and community benefit plan, the group may decide that taking a broader view of health and well-being will better meet the needs of the group members and the community. In this scenario, a plan could be developed for all related services and programs. The hospital plan would contain a subset of objectives and interventions appropriate to its capabilities and resources. You must be clear about the hospital's parameters in this situation. Over the long term many hospitals have found that leading or participating in community building efforts has been as important – and, often, more important – than conducting very focused health promotion projects that serve relatively small numbers of people. In this broader collaborative role, the hospital is truly seen as part of the community. Communities come to acknowledge and appreciate the hospital's contribution in building community collaborations that create sustainable resources in the community.

Determine the Organizational Structure of the Planning Group

There are different types of planning groups. What differentiates the type and structure of a group is the degree of commitment, decision-making, and responsibility for implementation required of or agreed upon by group members. A common understanding about the relationships and commitments of members is crucial. The role of the lead agency should be agreed upon and understood by all participants.

Whether the hospital will develop an advisory group, a network, a coalition, or a collaborative depends on what kind of participation and buy-in will be most appropriate to the hospital's purpose as well as what resources are available to support the work.

Example:

If you are simply trying to get information for a needs assessment, a loose network may suffice. If you will be trying to develop collaborative efforts and/ or influence policy decisions, a coalition or a collaborative will better serve the purpose.

The major types of organizational structures and how they differ are:

- An **advisory committee** provides recommendations to a program or entity, in a hospital's case, the community benefits program or the oversight committee of the hospital's Board.
- A network is a loose association developed to share information
- A **coalition** is an organization of diverse interest groups that combine their human and material resources to effect a specific change or achieve a goal that the members are unable to bring about independently. Many hospitals formed coalitions during the first assessment cycle with the goal of producing a community product.
- A collaborative is a system of organizations / individuals who share mutual aspirations and common goals, utilize the same conceptual framework, pool resources, collectively solve problems, and maintain a commitment to support and work together over time. A collaborative requires a commitment to participate in shared decision-making and allocation of resources -- a more formal and sustained commitment.** (definitions adapted from "The Collaboration Handbook", Sierra Foundation")

The work of the planning group/coalition may also be achieved by prudently using other structures to obtain information, skills or expertise. Examples are ad-hoc committees, working groups, community discussion groups, and meetings with key informants.

In this chapter, the term **Coalition** is used to describe the group that initially comes together to accomplish the community assessment. The group may, at a later time, decide to broaden its purpose and commitments to achieve the development of interventions for identified priority problems. At that time it may restructure into a collaborative.

Advantages of a Coalition

- Pool resources
- Apply for grant funding
- Form alliances
- Build on what exists
- Reduce duplication
- Visibility

Identify and Recruit Coalition Members

After the scope and focus of the assessment and planning effort has been defined, the process of identifying and recruiting the Coalition members can begin. Criteria should be developed to assist in determining the composition of the Coalition. Other factors to consider are the size of the Coalition and whether there are different levels of commitment and different roles for different organizations / individuals. It may be that there is a core group of Coalition members and an extended group brought together in periodic "network" meetings or as ad hoc committee or task force members.

Examples of criteria that can be used to select coalition members:

- Organizations/advocates with insight, knowledge into community problems
- Organizations/advocates whose mission is consistent with the purpose of this coalition
- Organizations/advocates who may be critical of the program (provide a forum to allow dissenting opinions and resolve conflicts)
- Organizations whose work should be coordinated or built upon by this coalition
- Organizations, individuals or advocates who have influence in the community
- Individuals who directly experience health / community problems
- Organizations that may bring resources to the group

Once the Coalition is convened, Coalition members may assist in identifying key additional members. They or others in the community may want additional agencies, organizations or individuals at the table. To keep this group focused and productive, it will be necessary to identify the "core" of the group and to develop other methods of obtaining input from additional stakeholders.

Now it is time to contact and recruit members. This will involve active outreach efforts. Identify potential members through key informant contacts, attendance at public meetings, requests to attend organization or coalition meetings sponsored by other community organizations, or by contacting nonprofit health and social service agencies and consumer advocacy groups. Before inviting a group of busy individuals to a meeting, describe to them in writing and/or by phone the purpose of the group and types of activities the group will be asked to participate in and the amount of time required.

It is essential to anticipate the needs of group members. They must feel that they or their agencies are going to benefit from their participation. Most potential members will feel that their plate is already full and may also be skeptical of the motivations of a hospital that has not previously been concerned or involved with community well being. This is especially the case where hospital expansions have impinged on neighborhood housing or otherwise affected local communities. What types of incentives can you provide, i.e. high community visibility, recognition by the mayor, a stake in the outcome, fundraising/grant writing assistance or other benefits?

Tips for a Structuring a Successful Coalition

- Don't duplicate existing efforts Do your homework
- Be honest and realistic Define the purpose of the effort and the available resources
- Listen and learn Recognize the expertise of community partners
- Think outside the box Recruit broadly beyond the clinical arena
- Learn to deal with conflict or differences of opinion

Agree on Process

Once assembled groups will benefit from a shared commitment to a set of operating principles that encourage open participation, build trust and guide planning and decision-making processes. These are developed together during one of the first meetings, recorded and followed.

Examples:

- The meetings should have specific time limited agenda items with meeting outcomes clearly articulated. This gives members a sense of what is expected of them at the onset of the meeting and a sense of accomplishment at the end of the meeting.
- Procedures for the meetings should be agreed upon. This includes meeting dates, times and locations that meet the needs of the majority of the members, length of meetings, definition of member responsibilities, whether there will be food provided, whether there will be childcare provided, whether consumers will be reimbursed for travel or parking.

- There is an established and understood process for how members will participate at meetings. Will a facilitator be needed? How will decisions be made? For example, will members raise their hands or just speak up? When important decisions are being made will opinions be reflected by a simple raise of hands or some kind of voting process?
- There is a defined process for prioritizing and analyzing the identified problems
- There is a plan for sharing the work of the Coalition with stakeholders and/or the community at large.

Define the Community of Interest

See definition / discussion "Defining the Community" of this chapter, page 5. The Community Benefits Program and / or the Coalition that it leads or in which it participates will probably start with a broad idea of the community as the residents of a geographic area and then, using primarily secondary data, profile this community. Initially, it is this "community" that will be used during the assessment process as the community of interest. As the process continues and priority problems are determined, the Coalition should identify a subset(s) of the population that are experiencing the problem or experiencing it at higher rates than a comparison group.

For example, the Coalition may start out with assessing the health of the population of an entire county, but once community problems have been prioritized, the population that will receive interventions will become more specific. Specifically, if diabetes was a priority problem, with rates being high in African American and Latino populations, the target population might become African Americans in three low-income zip codes and Latinos in two low-income zip codes in the county. These would be zip codes in which a significant proportion of persons of these race/ethnicities live.

Develop a Vision Statement and Goals

One of the most important tasks of any coalition is to build and articulate a shared vision. A vision builds a commitment to working for a greater good rather than individual member's special interests. Staff or a facilitator can help the Coalition to develop a vision statement and a set of related goals that will guide its work. The Coalition's vision and goals are likely different than, although they probably overlap and are consistent with, the hospital's mission and goals. The following definitions of mission and goals can be used as a reference for the planning group in better understanding the task:

• **Mission:** The mission statement explains who participates, why the planning group/coalition exists, and what it hopes to accomplish.

Example:

From the Orange County Health Needs Assessment:

Mission: Develop a process in which a vast range of community stakeholders engage in planning and conducting a comprehensive health assessment of Orange County, that embraces a broad definition of health, and which serves as the basis for future public and private sector policy development, implementation and resource allocation decisions.

- **Vision Statement:** A broad descriptive statement of the planning group or community's vision of an ideal future.
- **Goal:** A broad statement of a long term, ideal accomplishment needed to achieve the vision.

Example:

A Coalition's vision statement and a group of goals (this Coalition is working in a priority need area established during its first assessment):

Vision Statement: All seniors in our community will live in a safe environment and will maintain a high level of personal functioning.

- *Goal #1:* All seniors will have access to preventive, primary care services to ensure optimal health and well being.
- Goal #2: All seniors will live in a safe environment.
- *Goal #3:* Community health and social service agencies will work collaboratively to plan and evaluate efforts to provide a seamless system of comprehensive community-based services for seniors.

The goals, although much more specific than the vision statement, are not specific enough to be measured nor do they specify a time period. They are intended to guide the process of indicator selection and data collection.

The process by which a group develops its mission and goal statements is important. It should be an inclusive process so that all members feel their opinions are heard and each individual can support the underlying framework upon which the planning process is built. It is advisable to allow as much time as possible for the group to brainstorm ideas and for every member of the group to have equal opportunity to contribute. The process used may depend on the availability of an experienced facilitator and the willingness of the group to spend the necessary time.

The following process has been used successfully by many local health coalitions:

- Give the group a description of the process and basic definitions of terms.
- Ask participants to take five or ten minutes to individually think about their vision and write down key words or phrases. It might be helpful to give them a beginning phrase to complete, such as "All residents of this community will _____."
- Have each participant share his/her ideas while the facilitator or recorder uses a white board or butcher-block paper to document every suggestion.
- Have the group take a few minutes to look at the suggestions, identify common themes, and suggest ways of combining the ideas into a vision statement.
- Ask for suggestions and draft a statement, which, through an iterative process, the group members refine until there is consensus.

After the meeting, the resulting statement is circulated with the minutes and group members are asked to share it with other interested parties. Be prepared to finalize it at the next meeting. (In some cases a group is able to complete this process at one meeting and decides to go on to developing goals at the same meeting.)

Once the vision statement has been finalized, the group develops goal statements, using the same process as outlined above.

Overcome Barriers to the Formation and Successful Functioning of Community Coalitions -

There may be significant barriers to the establishment and successful performance of a Coalition. These can be classified into two categories:

- Administrative barriers that are related to the functioning of the convening agency.
- Internal barriers that are related to the functioning of the group itself and to the dynamics of the group process.

Administrative barriers include:

- Unclear purpose for the coalition.
- Inadequate staff support.
- Lack of leadership and organization.
- Unclear or unrealistic expectations about the coalition's roles, responsibilities or time requirements.
- Lack of adequate funds/resources to implement recommendations.
- Failure to accommodate the individual needs of members or member organizations.

Internal barriers can include:

- Lack of diversity of thought.
- Difficult current or past relationship(s) among possible member organizations.
- Real or perceived power differences within the group.
- Competition and turf issues among potential members.
- Personality conflicts between representatives of these organizations.
- Negative past experiences with collaborative efforts in the community.
- Differing community norms and values about cooperation.
- Conflicting loyalties, vested interests, and fear of domination by one organization or individual.
- Disparity in goals, values, histories, and missions of the member organizations.
- Failure to produce results commensurate with the time and effort expended on needs assessment planning and related activities.

In order to effectively avoid or overcome barriers, the coalition should periodically evaluate the structure, design, and implementation of its assessment activities as well as any group process issues that arise.

The following key questions should be included in this evaluation process:

- 1. **Membership** Are the appropriate people involved? If not, why not? Are current members actively participating? If not, why not? What are the benefits of participation?
- 2. **Leadership** What is the governance/leadership of the group? How do members feel about it?
- 3. **Membership satisfaction -** Do members feel respected and useful? Do they feel that they have been given the opportunity to provide input into the decision-making process? Has there been a facilitator? Has the facilitation been helpful? Is the group process working?
- 4. **Roles and responsibilities** Are the roles and responsibilities of the lead entity and of coalition members clear? Who takes meeting minutes? Are the minutes accurate? Are they timely? Are members fulfilling their commitments / responsibilities? Is the lead fulfilling its commitment?
- 5. **Purpose and Mission** Do the members understand the purpose of the group? Is there a shared vision? Is there a clear understanding of and buy-in to the mission and goal statements?
- 6. **Staffing** Is adequate staff time available for needs assessment activities such as data collection, data analysis and data presentation?
- 7. **Funding** Is there a budget for supporting the work of the coalition? For supporting the needs assessment activities? For supporting the implementation activities?
- 8. **Time frame** Is there a designated time frame for products? Is it realistic? Do members understand and honor their commitments to completing steps in the process?
- 9. Accountability What outcomes do the members expect? How will the coalition know when it has met its goals?

Key Points to Remember:

- Make sure that the purpose of the Coalition and the intended use of the results is clear before convening a group
- Establish a well defined group structure and processes
- Recruit a broad array of community stakeholders
- Ensure full participation of all members in the group process
- Establish a population health perspective
- Establish an ongoing self-evaluation process

Community Planning Step 2: Conducting a Community Assessment and Setting Priorities

A community health assessment is the collection, analysis, interpretation and communication of information about health conditions, risks and assets in a community. Data may be collected on population demographics, socioeconomic data, health status, health risks, health related behaviors, environmental hazards, health care access and health services utilization of an entire population and the assets or protective factors within a community that promote health.

A community health and well-being assessment should answer or at least address the following questions:

- What is the overall health and well-being status of the population?
- What are the population's health needs?
- Which population subgroups (gender, age, ethnicity, and insurance/payer) are at highest risk for health problems?
- Where (geographically) are high-risk groups located?
- Are there trends in the data that show an increasing or diminishing problem?
- How does your community compare to others (federal, state, similar community) or itself over time?
- What resources are available in the community and where are the gaps?
- What are the community's strengths or assets?

Generally, the initial community assessment casts a wide net to develop a community health profile, which includes a great variety of indicators. The community assessment will require the collection and use of data in a variety of ways. The result should be a community health profile including the identification of community needs and assets. However, a community assessment of this scope is very resource-intensive and it is usually not feasible to address these needs on an annual basis. Therefore, a smaller subset of indicators from the needs assessment phase is generally selected for ongoing surveillance (monitoring of community indicators) and evaluation.

A Community Health Profile

The community profile is a description of the community. The profile should give the reader a picture of the quality of life in the community, the overall health and well-being of the residents, and a summary of the benefits and risks related to living in the community. It should include indicators of socio-demographic status, health status, health risk factors, access to health and social services and a description of any environmental or geographic characteristics that affect health, as well as a summary of all the current changes in the community which could impact the health and well being of residents. These could include: political issues, new policies, and changes in funding and changes in the health service and social services delivery system. The profile will begin to raise awareness of the array of factors that need to be considered when responding to health problems. It will be used to identify health problems and community needs and assets and will be referred to again when analyzing population health and well-being problems.

Much of the data for a community profile is available in regularly produced government reports. For example, the U.S. Department of the Census produces reports on both the decennial census and annual Census Population Surveys. Summaries of these data and reports are readily accessible on the Internet. The California Department of Finance updates census estimates annually. County and city health departments as well as individual programs at the California Department of Health Services, the city/county planning office, and the local and state social service offices all produce some type of annual reports containing data on indicators related to their areas of interest. Table 1 lists a set of example indicators. Many community benefit programs / coalitions need only update this section from their last report.

Table 1 Examples of Community Profile Indicators Socio-demographic Indicators

Description of trends in the population by age, gender, race and ethnicity Percent of residents with limited English proficiency Percent of residents who are foreign-born Percent of residents with HS diploma Percent of residents with incomes below poverty Percent residents who are unemployed Percent of housing that is affordable

Health Status Indicators

Birth and fertility rates by age of mother, race/ethnicity and residence Mortality rates overall and top ten causes by age and race/ethnicity Percent of residents who smoke Percent of residents who exercise regularly Percent of residents who are overweight Percent of 2 year olds who are adequately immunized

Community Asset Indicators

Percent of neighborhoods with recreation programs for youth Percent of neighborhoods with public libraries Percent of physicians/clinics taking Medi-Cal Percent of neighborhood coalitions Percent of voter registration Percent of voter participation in elections

Community Health Indicators

Community health indicators are also referred to as public health indicators and population health indicators. Community health indicators are precisely defined, quantifiable measures of a population's health status. Indicators require a precise definition of what is to be measured in quantitative terms such as the number, percent or rate, and specification of the numerator and denominator. Standardized definitions including identification of the data sources for the numerator and denominator are necessary to be able to compare indicator statistics produced by your coalition with those of other geographic areas and those produced by other agencies as well as with national indicators, such as Healthy People 2010.

Key points regarding the benefits of using standardized indicators:

- Data analysis is made simpler through the use of standardized indicators. Typically indicators are clearly defined and draw on easily accessible, available data sources
- Data comparisons and benchmarking are made simpler through the use of standardized indicators. Standardized indicators are based on *Healthy People 2010* objectives or other national standards where possible
- Monitoring of intervention progress is facilitated through the use of standardized indicators. Decisions about which indicators to choose should include a thorough consideration of the feasibility of obtaining high quality data over time

Indicators are frequently organized by domain. Domains are organizational constructs or categories, by which indicators may be grouped, such as: age groups, health, social status, mental health, economic stability, and environmental safety. The selection of relevant community health indicators that are pertinent to the mission and/or goals of the planning group or coalition will be one of the first tasks in the planning process.

Indicators are used:

- To provide a global first assessment of a population's health and social status, i.e., the community profile
- To identify health and social problems
- To identify special needs or risk groups overall and for specific indicators
- To inform the development of interventions and enable targeting of resources to identified needs and populations at highest risk
- To identify areas of service deficiency, particularly as they impact low-income or special need populations

- To establish benchmarks to allow comparison of local community health and well being status with state and national benchmarks (e.g., Healthy People 2010 objectives)
- To monitor the effectiveness of intervention programs aimed at reducing particular deficiencies and needs identified through indicator-based assessment

Once the planning group or coalition has developed its overarching goals, staff or committees of the coalition can research existing indicators appropriate to each of the goals. See Appendix A-1 for a list of websites/resources for indicator information. It is usually not necessary to craft new indicators, as so much work has been done in the area of indicator development by experts in population health.

Common Problem:

Staff and Coalition members alike don't have the time or expertise to develop or select indicators. You are tempted to turn the job of indicator selection over to consultants.

Response:

It is important that community partners and other stakeholders are involved in indicator selection. This is the first major decision of the Coalition and the results will determine what problems/needs will be assessed. If the Coalition doesn't participate in the selection of indicators, it is unlikely to trust or buy into the planning process. The process of indicator selection can be managed efficiently as described below in "Develop Indicator Selection Criteria".

The Coalition's Role in Guiding the Community Assessment Process

Members of the Coalition come from different disciplines, have different levels of experience and education regarding the use of data for planning, and have different perspectives. They may not have looked at data in an analytic or systematic way before.

Therefore, starting the group with a common understanding and expectation of how the needs assessment will be conducted will assure a useful and acceptable assessment. This can be done by providing members of the group with copies of existing assessments and data reports, such as: a previous community assessment, a local county health department or health coalition report, a California Department of Health Services Center for Health Statistics report such as "County Profiles" or "County Data Summaries," or reports from a social service, mental health, or juvenile justice agency. If there were many reports it would be best for staff to digest the information, provide a summary report and make a presentation to the group, summarizing existing data. The source documents can then be available to members of the group who want more in-depth information.

Whenever possible build on existing reports and data. Before providing reports or data to Coalition members, data should be evaluated by staff with expertise in epidemiology or data analysis to assure the quality of the data.

Providing this common broad base of example information is a good way to launch the assessment process and make the point that quantitative and qualitative data will be a critical part of problem identification along with qualitative input from members and the community at large.

Develop Indicator Selection Criteria

Once the planning group has defined a broad set of goals, it is time to move to the selection of indicators to assess the current community status in these goal areas. In addition, there needs to be decisions about the availability and quality of the data to be collected.

Before considering specific indicators, it is helpful to identify a set of criteria against which to compare the potential indicators. The use of indicator selection criteria will enable the group to rank the proposed indicators in a systematic, objective way. When the group supports the process, it can then accept the decision to include one indicator and not another even when opinions differ.

The following criteria are frequently used for this process:

- The indicator must be quantifiable
- The condition or outcome may be impacted by either public health or clinical interventions
- The indicator(s) must be a valid measure of either a poor health outcome, a severe health condition, a costly condition, or a sentinel event (such as infant mortality)
- Data must be available for both the numerator and denominator
- Population-wide data or a representative population sample must be available for measurement
- Indicators must be consistent with widely acceptable national standards
- There is consensus on indicator utility
- The indicator(s) must be applicable across populations or programs
- The condition is severe or affects large numbers of people

The group facilitator can use the same techniques with the group in the criteria selection process as he/she did in the development of the vision and goals. Participants can be given some individual time to write down criteria they would want to include. Then the group can take turns sharing their ideas with the ideas being noted on white board or butcher-block paper so that all suggestions can be given equal consideration. In order to expedite this process, the facilitator often starts with an existing list such as the one above. Generally, it is best to limit the number of criteria to 5 - 7. The group should also have a discussion about which domains (categories for indicators as discussed above) they want to include before identifying potential indicators. In this way, they can ensure that there are indicators being considered from each of the selected domains.
Group Identification of Potential Indicators

The facilitator leads the group through the process of identifying potential indicators. If this is an initial community profile assessment, the indicators may be grouped in a wide array of domains. If this is a more focused process - for example, if the group will be addressing one or more of the priority problems or needs identified in an earlier process--then indicators (or a set of indicators) should be selected for each of the group's goals. The facilitator could begin by leading the group through a brainstorming session or, to streamline the process, a group of suggested indicators developed by staff or a subcommittee could be brought in and discussed. Having developed selection criteria, they will have a framework for thinking about useful indicators. Members, working towards consensus, could develop a feasible list of potential indicators. This list should then be given to staff or a working committee to determine the feasibility of collecting the indicator measures.

Identify and Assess Indicator Data Sources before Selecting Indicators: Once the Coalition (or a designated subcommittee) has a list of potential indicators and before selecting the final indicators, staff or consultants will have considerable work to do. It is necessary to evaluate each data source prior to the selection of an indicator to ensure that these data will be available and relevant to the task of monitoring health systems changes for a specific jurisdiction. Although each data source has very distinct characteristics, there are some criteria that apply to evaluating any data set.

Suggested criteria for evaluating the potential utility of data sources include:

- 1. Accuracy Is there agreement that the data are accurate and complete?
- 2. *Timeliness* Are the data recent enough to be useful in assessing and monitoring the status of the indicator?
- 3. Geographic Specificity Is there a geographic identifier such as address, census tract, or ZIP code that can allow you to identify the population that resides in the area you have chosen to target your community benefit activities?
- 4. **Specificity of Demographic Data** Is there enough detail on the race/ethnicity, place of birth to allow you to identify indicator data for those populations in your targeted area?
- 5. **Data Consistency and Standardization** Are the definitions of data items such as race/ethnic categories consistent with those in other data sets? Does the data set use nationally accepted standards for coding?
- 6. **Data Availability Over Time** Will the data be available over time in a consistent way so that you can use this source for trend analysis?
- 7. *Ability to Identify Individuals or Events* Can you distinguish between the numbers of individuals versus the number of events so that you can generate a population-based rate for individuals with a particular health problem or who use a particular health service?

Criteria applicable to data collected through surveys on a sample of the population:

- 1. Adequate Sample Size Does a survey contain a large enough sample to be able to reliably look at the population subgroups and geographic area of interest?
- 2. **Sample Validity** Was the survey data collected from a scientifically random sample or could the sample give biased results?
- 3. **Potential for Use of Instrument for Primary Data Collection** If the data from a national or state survey are not applicable to your area will the owners of the survey let you use it for an expanded local sample?

A more detailed explanation of these items appears in Appendix A-2.

Continue the Group Selection of Indicators

The criteria for selection of indicators have been agreed upon, potential indicators have been identified and staff or designated work group members have assessed the data sources for each of the indicators on the list developed by the group. Now the group will return to the process of selecting indicators. Staff will report on the availability and quality of data for each of the indicators brainstormed at the first session. We suggest a brief discussion on each indicator, making sure that each member understands the definition and what the indicator is intended to measure and whether it will be easy or difficult to obtain the indicator data.

At this point, the *Tool for Prioritizing Indicators* (attached as Appendix A-3) can be used by the facilitator to prioritize among suggested indicators. The indicators can be listed in the left-hand column and the individual criteria listed in the numbered spaces at the top of the page. Members of the group are asked to individually rate each indicator according to the agreed-upon criteria using the prioritization grid. Members will be asked to sum their ratings and generate a score for each indicator.

A staff member then calculates a composite score for each indicator and lists the scores in rank order. At a subsequent meeting the group can review the results and make a final decision on which indicators to include in their baseline needs assessment document.

Case Study:

USING INDICATORS FOR PRENATAL CARE NEEDS ASSESSMENT

A rural county community health coalition has identified universal access to prenatal care as a specific goal. They begin a needs assessment process by brainstorming and selecting indicators that will shed light on prenatal care adequacy and access to prenatal care in the county. They select several types of indicators — an indicator of adequacy of prenatal care, prenatal care outcome, and a prenatal care system barrier.

For prenatal care adequacy, they chose:

Adequacy of prenatal care (per the APNCU index) for all pregnancies resulting in a live birth in a calendar year, expressed as the percent of live born infants whose mothers did not receive adequate prenatal care

For prenatal care outcome, they chose:

Low/very low birth weight, expressed as the percent of live births weighing less than 2,500 grams and less than 1,500 grams at birth

For prenatal care system barrier, they chose:

Number of OB/GYN physicians per 1,000 populations, by payer source and by county region

They compared the county data to the statewide average and found that significantly fewer women in the county receive adequate prenatal care. In addition, the proportion of women receiving late prenatal care (e.g., entering prenatal care after the first trimester) was also significantly higher than the statewide average. Further analysis of these prenatal care measures by mother's age, parity, race and zip code of residence suggest that there are identifiable, high-risk subgroups.

Example

The data suggested that residents of rural zip codes, Medi-Cal recipients, younger women and adolescents are at greatest risk for inadequate and/or late prenatal care. For this reason, these groups should be target populations for intensified intervention.

Case Study (Continued)

Similar results are obtained through the evaluation of health outcomes associated with prenatal care. For example, low birth weight statistics for the county do not indicate an overall statistically significant high rate of low birth weight. However, indicator data does suggest several high-risk subgroups, specifically young women, women with low income (as measured based on average per capita income by zip code) and with less than a high school education.

The county data also suggests that, compared to rural area physician per capita norms, there does not appear to be an overall shortage of OB/GYN physicians in the county. However, over the past year, enrollment of managed Medi-Cal recipients into the county's local initiative plan has outpaced the plan's ability to recruit and contract local providers. Therefore, while there appears to be an adequate number of OB/GYN providers in the county, there were not enough providers currently accepting Medi-Cal recipients at the time of review.

Analysis of county Women, Infants, and Children (WIC) eligibility data and the penetration of WIC service utilization also suggest that there are a significant proportion of eligible pregnant women who are not receiving WIC prenatal services including food supplements and prenatal vitamins.

This case study illustrates how indicators can be used both in needs assessment and in the intervention planning process.

To summarize:

The Coalition identifies basic areas of deficiency, articulating the overarching mission and goals that determine the general direction of the needs assessment. Standardized, measurable indicators are selected to enable comparisons and benchmarking, and to help pinpoint health outcomes and processes that appear to be of particular concern. Through indicator data collection and analysis, the Coalition begins to answer who, what, where, when and why there are needs in the community. Results of indicator data analyses are used for community problem and asset identification and prioritization. Furthermore, the selected indicators will be measured at regular intervals over time and across populations will be used (at least in part) to monitor the progress and effectiveness of the interventions.

Collect Indicator Data

Primary Data versus Secondary Data

Primary data is data that you collect directly from the target population. Collection of primary data (usually collected by survey, focus, group, interview, testing) requires that you have or obtain expertise in the development of the data collection instrument, the computer-coding program and the data analysis methods. This can be expensive and time-consuming and developing valid and reliable data collection instruments is very challenging and requires considerable expertise. This process can be facilitated by the use of data collection instruments that have been developed, validated and used by others. For example, the University of California, Los Angeles (UCLA) Health Policy Institute conducts the California Health Interview Survey (CHIS) to obtain information from residents on a broad spectrum of health-related questions. Some county health departments have contracted with the Health Policy Institute to add questions to the survey and/or to expand the sample size in their county. Coalitions have shared the cost with the health department of obtaining the additional sample data. The analysis will be available to the Coalition and is valuable, timely data.

Secondary data is existing data that someone else has collected. Most often, coalitions use state or county data that has been collected on the entire population, such as birth, death, or communicable disease data, or particular subpopulations, such as hospital discharge data, or Medi-Cal data. When possible, use secondary data because these data are collected on a regular basis, are widely acceptable for measuring health status, can be readily used for comparisons with other areas and will be available over time. However, there are limitations to many of these data as discussed in the data appendix and there are areas where there are no data sets available. Sometimes data is not available for the population of interest at the geographic level required. These are situations where primary data collection is necessary.

Quantitative Versus Qualitative Data

Quantitative data is compiled and reported in numerical form. Analysis is largely statistical and reports will be based on the size of effects and the significance of statistical relationships. These data are collected through standard forms such as the birth certificate and standard instruments such as the National Health Interview Survey (NHIS). This type of data is useful when we know the data we want to collect and when we need to generate percents and rates for comparison purposes.

Qualitative data is gathered through interactive techniques such as unstructured interviewing, key informant interviews, observations, focus groups, and oral reporting of community traditions, history and beliefs. Analysis and reporting take the shape of a narrative. This approach is useful in developing an understanding of a problem for which we have little information or where we want more in depth information on underlying factors such as behavior, attitudes, beliefs or opinions affecting health status. Your Coalition may decide to augment the data it has with primary qualitative data. See Appendix A-4 for descriptions of the major methods of collecting qualitative data.

Table 2 below shows the major methods of collecting quantitative and qualitative data.

Quantitative Data	Qualitative Data
Use existing data sets, e.g. demographics, vital statistics, surveillance data, service utilization data, disease registries	Interviews
Tests	Questionnaires
Structured Surveys	Focus Groups
	Case Studies
	Observation
	Meeting Minutes, Staff Notes
	Descriptive Information

Table 2 Data Collection Methods

Remember to seek out and use your Coalition partners to access data. Your local health department should be a primary source of data. Although some health departments are very small and can provide only basic health status data, most are good sources of information.

Below is a list of key sources of data in most communities:

- Local public health department
- California State Department of Health Services
- California State Department of Finance
- Office of Statewide Health Planning and Development
- Other public agencies
- Health plans
- Hospital epidemiologists/planners
- Insurers
- Employers
- County or city planning offices
- Universities

Analyze and Organize the Data

Once the data from a variety of sources is collected, the data must be organized, analyzed, and presented to the planning group.

In order to facilitate these activities, the following process is suggested:

- Develop an outline for the needs assessment document and decide which data will go under each section. Begin with the community profile. The needs assessment findings could then be organized under each goal
- Present data for a five-year period to allow identification of trends
- Calculate the statistical differences for observed differences
- Analyze each indicator by gender, age, race and ethnicity, geographic area (e.g., zip code) and payor source for care

Issues in Data Analysis

Importance of Collecting and Comparing Sub Group and Trend Data -

For each indicator, simple comparisons should be included by age, gender, race/ethnicity, income, and zip code or census tract of residence. This ensures that in situations where a problem exists in subgroups and neighborhoods, the problems will not be hidden. Simply presenting summary or aggregate data alone often hides problems within subgroups and disparities between groups.

It is desirable to have at least 5 years of data. This ensures that worsening trends can be identified before the problem has become so serious it attracts attention. Compare the data for each indicator to a set of pre-selected standards, such as the Healthy People 2010 Objectives, the state, or other comparison community. Comparisons can also be made with results from previous years, especially where either a new intervention has been implemented or a change in health policy or community conditions has occurred.

Analysis of Small Number Data Sets

It is critical when making comparisons to not assume that any observed difference or change is significant. For many indicators, there are small numbers of individuals affected. This is especially true when looking at zip code or neighborhood-level data. To ensure that observed differences could not be the result of chance, tests of statistical significance should be performed. Since hospital benefit planners may not have access to statistical expertise, a simple method that can be used to make comparisons is included in Appendix B-1. These indicators show a significant negative relationship to comparison data that are identified as problem areas and as candidates for intervention activities.

Identification and Assessment of Community Assets

The process of "assets mapping" focuses on the documentation of a community's assets for the purpose of incorporating and building on existing resources as part of a planning process for community improvement. "Assets" are defined in this context as the skills, talents, programs, projects, and financial resources that individuals, community organizations, and local institutions possess.

Planners have generally included an inventory of existing community services when conducting a community assessment. The purpose is to identify gaps in needed services. Assets assessment goes beyond the compilation of this inventory of services to identifying community institutions, leadership, volunteerism, pride, educational resources, culture, traditions and other positive community characteristics that can be built upon to promote or protect health and well being.

Examples of community assets:

- Service–based organizations (e.g., community clinics, schools, skills training agencies)
- Faith-based organizations
- Commercial / retail business
- Advocacy groups
- Community initiatives/demonstrations
- Neighborhood associations (e.g., neighborhood watch, arts, cultural/ethnic, merchants)
- Community support systems (e.g., childcare, elder care, transportation)
- Physical infrastructure (e.g., meeting halls, vacant buildings, open space)
- Individuals with skills (e.g., sewing, construction trades, art, accounting, local history)

Kretzmann and McKnight in their seminal work "Building Communities from the Inside Out", identify individuals, associations and institutions as the major categories of the asset base of a community. They recommend an assessment of a community's physical characteristics as well as ways in which individuals, associations, and local institutions can contribute economically.

The three characteristics of their recommended approach are:

- It is "asset-based" starting with what is present in the community—not with what is absent.
- It is "internally focused" emphasizing agenda building and problemsolving capacities of local residents, local associations and local institutions and the primacy of local definition, investment, creativity, hope and control.
- It is "relationship driven" building and rebuilding the relationships between and among local residents, associations and institutions.

Comprehensive Community Assessments versus Focused Assessments

Your hospital and Coalition, in the second cycle and subsequent community assessment cycles, may not want to expend resources on another broad community assessment. It may decide that it is more productive to focus on problems identified previously.

Common Problem: Neither the community nor the hospital are interested in another tedious and resource consuming assessment. **Response:** This is not a problem. OSHPD recommends you respond to local consensus. You have several assessment options. The Coalition may choose to: Set priorities among identified problems/needs in this cycle and circumscribe additional indicator development and data collection to the selected priorities. Focus on further assessing the identified priority problems / assets identified in the first cycle of assessment • Examine the initial and annual indicator data and, based on what it shows, continue tracking indicators of concern. May expand the types of data being collected for these selected indicators. We recommend that staff and coalition members review the section on community health indicators to assist you in selecting or refining indicators relevant to the selected option.

Identify the Hospital's Internal "Assets" - During the assessment and planning process, you will want to conduct an internal assessment of the Hospital's community benefits assets. Most hospitals have completed a portion of this internal assessment by compiling the range of current program activities with a charitable focus as part of their original community benefit plan. While this compilation is both appropriate and acceptable as a first phase in the development of internal capacity, there are additional steps that should be considered to enhance the quality and effectiveness of the community benefits program.

You will want to move beyond this compilation of existing programs and activities to identify other relationships, skills and interests of senior leadership, providers and staff. Many of the community linkages, skills, and interests of these individuals are unrelated to their work in the hospital, but can be immensely valuable resources for partnership and program development and implementation. For example, a member of the nursing staff may be an active member of a neighborhood association whose insights and support are important for the development of a health improvement initiative.

To identify potential assets you could conduct a hospital wide survey that is strongly endorsed by senior leadership. A very simple sample survey is included in Appendix A-6.

Examples of assets that might be identified in the survey are:

- Personnel / volunteers special expertise, interests and talents. (e.g., talents/expertise in artistic design, marketing, resource development, evaluation)
- Hospital programs with the capacity to provide services in the community as part of, or an expansion of, current activities (e.g., health education, planning expertise, facilitation, grant-writing)
- Space and facilities
- Materials and equipment (e.g., software, hardware, fax machines, audiovisual, x-ray)
- Economic support (e.g., investment, leverage funding, purchase of goods and services)
- Advocacy (e.g., support local interests with public sector, business)

In addition to the process of identifying the hospital's internal assets, a second, more difficult, assessment needs to occur. To free resources and allow a shift in focus to community-identified priorities, it will be helpful to assess existing community benefit program activities. Many of the activities identified in the first hospital community benefit reports have not been evaluated to determine their effectiveness. You will need the support of senior leadership to accomplish this second assessment.

Hospital Community Benefit Program activities can be reviewed and assessed in two ways:

- Hospitals and community partners should develop performance criteria to evaluate existing as well as planned intervention activities.
- Community benefit activities need to be compared to the priorities established in the community assessment process. Do the activities match the designated priority intervention areas?

This internal assessment and attention to community input and process reinforces the hospitals commitment to an ethic of shared responsibility.

Presenting the Assessment Results

When planning groups comprised of the representatives of diverse community agencies and individuals come together to review community health data, volumes of data will be overwhelming and difficult to absorb. It is important to use these valuable members' time efficiently, minimize frustration and promote engagement in the process. The group members must be able to understand the data, trust the data and agree on what is important to explore further.

Present the data to the planning group in a manner and format that they can understand. If they have been included in the earlier selection of the indicators and feel confident about the data collection process, they will be eager to both learn from the data and assess the data for the purpose of setting priorities among identified problems.

For each indicator / set of related indicators

- Simple comparisons should be included by age, gender, race/ethnicity, income or insurance coverage / payor source and zip code or census tract of residence. This ensures that where a problem exists in subgroups and neighborhoods, it will not be masked in summary or aggregate data.
- There should be at least 5 years of comparable data. This ensures that trends can be identified.
- Tests of statistical significance should be performed to ensure that observed differences could not be the result of chance. Beware of presenting percentages and drawing conclusions based on small numbers. See page 32 and Appendix B-1.
- The data should be compared to pre-selected standards, such as the Healthy People 2010 Objectives, State data or another comparison community(ies). Comparisons can also be made with data from previous years, especially when either a new intervention has been implemented or a change in health policy or community conditions has occurred.
- Qualitative and quantitative data are used, as applicable.

Tips for data presentation

- Use a clear, uncluttered format
- Present comparison data in simple tables or graphs that illustrate important comparisons and findings
- Show where there is statistical significance and/or emerging trends
- If data is left out or not available, be sure it is noted
- Provide a brief objective summary of important findings, using bullets or other easy-to-read format

Many Opportunities for Intervention: How to Decide?

The Coalition / planning group has chosen a set of community health / health care access indicators that are associated with each of its goals. The data has been collected on as many of the indicators or sets of related indicators as feasible. It has been compiled and analyzed by staff or a consultant and presented to the planning group. Community health and health care problems have been identified. This information is brought to the planning group to digest. Some groups will have participated in identifying the community health problems; other groups will have reviewed staff or consultant work and, after amending or clarifying assessment findings, approved the assessment and list of community health problems.

Examples of Community Health Problems					
Teen pregnancy	High # of seriously mentally ill persons	High # of homeless families			
Suicide	Access to health care	Dental caries			
Disparities in Infant Mortality	Need for assisted living options for seniors	Prevalence of childhood obesity			
Asthma	Child abuse and neglect	Drug use			
Type II Diabetes	AIDS	Unintentional Injuries			

Common Problem:

Once community health problems have been identified, many groups enter a period of being overwhelmed. Members have divergent, conflicting opinions about which problems should be addressed. Staff, may share these feelings. Group members and staff alike may be asking, "What do we do now?" "How do we decide what to work on?" "What are the most important problems?" "What problems are feasible to tackle?"

Response:

The Coalition is faced with an important decision. Some Coalitions disband at this point and leave decisions about which problems to address to its individual members. Thus, any of its members may choose any of the problems identified to address. In this scenario, the participating hospitals sometimes continue to do what they have been doing and simply link existing activities to the problems identified. It is difficult for hospitals to market these efforts as the expected community benefit. OSHPD's Hospital Community Benefits Program encourages Coalitions and hospitals to take the next steps—to tackle *priority* community health problems and to develop effective interventions within available resources. Sometimes the Coalition or subgroups of the Coalition, in addition to providing or coordinating resources, can seek funding to tackle a problem identified in the assessment.

Setting Priorities among Health Problems

It is likely that a rather large number of health and health care problems have been identified in the needs assessment. Given limited funds and staff, how will the group choose the "most important" problems on which to focus limited resources?

Despite the importance of priority setting, there is a tendency in coalitions to devote minimal attention and effort to an explicit strategy. This most often occurs because partners become impatient with the time and resources invested in the assessment process, are anxious to take action, and have their own ideas about what problems can be addressed. We urge you to take the time to lead or participate in an inclusive priority-setting process and to follow-up by addressing those priorities established by a broad-based community Coalition. Such an effort will take the hospital a long way on the path towards community trust building and good will.

Common Problem:

Planning group members come to the prioritization process with their own or their agency's agenda. There are diverse personalities and interpersonal styles. Members have different levels of knowledge and analytical skills. How can the prioritization process be managed to respect the diversity and special interests, yet produce a consensus about which problems should be addressed?

Response:

Consider a formal process for setting priorities. At this point, a method of focusing the group is to use a facilitated, rational process of setting priorities.

Consider a formal process when there are diverse participants and many choices

Facilitated Group Process

Coalition members have a range of perspectives, individual biases and personal agendas. Without a structured and fair process, groups frequently make decisions about where to target resources based on some of the following: anecdotal evidence (e.g. "The Mayor's niece wasn't in an infant car seat when she was injured in a car accident; therefore, public education about infant safety seats is needed"); pressure by coalition members with a specific agenda (breastfeeding coalition wants to do media campaign); pressure by members or staff who have a vested interest in continuing existing programs (e.g. hospital has had a diabetes support group for the past ten years and staff feels it must continue) or the availability of categorical funding makes a particular activity attractive even though it may not be as high a priority (e.g. tobacco tax money available for smoking cessation).

Apart from the issues outlined above, interpersonal conflicts and personality styles can also impact the decision-making process. For example, individuals with persuasive and/or aggressive verbal styles may dominate discussions and decisions. Some participants are simply shy and reluctant to express opinions in a group setting. Others with more extroverted personalities will monopolize the meeting. The "experts" intimidate some participants. This often happens when community representatives and consumers are brought together with health care professionals or professional advocates. Or, there may be personal or agency rivalries that have existed for many years that obstruct a rational process. Therefore, a structured approach is necessary to assure a systematic, fair and inclusive process. All perspectives need to be heard and considered at each step of the process. If members feel they are heard and they understand and accept the process, they are much more likely to "buy-in" to the results than if they feel the process was arbitrary or biased.

An effective approach is to have a formal, facilitated prioritization process. A consultant or other neutral person with strong facilitation skills can 1) lead the group through a structured group process, 2) focus the group, 3) assure all members are heard and 4) provide accurate documentation of the process. This process minimizes the potential for the individual interests (e.g., hospital, public health department, advocacy group) to override the shared interests of the larger group.

Purposes of a Formal Prioritization Process

- Create a systematic, fair and inclusive process
- Focus decision-making if overwhelmed by many problems
- Challenge partners to critically review data
- Promote rational allocation of resources
- Document a rational decision-making process

Group Process Tools

There is an array of specific tools that can be used to assist groups with setting priorities, ranging from simple ranking methods to multi-stage methods. (See Appendix A-7 for a description of ranking methods). Smaller, more homogeneous groups may be able to reach consensus using a relatively simple ranking process. However, most Coalitions/planning groups have both a volume of information to wade through and strong group dynamics and, thus, will benefit from a carefully managed process that walks participants through a logical step-by-step decision process. We recommend the following facilitated process for work with a large Coalition or planning group with a diverse membership. It is adapted from a chapter of the University of North Carolina, Program Planning and Monitoring Self-Instructional Manual, "Assessment of Health Status Problems". The process is described and discussed below and a facilitator's guide is included as Appendix A1.

An abbreviated version of this process can be used effectively to set priorities in a small or homogeneous group. It can also be adapted to working with the Hospital's Board to assist priority setting.

Setting Priorities in a Diverse Community Coalition / Planning Group

Before beginning this process of setting priorities among the problems identified in the community health assessment, it will be important to assess:

- 1) The involvement of the participants in selecting indicators and reviewing the needs assessment findings
- 2) Biases of members and prior knowledge/experience
- 3) The time commitment of the participants
- 4) The anticipated level of trust and engagement of the group
- 5) Historical group dynamics

This will assist in determining how much of the process will be conducted with full participation of the group, the degree of attention to developing group buy-in and how much can be done by staff or a smaller group of the members prior to meetings. Throughout the discussion below, we note when doing preparation work outside the meeting(s) can save time. How much the group needs to participate in each step to assure buy-in and consensus building is a judgment call.

Review objectives and process: The process begins with an overview of the priority setting process and an introduction of the objectives of the process. Participants in the process are encouraged to ask questions. A realistic estimate of the time this process will take is given to the group. There should be an agreed upon commitment of time, e.g., three 1 ½ hour meetings plus data review time outside the meeting. In our experience this process ranges from a total of 4 hours to as much as 16 hours. The importance of the member's participation and their efforts to leave their special interests at the door are emphasized.

Timesaver: The objectives and a description of the process can be sent out in advance of the meeting. However, a summary of the process and an opportunity for questions and clarification at the beginning of the meeting is important.

Steps in the Group Prioritization Process:

- Review prioritization objectives and process
- Select prioritization criteria
- Develop criteria scoring scale
- Weight prioritization criteria
- Review /discuss problem data
- Agree on problem list
- Use prioritization tool individually to rate problems
- Compile group rating / rank problems
- Discuss ranking and confirm results
- Discuss ranking and confirm results

Select prioritization criteria - After an overview of the meeting objectives and the problem prioritization process, the group will develop criteria to be used to prioritize health and health care access problems. This should be done before discussing the health problems. Criteria are standards, rules or tests upon which a judgment can be based. In our health problem prioritization process, participants judge the importance or priority of the problems based, using agreed upon criteria. An example of a criterion is "the problem affects a large number of persons in the community." A key point to make with the group is that selecting criteria beforehand is crucial to an objective rational prioritization process.

Criteria selection begins with the group brainstorming possible criteria. It is important that every group member has a chance to make a suggestion. This can either be done by going around the room in turn or by having each person come up and record their suggestion. During this process all suggestions are recorded on a whiteboard or flipchart sheets so that all participants can see that their suggestions have been heard and recorded and they can review all of the suggestions. The group then decides on a total number of criteria it will use to determine priorities. We suggest no more than 5 -7 criteria so that the process is focused but does not get overly lengthy and confusing. The group is given time to discuss the proposed criteria and reach consensus on the criteria it will use. Be careful to assure that all participants understand the criteria.

There is no perfect set of criteria that apply to every situation. It is important that each group agrees on its own criteria. Possible criteria might include any of the following as well as others. However, the group should decide on no more than 5 - 8 criteria.

Example Criteria for the Selection of Priority Community Problems and Needs:

- The problem has severe consequences (to health / quality of life)
- The problem is increasing
- There is a high incidence (new cases) / prevalence (overall large number)
- The community has identified the problem as important
- Opportunity to build on community strengths
- The consequences of the problem are costly (e.g., result in high emergency room costs or repeated hospitalizations)
- There are resources / community assets available to address this problem
- The problem is amenable to identifiable interventions
- There is an identified cost-effective intervention
- The problem is consistent with other health priorities identified in the community (e.g., it is consistent with a Healthy People 2010 objective or a local community focus on health promotion services for children)
- It is a greater problem in our community than in the State or Nation
- Possibility of obtaining funding to address the problem
- Relevance to community stakeholders
- Degree of controversy
- Sustainability of effort to address the problem

Timesaver: A preliminary list of criteria can be prepared by staff or a few members of the group and brought into the group meeting for discussion and refinement. Criteria may be added, changed or removed by the group.

It is essential that all participants have the same understanding of what the criteria mean and that the criteria are stated in terms that are specific and convey the intended meaning. For example in the list provided above participants should come to a consensus on the meaning of terms such as:

- Relevance (e.g., to whom, and for what purpose)
- Effectiveness (e.g., in what time frame, and by what measures health status, service utilization, quality of life)
- Controversy (e.g., among what faction(s), by what measure of impact)
- Sustainability (e.g., depending upon what types of goal(s) and what is necessary to achieve them).

Occasionally, there will be conflict about a particular criterion, necessitating the use of a voting procedure with a majority decision. Using a uniform set of predetermined criteria will make it less likely that individuals will try to push their own agendas or biases. Below is an example of one group's experience when developing one of its criterion and determining what the criterion meant and, thus, its definition.

Example: Defining a Criterion

In this situation, staff had done work previous to the meeting and one of the criterions it brought in was:

There are resources available to address this problem.

A discussion ensued about whether, if there were resources available, the availability was a good reason to prioritize the problem. Maybe it was it a good reason not to prioritize the problem. Some individuals said that if there were already identified resources in the community, another group could address the problem. This Coalition's efforts should be directed toward a gap in resources. One person pointed out that maybe the criterion should be:

There are no other resources available to address this problem. Another participant said maybe they wanted to prioritize a problem for which There was an identified or potential funding source. He introduced:

The problem has been identified as a priority by a funding source or potential funding source.

The group decided on a completely different criterion: It is feasible for our coalition partners to pool resources to address the problem. However, a group in another community had a similar discussion and decided on the first criterion presented. It is important that group members agree on and have a written definition of the criteria.

The selection of criteria usually takes considerably longer than anticipated because discussion of various views and definitions is important. As the group discusses and reaches consensus on the criteria and criteria definitions, participants "buy-in" to this process.

Develop criteria scoring definitions - After the group agrees on the criteria, a rating scale for each criterion should be developed. If a definition is needed to ensure criteria are understood, the definition should be written. A clear rating scale for each criterion is developed either with the group or by a subgroup or staff and then discussed and approved by the group. As in previous steps, the discussion and agreement is important.

Few, if any, criterion can be applied in a simple yes/no fashion. To capture the degree to which a problem matches a criterion a predefined scoring system is used. The participants are asked to develop a scale to describe the extent to which a problem meets a particular criterion. We use a 5-point scale. Whatever scale is chosen, the same scale must be used for all criteria. So, a 5-point scale must be used for *all* criteria; it would corrupt the scoring system if a 3-point scale were used for a few criteria and a 5-point scale for the remainder.

For example:

The criterion, "the problem has severe consequences" could be scored as follows:

- 1 = is not life threatening or disabling to individuals or society
- 2 = rarely life threatening but could be disabling
- 3 = moderately life threatening or moderate likelihood of disability
- 4 = moderately life threatening and strong likelihood of disability
- 5 = high likelihood of death and / or serious disability

Timesaver: If the group has done its work well as it defined the criteria, a few of its members or staff can be asked to develop the scoring scales outside of the group and bring its work back. If so, the larger group will simply need to review, if necessary amend and agree to the scoring definitions.

Weight prioritization criteria: While all of the selected criteria are important, not all of the criteria may be considered by the group to be equally important. For example, a patient advocate might feel that severe health consequences is more important than cost issues, while a hospital administrator might feel that cost issues are more important. There is a way to adjust for relative importance. One way of weighting the criteria involves giving points according to the degree of importance. For example, using a scale of 1 to 3, a criterion is given a weight of 1 if it is considered important, a 2 if very important and a 3 if most important. The facilitator

manages the necessary discussion among these diverse participants to determine what they, as a group, will agree are the most important criteria. The University of North Carolina School of Public Health self-instructional manual cautions: "Although some criteria may initially appear to be non-controversial, they may have controversial aspects.

Example:

Problems that have serious consequences are often considered more important than those with less serious consequences, and problems that have been increasing in magnitude may be assigned higher priority than those that are decreasing. In the first case, the most serious problems may affect only a small proportion of the population. In the second situation, the rate of increase or decrease may modify conclusions about the trends." This is another point in the process when participant discussion and understanding of the different perspectives is important and the process is intended to promote consensus and buy-in, this time to an agreed upon assignment of weights.

Review/discuss problem data - Now the facilitator asks the group to turn its attention to review of the identified community health problems and related indicator data. The information should not be new to members of the Coalition. During this process, members are using the data as they compare each problem to the agreed upon criteria. It is essential, as discussed earlier in this chapter that the data is presented in a format that is objective, easy to understand, allows for comparison and delineates important information.

Providing participants with a volume of data will be overwhelming and difficult to absorb. It is important to use members' time efficiently and minimize frustration. If the data is not complete or difficult to understand, participants may become confused or, worse, distrustful of both the data and the process of setting priorities. A well-organized written presentation of the data, sent out for participant review before the meeting, followed by questions and discussion during the meeting prepares participants to engage in this rational problem prioritization process. We strongly recommend presenting the data in a framework that facilitates the comparison of the problems, using the agreed upon criteria. While this requires additional staff or member work, the work reaps considerable benefit to the process of rational, objective priority setting.

Common Problem:

Participants in the process of setting priorities are left on their own to interpret large quantities of data that is not easily compared. They become frustrated, don't review the information and fall back into using their own or their agencies conceptions of what is important when participating in the process of setting priorities.

Response:

Tips for data presentation

- Use a clear, uncluttered format
- Provide a framework for setting priorities using the criteria selected by

the participants

- Present comparison data in simple tables or graphs that illustrate important comparisons and findings
- Show where there is statistical significance and/or emerging trends
- If data is left out or not available, be sure it is noted
- Provide a brief objective summary of important findings, using bullet or other easy-to-read format

Agree on problem list - After review of the data, the group may, by consensus, remove some of the identified problems from the problem list, combine problems, or refine the problem statement (e.g. specify a specific population experiencing the problem). The list of problems to be prioritized is ready to be entered on the problem prioritization matrix.

Use prioritization tool individually to score problems - A problem prioritization matrix, designed to use the weighted criteria the group has agreed upon, is provided in appendix A 3. The facilitator instructs the participants in the use of this tool and ensures that every participant understands the scoring system. It is wise to lead the group through an example. Each participant then uses the tool to score each of the community health problems. For specific directions on how to use the tool see the facilitator's guide in the appendix. This is a thoughtful, analytic process; it can be time consuming.

Common Problem:

Participants vary in the time it takes them to complete the prioritization scoring and their need for assistance during this process.

Response:

Depending on the group, timesaving methods are used whenever possible. The process could be broken up into two or three meetings: the first to identify criteria and develop definitions, weights and scores for each; the second to review the problems and related data and for individuals to do the rating; and the third, usually a shorter meeting, to present the results, allow for questions and discussion and for the group to affirm the results.

Members can do the scoring at the end of a meeting and leave when done, or they can score the problems at the beginning of a meeting, and go on to other agenda items while staff do the math and total the scores and later returning to this process for the results and final discussion. Another alternative is for the participants to record their ratings on a master sheet that all members can see and the group does the totals together. Yet another approach is to have members do the ratings at home and mail or e-mail in their results. Then staff can compile the results for the next meeting. The difficulty here is that many members won't do the "homework" and it will still be necessary to take time at the next meeting for them to complete the task.

Compile group scores/rank problems - The results of the individual scoring sheets are entered in a summary table to show the total of the individual scores and the rank order of each problem. The total scores are ranked from the highest, which is priority 1, to the lowest. The summary is presented to the group. Table 3 is an example of an abbreviated summary ranking table is presented below. Usually, there are very obvious priorities that emerge.

	Participants				
Problems	Participant 1	Participant 2	Participant 3	Total	Priority Rank
Disparities in infant mortality	65	52	68	185	1
Type II Diabetes	30	25	36	91	3
Teen drug abuse	55	46	70	171	2

TABLE 3: EXAMPLE SUMMARY RANKING TABLE

Discuss ranking and confirm results - The ranked list of prioritized problems is then discussed among and accepted by the group. If there are questions or disagreement, these are discussed and resolution sought prior to accepting the ranking. Occasionally, a participant will not agree, however, the majority of the participants have reached consensus and "bought into" the result.

The group is now ready to either designate an "expert" group or continue to analyze the priority problems, identifying the causes and contributors to the problems and proceeding to identify possible points of effective interventions.

Criteria for Evaluation of Data Sources

Timeliness

Many population-based data sets are extremely useful when comparing state data against other state and national findings. However, due to the complexity of collecting, cleaning and preparing large data sets, there is frequently a 2 to 3 year delay in the availability of these data for use by local health agencies. Thus, in order to monitor the impact on health status or outcomes of the rapid transition of Medicaid enrollees into managed care plans, local agencies may need to collect and/or analyze more timely data. For example, rather than use the state Birth Certificate data to monitor perinatal health, a local health jurisdiction would choose to analyze birth certificate data it is collecting.

Geographic Specificity

Data sets differ in their level of geographic specificity. Some data sets, such as the Federal Census of Population and Housing, contain ZIP code and census tract level information. However, population-based data are frequently collected through surveys of only a sub-sample of population, e.g., the National Hospital Discharge Survey or the National Health Interview Survey. Sample representatives and generalizations may limit the utility of such data sets for evaluating local conditions. For example, national data set samples may not be representative of a local, state or regional population. States often address these barriers by using the standardized instrument from a national survey and sampling a much larger local population. However, additional local sampling requires additional financial resources.

Specificity of Demographic Data

As in the section on geographic specificity, national population samples are often limited in the number of race/ethnic groups for which data are collected in large enough numbers to analyze with any degree of statistical validity. For example, the size and content of the samples in the Youth Risk Behavior Survey or the High School Senior Survey on drug use do not allow results to be calculated for Asian/Pacific Islander populations.

In addition, age is often reported as a categorical age group rather than a continuous variable (e.g., data on age group categories are gathered - rather than data on actual years of age). At the national level, for example, mortality reports frequently aggregate age into broad ranges such as 0 to 24 years for injuries, or 15 to 24 years for motor vehicle related indicators. This makes the age specific analysis necessary for program planning and evaluation more challenging, if not impossible.

As with geographic sampling, states often attempt to correct this limitation by using a standardized instrument and over sampling the groups of particular interest.

Data Consistency and Standardization

In order to adequately compare health outcome measures from one jurisdiction to another, or to monitor changes in health outcome measures over time, it is necessary to compare similar groups using standardized variables. Standardization requires that state data collection efforts use identical definitions and standard instruments where possible. This may be a challenge given that the existing data available from multiple sources frequently measures the same construct in different ways. For example, race/ethnicity may be collected and/or coded using different categories: Asians may be reported as an aggregate or by specific categories such as Japanese, Chinese, Southeast Asians, etc.

Whether a measure is recorded by self-report or "assigned" by the data collector may also lead to discrepancies across data sources.

Differences in methodologies for combining variables (or codes) into groups, may also lead to inconsistent comparisons across data sets. This frequently occurs with grouping of diagnostic codes in hospital discharge data where, for example, different researchers measure heart disease using different diagnostic ICD-9 code groupings. Similarly, age groupings are frequently not comparable across datasets.

In some cases, the data may be collected in a more detailed fashion and reported in categories that are not useful or consistent with other data being utilized. In this case, obtaining the raw data and recoding the variables may solve the problem. In other cases, the data set may simply not be helpful and a primary data collection effort will be necessary.

Availability Over Time

Some data collection efforts occur at specific intervals and are not available every year. Most notable is the US Census, which is only collected every ten years. In order to supplement this, states collect intercensal samples and make projections for each year. However, these samples may not be detailed enough to provide data at the ZIP code or census tract level for all ages or race/ethnic groups. This limits the ability to generate rates for these groups between census years. Many local health jurisdictions get population estimates through private companies that do projections for the private sector to use in marketing.

National or state survey data are also collected for specific time periods. Other surveys may be done only once due to the one-time availability of resources or the political climate. An example of this might be toxicology screening of newborns for in utero exposure to drugs or alcohol. In order to use a particular data set for ongoing monitoring, resources would have to be identified to repeat the data collection effort on an ongoing or periodic basis.

Ability to Identify Individuals or Events

Many service utilization data sources were developed for billing purposes. They contain records for encounters, admissions, or visits, as opposed to records for unique individuals and are therefore subject to duplication of information. Before deciding to use one of these data sets it is important to define the unit of analysis under consideration (billed claims, episode of care, or individual client) and to determine if indeed this information can be derived from the data source.

Often deterministic and probabilistic record linkage strategies would have to be developed and utilized to obtain client-specific data within a billing data set and across data sets. A local jurisdiction needs to decide whether it has the resources for such and effort. A more long-term strategy would include developing a unique personal identifier by utilizing, for example, client identification numbers or a set of standardized variables.

Adequate Sample Size

Many national or state surveys that contain data only for a sample of the population are not readily applicable to smaller geographic areas or subpopulations such as smaller racial, ethnic or age groups. In some cases the data can be weighted to produce usable estimates. For example, most national surveys produced by the National Center for Health Statistics require special software to weight records to produce national estimates. The cost of acquiring this software and the technical skill needed to use it represent barriers to the proper utilization of data sources for which weighting is required. However, in many cases there is no way to produce local estimates. In these cases the community may decide to use a survey instrument to do primary data collection or pay the survey developers to take a larger sample from the community of interest. Many counties have contracted with UCLA for expanded samples for the California Health Interview survey.

Sample Validity

Some survey data are collected on convenience samples. For example, the High School Senior Survey collects self-reported data on students who are enrolled and in attendance at a school on a particular day. This methodology excludes those students who have dropped out of school or who attend school sporadically from participating in this survey. Thus, it would be inaccurate, for example, to use this sample to estimate overall teen drug use since it excludes those teens that are more likely to have frequent, chronic or severe drug use.

Potential for Use of Instrument for Primary Data Collection

There are many indicators for which no data source exists. In these cases the decision needs to be made about whether it is feasible to develop a primary data collection instrument. An important consideration in making the decision to do primary data collection is whether there is a standardized, validated instrument that has been used in a similar population. If so, can it be acquired for a reasonable price and does the agency have the expertise and the resources to collect and analyze the data using this instrument?

In cases where there is no instrument, a key question is "Does the agency have the expertise to design an instrument or can it afford to hire a consultant to develop one?" If the answer to both is no, the planning group should probably not choose the indicator.

Family Health Outcomes Project: (FHOP) Problem Prioritization Facilitator Guide

This guide has been developed to help you facilitate a group through a problem prioritization process. The bolded paragraphs are questions and/or prompts that may assist you. However, this is intended to be a generic guide and adjustments should be made as needed to fit the needs and dynamics of the group.

Have the group members introduce themselves. Describe the prioritization process and tell them you will be guiding them through this process to help them choose priority community problems that the Coalition will address in the ensuing year(s). Lead the group through the following steps:

Step # 1 -

We will be prioritizing community problems identified through a community needs assessment. However, let's first decide what we think will help us to decide which problems should be addressed by our Coalition / planning group. Are there factors / criteria to consider that can help us make those choices?

Let's review a few examples of possible criteria and then brainstorm and discuss the brainstormed criteria. Our objective is to reach consensus on the criteria this group will use to prioritize community problems.

Emphasize that it is important that members of the group leave their "special interest" hats at the door and enter into this process as objectively as possible.

Develop criteria with which to evaluate the data in order to prioritize the Community's most pressing health problems

It is helpful to bring in suggested criteria with which the group can begin. Sometimes, in the interest of time, a group may start off with a list put together before the meeting by staff or a subgroup of members. It is important, however, that the group reviews the criteria, and adds or removes from the list based on discussion and consensus.

If the facilitator has brought in a list, hand it out and write it on a flipchart /whiteboard: (the following is an example of a list, which might be brought in.)

- Amenable to intervention/intervention proven effective by research
- High incidence or prevalence
- Severity of consequences
- Community identified needs or perception of problem

- Resources available
- Costliness of treatment or consequences
- Problem increasing

Do you think criteria on this list will be helpful? Does everyone understand each criterion? Do you want to suggest others? Let's discuss them.

Expect discussion during the process of developing and selecting criteria:

Be sure to make the point that selecting criteria *beforehand* is an important step in having an objective process for prioritization. As the group comes to consensus in selecting criteria, participants "buy-in" to an objective process for prioritization and become less attached to pushing their own agendas or biases. Selecting criteria as a group provides the "ground rules" for the prioritization process.

This prioritization process breaks down the process of prioritizing problems into factors (criteria) and, then, through scoring and weighting allows the determination of how important each of these factors is in the overall decision about whether the problem should receive a high priority or a lower priority. The discussion of the criteria is important; it should stimulate critical thinking.

Keep in mind this note from the University of North Carolina self-instructional manual:

Although some criteria may initially appear to be non-controversial, they may have controversial aspects. For example, problems that have serious consequences are often considered more important than those with less serious consequences and problems that have been increasing in magnitude may be assigned higher priority than those that are decreasing. In the first case, the most serious problems may affect only a small proportion of the population. In the second situation, the rate of increase or decrease may modify conclusions about the trends.

Examples of other points that often come up in discussions:

- Amenable to intervention/intervention proven effective by research Even if an intervention has been shown effective by research, will it be effective in your community, with your population?
- Community perception of problem vs. greatest need, as identified by data -Sometimes the community will perceive that something is a problem, when there is no data to support this perception.

Guide the group in its discussion. It may add or delete criteria as a result of the discussion. It may, indeed, make changes to the criteria several times before reaching consensus.

The group should briefly discuss criteria so that each member understands what each criterion means. Discuss why this process of selecting criteria will help each participant individually and the group as a whole to think systematically and reflectively about whether a problem is a high or low priority.

Step #2

We want to make this process as objective as possible and assure that each of you will be using the same, agreed upon definitions to score problems. Let's next develop a scale of scoring definitions for each criterion. We use a scale of 5 (as opposed to 2, 3, or 4) because this wider range of scores results in a ranking that is sensitive to degrees of differences yet manageable. By using these scoring definitions, you will later answer the question "How applicable is this criterion to the identified problem?"

Before developing the scales, walk the group through one example, such as:

Criterion: Severity of consequences Definition: The degree to which the problem causes death or functional impairment

1 = is not life threatening or debilitating to individuals or society

- 2 = slightly life threatening or debilitating to individuals or society
- 3 = moderately life threatening or debilitating to individuals or society
- 4 = life threatening or debilitating to individuals or society
- 5 = life threatening AND debilitating to individuals or society

Now, using a scale of 1 to 5, develop a scale for each criterion. Note that the scale of 1 to 5 needs to be worded differently for different criteria. See 5 value scales for commonly used health problem criteria on separate handout.

Step #3 -

Are all of the criteria equally important?

Anticipated answer: Some of the criteria might be more important than other criteria.

We will be assigning weights to reflect the fact that the group feels a particular criterion is more important than another. For example, as a group you may decide that increasing rates or trend is considerably more important than the community's perception of a problem.

Lead the group in understanding the weighting system. A range of weights can be used. Often groups use a scale of 3 to 1 (3 = most important, 2 = very important and 1 = important). Using this scale, the group should decide which criteria are weighted 3, which are weighted 2 and which are weighted 1.

The selected and weighted criteria will be used to prioritize the identified problems.

Step #4

We are now ready to look at the indicator and other data. Let's discuss the data. What does it tell you? Do you have questions?

The group should have had the material in advance of the meeting and have reviewed it. It should be sent or presented to them in an easily understandable and concise format. Whenever possible and appropriate, breakdowns by race/ethnicity, age, specific subpopulations, geography, etc. should be presented. Trend data should also be presented. Local data should be compared to State or regional data, Healthy People 2000 Objectives or other benchmarks. Whenever possible, differences that are statistically significant should be indicated.

Walk the group through an example of using the criteria to look at the data. For example, if one of the identified problems is teen pregnancy. Ask then to look at the data and ask questions related to the chosen criteria. "Over the past five years has the problem been increasing? Is this a serious problem in our community? How do our rates of teen pregnancy compare to the States, other counties similar to us? What are the cost consequences of this problem, etc?

Step #5

What problems does this community have that should be considered for intervention in this year's plan? Are there any that we should eliminate from further consideration?

The group reviews the data, discusses the significance of any findings and identifies the problems to be considered. Some problems may be combined with others or omitted by group consensus. Sometimes, the group will decide it needs more data.

The group should agree on a final set of problem areas to address.

Step #6

Now it's time to prioritize the identified problems using the agreed upon weighted criteria.

We need to perform prioritization in a methodical, objective way. We will be using a problem prioritization tool developed by the Family Health Outcomes Project at the University of California, San Francisco. (Hand out the tool.)

We will use this tool to apply the weighted criteria to the health problems identified by the data that has been collected. Let's walk through the process.

Before beginning, review the scoring definitions. Now instruct the group how to use the prioritization tool as follows:

- 1. Fill in Criteria 1 through 8
- 2. Fill in the identified community problems. Let's take an example. If the problem identified is a high rate of infant mortality. Write "infant mortality" in the "Problem" column.
- 3. Fill in the agreed upon weight for each of the criteria. For example, in the box directly under column C1, write in the weight for criterion 1 agreed upon in step #3.
- 4. Now, for each problem, the participant will score each of the criteria using the scale 1 to 5. Review the scoring method (Step 2, page 1-2). For example, if problem #1 was infant mortality and criterion 1 is "severity of consequences", decide to what extent the problem meets the criteria on a scale of 1 to 5 as follows:
 - 1 = is not life threatening or debilitating to individuals or society
 - 2 = slightly life threatening or debilitating to individuals or society
 - 3 = moderately life threatening or debilitating to individuals or society
 - 4 = life threatening or debilitating to individuals or society
 - 5 = life threatening AND debilitating to individuals or society

Write the score in the box corresponding to problem #1 and criterion 1 (C1)

- 5. Next multiply the score (1 to 5) by the weight given each criterion (1 to 3) and write the result in the scoring box. For example, if infant mortality is rated *life threatening AND debilitating to individuals or society is 5* and the weight assigned the criterion severity of consequences is 3, multiply $5 \times 3 = 15$.
- 6. When finished scoring all the problems, the participant should add the scores (across the row) for each problem, entering the sum in the Total Score for Problem column.
- 7. Ask if there are any questions on how to complete the tool.

Step #7

Each participant should now complete the prioritization process by rating all problems using the problem prioritization tool.

Take the necessary time for each person to *individually* complete the tool. Participants should do this on their own without lengthy discussions. We don't want one or two people influencing others. This is not the time for a group process or group discussion. This is a quiet time devoted to individual scoring.

Step #8

Now we will summarize the results of the scoring and reach consensus on those problems to be addressed by the group.

- 1. Ask participants to give you their total score on each problem. Record each participant's total score in a Summary Table as shown below.
- 2. Going across the row, add up the participants' scores for each problem. For example, in the table below, add the Participants' scores (65, 52, 68) and enter the total (185).
- 3. Rank the problems in order of score. In the example below, "Disparity in infant mortality" would be ranked #1 (highest), Teen drug abuse #2 and Diabetes #3 (lowest).

Example:

SUMMARY RANKING TABLE

	Participants			
Problems				Total
	Participant 1	Participant 2	Participant 3	
Disparity in infant mortality	65	52	68	185
Diabetes	30	25	36	91
Teen drug abuse	55	46	70	171

Note alternative process: If time allows, the facilitator might want to follow these steps:

Adjourn the meeting for the day. Take the participant's score sheets back to the office. From each participant's score sheet, enter the "Total score" for each problem into a *Summary Ranking Table* spreadsheet (Excel or Lotus is fine). Generate a total score from all the score sheets for each problem. Then rank the problems from the highest score to the lowest. Be ready to present the final ranking to the group at the next meeting. (The facilitator should also bring the spreadsheet in case anyone has questions regarding details of the underlying scores per criteria per health problem.)

Step #9

Discuss the results and reach consensus as follows:

- 1. Ask the group if they agree with the ranking.
- 2. If there is disagreement, select one problem to explore. List the scores for each criterion for that problem from 2 or 3 participants whose scores disagree.
- 3. Look at the scores under the columns for criteria. How are they similar or disparate?
 - Similar scores group agrees, "buy-in" of the process
 - Disparate scores people may have strong differences of opinion. A group discussion of a particular problem and how various people used the criteria to rank it might help people to understand one another better. The group should aim discussion at reaching eventual consensus, or at least acceptance.
 - Let group discuss one criterion where there is a disparity

Members of this group have successfully identified priority areas. Please keep in mind throughout the process with this, or any other prioritization tool, that:

"This is not a mathematical tool to obtain a correct answer; it is a way of organizing a discussion to merge the opinions of different persons and groups."¹

¹ World Health Organization, Division of Family Health - A Workbook on How to Plan and Carry Out Research on the Risk Approach in Maternal and Child Health Including Family Planning. Geneva, Switzerland: WHO. 1984. pp. 87-91.

Family Health Outcomes Project Suggested Criteria To Prioritize Health Problems

The following are suggested criteria for use in prioritizing Community health problems. A group may wish to add or delete.

- Amenable to intervention/intervention proven effective by research
- High incidence or prevalence
- Severity of consequences
- Community identified need or perception of problem
- Resources are available
- Costliness of treatment or consequences
- Problem is increasing

Each criterion is scored 1-5 as follows:

Problem is amenable to intervention/intervention proven effective by research:

- 1. No known effective intervention exists
- 2. Promising intervention exists, but it is unclear whether it can be applied to the population in question.
- 3. Intervention with a proven efficacy exists, but probably cannot be applied to the population in question
- 4. Intervention with a proven efficacy exists but it is unclear whether it can be applied to the population in question
- 5. Intervention with a proven efficacy exists and can be applied to population in question

High incidence or prevalence:

- 1. Low incidence or prevalence
- 2. Moderate incidence or prevalence in some subgroups
- 3. Moderate incidence or prevalence in all groups
- 4. High incidence or prevalence in some subgroups
- 5. High incidence or prevalence in all subgroups

Severity of consequences:

- 1. Not life threatening or debilitating to individuals or society
- 2. Slightly debilitating to individuals or society
- 3. Moderately debilitating to individuals or society
- 4. Life threatening or debilitating to individuals or society
- 5. Life threatening and debilitating to individuals and society

Community identified needs or perception of problem:

- 1. Not perceived as a problem; efforts to address it would be opposed
- 2. Recognized as a problem; efforts to address it would be opposed
- 3. Recognized as a problem; efforts to address it would not be opposed
- 4. Recognized as a problem; efforts to address it would be supported by some
- 5. Recognized as a problem; efforts to address it would be welcome

Resources are available to address the problem:

- 1. No resources available
- 2. Minimal resources available
- 3. Moderate level of resources available
- 4. Many resources available
- 5. Very high level of resources available

Costliness of treatment or consequences: (e.g., result in high emergency room costs or repeated hospitalizations)

- 1. No cost for treatment or consequences
- 2. Minimal cost of treatment or consequences
- 3. Moderate cost of treatment or consequences
- 4. High cost of treatment or consequences
- 5. Very high cost of treatment or consequences

Problem is increasing:

- 1. Rapid decrease in past five years
- 2. Moderate/slow decrease in past five years
- 3. No change in past five years
- 4. Moderate/slow increase in past five years
- 5. Rapid increase in past five years
Criteria are weighted to indicate their importance, such as:

- 1 = Important
- 2 = Very Important
- 3 = Most Important

Appendix 3-B <u>fhop</u> PROBLEM PRIORITIZATION TOOL

CRITERION #1:				CRITERION #5:					
CRITERION #2:				CRITERION #6:					
CRITERION #3:				CRITERION #7:					
CRITERION #4:				CRITERION #8:					
Problem	weight criterie assigr	n the line below each criterion number (e.g. C1), record assigned weight as decided by the group. Then, for each problem, score each riterion 1 to 5 (use scoring scale) and multiply the score by the ssigned weight. Add weighted scores to obtain Total Score for Problem.							Total Score For Problem
	C1	C2	C3	C4	C5	C6	C7	C8	
1.									
2.									
3.									
4.									
5.									
6.									
7.									

Qualitative Methods

Qualitative Methods are a systematic collection and analysis of descriptive subjective information. The description produced from the qualitative methods is usually in non-numeric terms. They provide detailed and in-depth information and are useful in developing and refining quantitative assessment instruments and quantitative evaluation methods.

- Qualitative analysis is fundamentally an iterative set of processes.
- Good qualitative analysis is both systematic and intensely disciplined

A combination of Qualitative and Quantitative Methods is the best and most efficient approach since the two compliment each other and make up for what the other method is lacking.

Qualitative Methods include:

Questionnaires Interviews Focus Groups Observation Case Studies

Questionnaires

A questionnaire is series of written questions on a topic about which the respondent's opinions are sought (examples: mail survey, group administered questionnaires, household drop-off survey). Questionnaires are often used in survey research and can be used to collect both quantitative data (data we typically represent in numbers and provides a measurement of something – e.g., 64% of new working mothers bottle feed exclusively), and qualitative data (e.g. a descriptions of the reasons mothers listed for breast feeding). There are two general types of questionnaires: self-administered, which respondents fill out themselves, and interviewer administered in which the interviewer asks questions and records the answers.

There are two kinds of questions on a questionnaire: open-ended and closed ended. An open-ended question asks a question but provides no answers to chose from, just a space for writing in an answer. In contrast, a close-end question provides a list of possible answers to choose. An example of an open-ended question would be "What do you like most about your health care provider?" Answers to open ended questions are usually in the forms of phrases, sentences or paragraphs and provide you with qualitative data. Analysis of qualitative data from questionnaires often involves reading the answers trying to identify common themes or developing ways to code your qualitative data to allow you to describe your findings.

Open-ended questions are useful

- When you want information in the respondent's own words
- Don't know what all the possible answers to a question
- When you want to avoid suggesting answers.

Advantages:

- Generally more economical than interviews
- Administration is quicker than an interview
- Questionnaires can be anonymous, so they may be desirable for investigating sensitive attitudes or behavior

Disadvantages:

- Time consuming
- Difficult
- Expensive
- Very subjective

Interviews -

The interviewer based on the feedback of the responder completes interviews. More personal than self-administered questionnaires (examples: telephone interview, personal interviews, group interviews)

There are two main types of Interviews:

- **Structured Interviews** the emphasis is in obtaining answers to carefully worded questions. The interviewers are trained to deviate only minimally from the structured questions to ensure uniformity of the interview administration.
- *In-depth Interviews* the interviewer does not follow a rigid form. An In-depth interview is a dialogue between a skilled interviewer and the person being interviewed. Open-ended questions and extensive probing characterize in-depth interviews. The interviewer follows an interview guide that includes a list of questions or issues to be explored which assists in pacing the interview and make it more systematic.

When to Use in-depth Interviews:

- When it is about a complex subject matter
- When in need of detailed information
- When it's a highly sensitive matter
- When the respondents are busy or of high-status
- Flexibility in administering interview to specific individuals (i.e. physical disabilities)

Advantages:

- Rich data and more details as well as in-depth exploration of a topic
- New insights
- Face-to-face contact with participant
- Interviewer has the opportunity to clarify questions and to follow-up question and probes, increasing the likelihood of useful responses

Disadvantages:

- Expensive and time-consuming
- Possible inconsistency due to flexibility
- The amount of information might create difficulty in transcribing and reducing data
- Need qualified and well-trained interviewers
- Interviewee may be biased by interviewer and distort information

Hints:

- Select a setting that provides privacy for the participants and a location that is accessible, comfortable and quiet
- Make sure sitting arrangement encourages interaction
- Select a facility that is equipped for tape or video recording (unless you are bring your own equipment)
- Stop outside interruptions (i.e. phone calls or visitors)
- Make sure it is located in a non-threatening environment

Focus Groups

Definition: Carefully planned group discussions designed to obtain participant attitudes on a defined topic.

Focus groups should be conducted by an experienced moderator/facilitator (possibly a facilitator from within the community – based on gender, race/ethnicity, age etc). The focus group should take place in comfortable setting and at a location that is easily accessible to your target audience. A list of guidelines and ground rules must be the first thing before the focus group begins reviewing confidentiality, etiquette (i.e. respecting each others opinions, not talking over someone else or interrupting, no name calling etc). The participants selected for the focus group must be representative of the intended audience and various subgroups of the intended audience should be represented so that a range of opinions is heard. Develop criteria for selecting participants before recruiting. The number of participants should range from 5 - 12. A larger group would be hard to facilitate in a short period of time and a smaller group will have limited feedback.

A session should last between one and two hours. Tape recording and transcribing is suggested but be sure to have permission of participants and also that the facilitator ensures confidentiality during the session. Also another person may be the note taker so that the facilitator focuses on the discussion flow. All of the participants should be encouraged to express their feelings, ideas, perceptions and opinions freely. It is recommended that incentives be offered such as a monetary amount and refreshments/ food during the session.

Although focus groups and in-depth interviews share many characteristics, they should not be used interchangeably. The focus group session is an interview and not a discussion group. Focus groups use the group dynamics to generate data and insights that would be unlikely to emerge without that group interaction.

Advantages:

- Provides in-depth insight into how the participants feel about a specific topic
- More cost effective than individual interviews
- Findings are presented in a narrative form (with actual participant quotations)
- Participants are free to volunteer information on points that are important to them

Disadvantages:

- The open-ended questions/responses generate a narrative that can make summary and interpretation time consuming and difficult
- Respondents may hesitate to express concerns in a group setting depending on the facilitator or the group participants (or their comfort level in a group setting)
- The interaction between participants and facilitator may bias opinions
- The small number of respondents and the lack of random selection limits the ability to generalize to a larger population

Guides for Focus Group Facilitator:

Before convening the focus group the facilitator must assure confidentiality and have a guide based on objectives and questions. The guide should be a list of questions or issues to be explored. This will not only keep the facilitator and the session on track but will also assist the facilitator in times when the discussion may need extra facilitation to flow and will keep the interaction focused.

When to use focus groups:

When conducting evaluations, focus groups are useful in answering the same type of questions as in-depth interviews, except in a social context. Specific applications of the focus group methods include:

- Identifying and defining problems in project implementation
- Identifying project strengths, weaknesses, as well as recommendations
- Assisting with interpretation of quantitative findings
- · Obtaining perceptions of project outcomes and impacts
- Generating new ideas

Recording focus group data: It is good to have a second person besides the facilitator taking notes during a focus group session. A major advantage to this is that the recorder focuses on observing and taking notes, while the facilitator concentrates on asking questions, facilitating the group interaction, following up on ideas, and making smooth transitions from issue to issue.

Focus groups can also be tape-recorded. This approach allows for confirmation of what was heard. However, transcribing the tapes of the session can be costly. Whatever the approach to gathering detailed data, informed consent is necessary and confidentiality should be assured.

In focus groups, group dynamics are especially important. The notes, and results report, should include comments on group interaction and dynamics as well.

Observations:

Observations provide the evaluator with an opportunity to gather information while capturing a great variety of interactions. Observational techniques provide a way to explore situations for new information. [An example of an observation in the field is the urban anthropologists in the large counties.]

Two kinds of observations are:

Participant Observation:

- The researcher must be a participant in the culture or context being observed
- It may require months to years of intensive work

Direct Observation:

- The direct observer needs to be as unobtrusive as possible so as to not bias the observation
- The researcher is watching (not taking part)
- Often technology is used such as one-way mirrors and videotape.
- It takes a shorter amount of time.

Advantages:

- Provide direct information about behavior of individuals and groups
- Permit evaluator to enter into and understand situation/context
- Provide good opportunities for identifying unanticipated outcomes

Disadvantages:

- Expensive and time consuming
- Need well-qualified, highly trained observers; may need to be content experts
- May affect behavior of participants
- Selective perception of observer may distort data
- Investigator has little control over situation
- Behavior or set of behaviors observed may be atypical

When to Use Observations:

- When needing info on possible environmental factors (i.e., safety of a child)
- When the setting is within the environment that the project takes place
- When wanting to include native language or jargon
- When wanting to include clues from non-verbal communication and notable non-occurrences (i.e. observing that something is not happening that should be happening under other circumstances)
- When observing social networks

Case Study (ethnography, field study, participant observation)

Definition: The collection and presentation of detailed information about a health event. A case study is an intensive study of a specific individual or context, drawing conclusions only about that participant or group and only in that specific context. A combination of methods can be used in a case study. Case studies are a preferred method when the researcher has little control over the events, and when there is a contemporary focus within a real life context.

Four types of case studies are:

Illustrative Case Studies - descriptive studies
Exploratory (or pilot) Case Studies - condensed case studies performed before implementing a large-scale investigation.
Cumulative Case Studies - help to aggregate information from several sites collected at different times.
Sentinel Events Case Studies - useful for answering cause and effect questions about rare occurrences of unexpected outcomes (example: maternal mortality).

Suggested Readings:

Denzin, N.K., and Lincoln, Y.S. (Eds.). (1994). *Handbook of Qualitative Research*. Thousand Oak, CA: Sage

Greebaum, T.L. (1993). The Handbook of Focus Group Research. NewYork: Lexington Books.

Krueger, R.A. (1988). Focus Groups: A Practical Guide for Applied Research. Newbury Park, CA: Sage.

CALIFORNIA'S

HOSPITAL COMMUNITY BENEFIT LAW

A PLANNER'S GUIDE

CHAPTER FOUR

DEVELOPING AN ACTION PLAN: PROBLEM ANALYSIS, GOALS AND OBJECTIVES, AND PERFORMANCE MEASURES

DEVELOPING AN ACTION PLAN: PROBLEM ANALYSIS, GOALS AND OBJECTIVES, AND PERFORMANCE MEASURES

For Inclusion in the Hospital Community Benefits Planner's Guide

The Hospital Community Benefits Program Office of Statewide Health Planning

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Excerpts adapted from a case study provided by Integrating Medicine in Public Health (IMAP) Program, Institute of Health and Aging, University of California, San Francisco, Medicine and Public Health Section, California Department of Public Health Services Once the Coalition or other group has set priorities among identified health problems, attention should be given to understanding the causes, contributors and consequences of the priority problems. This is a critical step before going on to identify effective interventions to achieve desired results.

In moving to this next phase, many groups may have reconstituted and/or redefined the purpose of their planning coalition from that of guiding the community needs assessment process into a collaborative committed to working together to address the priority community health problems. (Note our shift to the term collaborative, see definition in the Community Assessment chapter). This Chapter will address the following steps in the community benefits planning process:

- Step 1. Performing a Problem Analysis to Identify Intervention Points
- **Step 2.** Setting Goals, Outcome Objectives and Performance Measures
- Step 3. Developing a Community Action Plan and / or Program Action Plan

If your hospital has convened or is part of a Collaborative, there will be an overall collaborative action plan with the different participating members' responsibilities identified. The hospital(s) and its partners should also have program-specific action plans.

This chapter uses a systematic approach to moving from assessment data to problem analysis; identification of intervention points, development of outcome objectives and performance measures and, finally, through the development and documentation of an action plan. We will walk you through the steps and provide guidance and materials so that you are then able to participate in and even lead a group through this process. Diagram 1 shows the decision and analysis points of the planning process.



Diagram 1: Points of Decision and Analysis in a Group's Community Planning Process

Community Planning Step 1: Performing a Problem Analysis to Identify Intervention Points

Problem analysis is used to help us identify and understand the causes, contributors and consequences of problems and the relationships between them. From this base of understanding, a collaborative can then wisely choose the most effective interventions to achieve desired results. This is why it is important to conduct as thorough a problem analysis as possible within your resources.

Every problem has multiple causes and, thus, many possible interventions. A problem analysis will help identify the underlying processes, and possible causal pathways, that lead to a particular health problem or poor health status and the consequences or impact of that problem. It can also allow you to identify and consider those factors that protect against a negative outcome and those that promote a positive outcome. Through this process you can identify the "who, what, where, when and why" of the problem.

A formal problem analysis promotes rational allocation of resources where these resources can be most effective and avoids allocation in response to "impressions", anecdotal evidence, or political pressure.

Example: If a group has prioritized inadequate immunization rates as a problem it wants to address, it may identify multiple possible intervention activities such as: sending patient reminders; establishing a central registry; educating providers on missed opportunities for administering vaccines; doing a media campaign targeting parents or giving shots at health fairs. In order to select the most effective intervention(s), your group must understand the underlying causes of the problem in the target community and identify intervention strategies that have been shown to be effective given the particular circumstances it knows to be present. Intervention strategies will then be identified to affect specific events along the causal pathways.

Problem Analysis Methods

A problem analysis can be conducted by staff, a small group of partners, a collaborative or a committee designated by the collaborative, or a combination of these. In most communities, the most successful and appreciated process will be one in which community representatives participate.

This collaborative approach can be successful in two ways:

- 1. It supports the approach of building a partnership to solve community problems and continues to draw upon the insights and wisdom of community-based organizations and community members
- 2. It identifies interventions that are based on logic and systematic analysis

Although a collaborative process may be more time-consuming than "going it alone", a facilitated group process can be done efficiently and can result in maximum buy-in, shared objectives, and the sharing of resources and expertise among collaborative members. It also promotes hospital visibility as a contributor to community health.

We are emphasizing the use of a broad based, inclusive approach.

Components of a Problem Analysis

- 1. Examine the epidemiological data for the community of interest
- 2. Examine the literature and consult experts about causal and risk factors associated with the problem
- 3. Determine the extent to which these factors are active in the community
- 4. Determine the relative contribution of each identified factor to the problem
- 5. Identify the interrelationships among factors
- 6. Determine the most effective points in the causal pathways for intervention

If there is staff or a working group, the first four components of the problem analysis can be completed by them and presented to the larger collaborative for discussion and decisions. However if time and resources permit it is a good idea to hold an initial meeting to provide an over view of the problem analysis concepts, to introduce the diagram, and to brainstorm risks and contributing facts. The brainstorming can be used to guide the staff or a working group in conducting the research. The last two components are best completed in a representative facilitated group. With the appropriate background work prepared in advance, it is possible to complete the group process in an estimated 16 hours. The components of the process are described below. While they are presented sequentially they may actually be conducted simultaneously or may overlap.

Common Problem:

Different members of a group may define the problem from different perspectives. For example for the asthma problem, hospital representatives may define the problem as "the high cost of emergency room (ER) visits" while a parent in the group defines the problem as "school absence due to asthma".

The actual problem is asthma; the ER use and the school absences are consequences of asthma attacks. In our everyday life, a problem is often defined from the perspective of the consequence of the problem. And, indeed, while we may not know how to prevent asthma, we may be more successful in identifying ways to avoid emergency room use. Thus, it is helpful to include in the diagram the consequences of the problem. In some cases, the most feasible intervention may be at a point of consequence.

Example

In the asthma example, it may be determined that identifying parents of a child presenting in the emergency room with an asthma attack and intervening with the parent at that point or soon after is a very effective intervention point. The intervention may be to provide education to assist the parent/child in identifying ways of avoiding or controlling attacks and/or to connect the parent/child back to a primary care physician.

In the Case Study the problem was defined as frequent asthma attacks in school age children.

Solution:

When guiding this process, ask participants to think broadly about the problem and its consequences. They can begin by defining the problem using the indicator data. Then, once the precursors, consequences and protective factors have been identified and there is a big picture understanding of the problem, ask participants to think about what they have learned from the literature and experts and how this knowledge applies to the particular characteristics of their community of interest. As they now review the diagram from this more focused perspective, the problem definition may be redefined or broken down into component problems.

Problem Analysis

Component 1 - Examine the epidemiologic data for the community of interest Epidemiology is the study of the pattern of distribution of a problem or condition in the population. The population being studied is the entire population or subgroups of persons within the population.

Epidemiological questions include:

- When does the disease/problem occur?
- What causes the problem?
- Is the problem increasing or decreasing?
- Is a particular group more affected than other groups?
- How does the frequency or occurrence (prevalence or incidence rate) of this problem compare to a standard such as Healthy People 2010 or a comparison community?

You should begin the process of examining the epidemiologic data by going back to the data collected during the initial needs assessment. Additional data may be needed at this time to further illuminate the problem.

This preliminary analysis will ensure that significant problems within race/ethnic or age subgroups and neighborhoods will not be hidden or masked by looking at summary or aggregate data alone.

Example

A county may have an overall rate for tuberculosis that is low and level over time, but the newcomer Asian population in this same county may have high and increasing rates.

Or, the overall county rate may be high, but the increased rate is the result of the much higher rates occurring primarily in two or three neighborhoods.

In order to determine trends for a condition at least 5 years of data should be examined. This ensures that worsening trends can be identified before a problem reaches a critical level. Comparisons of indicator data from one year to the next are especially useful where either a new intervention has been implemented or a change in health policy or community conditions has occurred. When making comparisons, it is critical that those studying the problem not assume that *any* observed difference or change is significant. For many indicators there are small numbers of individuals affected and, thus, the effect of one or a few incidences can be misinterpreted as a significant change. This is especially true when looking at zip code or neighborhood level data. To ensure that observed differences could not be the result of chance, tests of statistical significance should be performed. Since hospital benefit planners may not have access to statistical expertise we provide a simple method that can be used to make comparisons.

See Appendix B-1 for the definition and use of statistical confidence intervals. Those indicators that show a significant negative relationship to comparison data are identified as problem areas and as candidates for intervention activities.

Component 2: Examine the literature and consult experts

The second step of this process is to become educated about the problem and its causes. This can be done by examining the peer review literature, conducting a search on the Internet, consulting with agencies providing services for this problem, and/or consulting with individuals in your community who are recognized experts in this area.

Example

If the problem is immunization inadequacy, staff might be assigned to do a literature review on immunizations. A good place to start this review would be the Centers for Disease Control WEB site (www.cdc.gov). You could also consult with, or include in the meetings about this problem, a representative from the state or local public health agency in charge of immunization programs.

There might be a local pediatrician active in the community or in the local chapter of the American Academy of Pediatrics who would be willing to participate in the planning group for the discussion of this problem. In addition, there may be local advocacy groups concerned with the issue that could participate and bring useful information from the community. You could also include community members from the groups experiencing the problem.

This investigation should result in the identification of factors that are significantly related to low levels of immunization among similar populations. These may be direct causal factors, risk, ecological or environmental influences, and public policies impacting health status, health services or healthcare systems. Protective factors--those factors positively associated with increased immunization rates--should also be identified. At this point we recommend that staff or those responsible for gathering this information begin a list of these factors, also indicating the strength of the association of the factor with the poor or positive outcome whenever the literature provides that information.

Example

The review could generate data on the percent of unvaccinated children in a community with an automated reminder system versus one without or the percent of unvaccinated children having an identified primary care provider versus children without a regular provider. It would be valuable to know whether observed findings were statistically significant or not.

Component 3: Determine the extent to which the factors found in the literature or identified by experts are active in the community

The planning group, building on the findings of its review of literature and expert information about the causes and effects of the problem, should now identify those factors that they know are present in their target community and examine the strength of the association between a particular risk factor and the identified health problem. This can be accomplished by consulting with the public health department for epidemiological studies or results of surveys of the target community to identify factors related to the problem. Local employers and institutions also may have data on the populations with whom they work.

Example

If the group has identified death and disability due to cardiovascular disease as a problem, you would check with the health department on the existence of any studies of the local population that have been done to identify cardiovascular risk factors such as obesity, level of physical activity, dietary practices, rates of smoking or you might ask staff at the hospital to review a sample of records for recent admissions for myocardial infarction for these risks. If the problem were high rates of hospital admissions for asthmas and the peer review literature and experts indicate there is a very strong association between high levels of air pollution and asthma, you might want to check with the health department environmental section to learn the level of air pollution in your community. You might also survey clinicians on their use of appropriate asthma management protocols or survey community members about whether they have talked about and/or received an asthma management plan from their health care provider.

Component 4: Determine the relative contribution of each identified factor to the problem

Through the problem analysis you will identify multiple causal or risk factors that are linked to a particular outcome. Ideally, one would want to intervene in those factors that are most strongly associated with the problem and which affect the greatest number of individuals. Thus, it may be useful, if time, expertise and resources permit, to investigate both the strength of the association between individual factors and the identified problem and the contribution of each factor to the total number of individuals impacted by the problem.

The strength of association between a risk factor and outcome is determined by calculating the ratio of the incidence of the problem among people with the factor in question to the incidence of the problem among people who do not have the risk factor. This ratio is called a *relative risk* ratio. With limited resources, it is important to identify those factors that have the stronger association with the problem.

Example

A relative risk analysis shows that women who smoke are twice as likely as those who do not, women with a history of a low birth weight baby are 1.4 times as likely as those with no history of a previous low birth weight baby, and women who are abusing cocaine are 3 times as likely as women who are not to have a low birth weight baby. Thus, the strongest association with low birth weight is cocaine use, followed by maternal smoking. See appendix B-2 for a technical definition and a detailed example of how relative risk calculations can be done and how they can be useful.

However, many of you are already questioning whether targeting your resources to intervene with mothers using cocaine will make sense. You are right to question that conclusion. In some circumstances, although the relative risk is high for a particular factor, it does not necessarily mean that this is the place to focus an intervention. You must also consider the number of people in the community affected by this factor as compared to the other identified factors. If the number is small, even though relative risk is high, it may be more beneficial to target other risk factors in the community of interest that are affecting a larger number of persons. A useful calculation to use here is that of *population attributable risk*, that is how much, i.e., what proportion, of the problem can be attributed to a particular causal or risk factor in comparison with the other identified factors.

Example

If the literature or experts have identified both smoking and cocaine use as risk factors for LBW, what percent of cases can be attributed to one versus the other? If it is found that 30% of women in your community who had LBW babies smoke cigarettes and only 1% of women use cocaine, an intervention aimed at women who smoke might have a greater impact on the community's LBW rate than targeting cocaine users. Generally, you will want to target your effort to that causal or risk factor with the greatest impact, i.e., assuming there is an effective intervention. Your group will want to consider the seriousness of the consequences as well as the number of people affected. In some cases, a problem consequence is serious enough to convince the group that, although numbers affected are relatively small, it is important to the community to allocate resources to the problem.

For more detailed information on how to calculate population attributable risk see Appendix B-2.

Obviously, other factors such as available and potential resources, expertise in various methods of intervention and information about the effectiveness of available interventions should also be considered when making decisions about the best point of intervention.

Common Problem:

The Collaborative and its staff lack expertise to conduct this level of analysis.

Responses:

There are three possibilities.

1) Use literature to determine relative and population attributable-risk. Often, in your review of the prevention literature you will find calculations of risk and can assume that the relative risk ratios for factors in the community are the same as those found in a similar population;

2) Identify experts who can perform this analysis for you. Inventory other possible resources and expertise available to you. Is this expertise available within the staff of your hospital or among the partners in your collaborative? Is expertise available from the local health department, i.e., is there an epidemiologist, a planner or other health department staff that can assist in this area of problem analysis? When hiring a consultant, have you been explicit about the expertise he or she should have or have access to? Do you have a University in your area or close by? Is the appropriate university staff with expertise or access to expertise in problem analysis represented on your collaborative? Are there University students who can help and also benefit by using the work to meet a course requirement?

3) A lack of resources, information, or time may require a modified approach. An understanding and review of the concepts of relative risk and population attributable risk can assist the group's less technical review of the demographic, incidence and prevalence data and its decision-making process about which factors are likely to be significant in the community of interest. Although the group will not have the benefit of a technical analysis, the concepts should be kept in mind and considered.

Component 5: Identify the interrelationships among factors

This component requires full participation of the planning group in the problem analysis and decision-making based upon the analysis. It is necessary that everyone participating in the planning group understand how risks, contributing factors, protective factors and consequences relate to each other in order to identify the best (most effective) points at which to intervene.

In order to help organize the information and promote a shared understanding of the problem, we suggest using the data that staff or others have gathered and analyzed, within the context of a facilitated group process, to construct a problem analysis diagram. A diagram is one way to illustrate the relationships. Another commonly used method is a tree diagram. Drawing a diagram will help the group understand the interrelationships among factors and identify possible causal pathways. *Diagram 2* is a generic problem analysis diagram presented to assist understanding of the theoretical construct of the diagram.

If the group has been previously oriented to the problem analysis diagram, members can now reconsider the results of their initial brainstorming process and add to or modify the diagram with the information gathered by staff. If it is beginning the process now, an orientation to the process and use of the diagram should be done.

The following **definitions** will help to clarify terms used in the process of constructing a problem analysis diagram:

Precursors - Aspects of personal behavior, life-style or genetic predisposition; family influences; school, job or other institutional factors; environmental conditions; or other community level characteristics that have been shown in the peer review literature to be associated with a poor outcome. Precursors can be categorized in a number of ways. One useful approach is to define them as direct, secondary and tertiary as follows:

• **Direct precursors**, often called determinants, have a cause-and-effect relationship to the outcome. They include factors that are directly related to the pathological processes that lead to the outcome and should be supported by peer reviewed experimental studies.

Example

If the identified problem is myocardial infarction, direct precursors would include factors such as high blood pressure or high cholesterol level or a family history of heart disease. Direct precursors tend to be those related to the characteristics or behavior of an individual (biological, medical or behavioral).

Secondary precursors have a significant association with the outcome, but not a clearly defined causal relationship. These usually include socioeconomic and psychological characteristics of the family or characteristics of the institutions in which a person works, studies or lives. They are often, although not always, related to direct factors.

Example

For heart disease, secondary precursors could include familial dietary patterns, families' lack of knowledge of what constitutes a healthy diet, or inadequate exercise

Diagram 2. A Generic Framework for Health Problem Analysis *



• **Tertiary precursors**, often referred to as community or environmental factors, are those global conditions or policies that impact health status. They are often societal, political or environmental in nature and can include poverty, racism, community violence, level of unemployment, inadequacy of health services, and level of safe and affordable housing.

Example

For myocardial infarction, they could include: advertising of cigarettes to young people, lack of availability of supermarkets selling healthy food, lack of safe recreation areas providing opportunity for exercise, and lack of availability of preventive health services.

Systems Barriers — Attributes of the health care delivery system, including financial, geographical and cultural accessibility, which have been shown in the medical literature to be associated with a poor outcome for a variety of health indicators. System barriers can be secondary or tertiary precursors.

Example

Lack of health insurance, lack of culturally and linguistically appropriate services, geographic inaccessibility or poor transportation. These fall into the category of tertiary precursors.

Protective Factors/Community Assets — personal characteristics, attributes of the family or culture, or attributes of the operating social systems, the environment or the community in which individuals live that are associated with positive health status or outcomes. These can be primary, secondary or tertiary precursors.

Example

a high rate of literacy among adults, the presence of community agencies that assist newcomers by providing translation services for health care visits, the presence of safe after-school and evening recreational facilities for teens, the presence of a neighborhood crime patrol.

Protective factors exist at all levels of the problem diagram. It is important to determine not only whether there are community assets, but also whether the target population is connected to the protective factors in the community or have other protective factors characteristic of their distinct community.

Linkages - the association between the problem and the various levels of precursors. The concepts of relative risk and population attributable risk described previously can be useful in identifying linkages. Also, the literature research can inform how precursors are related. For example there are well-accepted theories of how various factors contribute to certain behaviors that in turn contribute to poor health outcomes.

Example

Cultural eating patterns that include foods high in fat are associated with higher dietary fat intake in many of the individuals in that culture leading to high serum cholesterol. This in turn is associated with increased formation of plaques on the coronary arteries that result in higher rates of myocardial infarction.

Consequences/Impacts: the effects of the problem on individuals, families and society. Identifying and quantifying consequences enables assessment of the significance of the problem.

Example

If assessing the consequences of myocardial infarction, assessment might include the immediate costs in terms of medical care, the costs of loss of work, as well as the physical emotional and economic costs of the resulting death and/or disabilities. As can be seen in this example, consequences of one step in the problem cycle can become precursors to another problem. Consequences can also be categorized as primary, secondary or tertiary.

Component 6: Determine the most effective points in the causal pathways for intervention

After the initial diagram has been completed, the group continues the refinement process as needed, reviewing the information staff has gathered on the relative risk and population attributable risk of particular factors. Members of the group, contributing their own knowledge of the community, determine the points in the causal pathways that they think have the most intervention potential. This is also another time during which to identify health promoting or protective factors and identify where they are operative.

Example

Having an exercise room in the workplace would promote physical fitness and potentially decrease cardiovascular disease. This protective factor would belong at the secondary level.

Questions to ask to guide the review of the diagram:

- Is there additional information needed in order to better understand the relationships among precursors, the problem and its consequences?
- Are there precursors that are especially prevalent in your community of interest?
- Does the literature show or have your technical experts provided analysis that indicates one or several factors are more important (greater relative risk and/or population attributable risk) to address than others?
- Do your data and your community experts (e.g., members of the target population, leaders of the community or other designated representatives) indicate one or several factors are more important to address than others?

The following case study illustrates the problem analysis process up to this point .

Case Study

The Community Benefits Coalition has prioritized the problem of asthma in school-aged children as one of its major community health problems. The following asthma related data was collected by Anywhere Hospital during a community needs assessment and reviewed by the hospital's Community Benefits Collaborative (CBC):

- Asthma was the leading cause of visits to the emergency room (ER) and hospitalizations in the pediatric/adolescent age group of 4 – 18 years of age and rates doubled in the past 4 years.
- Asthma was the leading health related cause for school absenteeism for the past 2 years. This was particularly true for African American and Hispanic children.
- The community clinic representative, as well as the county public health representative, reported increasing numbers of clinic visits for asthma, and the high cost of ER visits for asthma attacks to their programs, for the same race/ethnic groups.

The group also learned, through a meeting with hospital-based healthcare providers, that the majority of asthma-related hospitalizations, ER visits and deaths are thought to be preventable and its members subsequently agreed to proceed with a systematic problem analysis.

The CBC established an Asthma Work Group (AWG) whose mission was to provide the CBC with a better understanding of asthma in their community. The AWG was empowered to further assess the extent to which asthma impacted the children/families with asthma and to identify community-based activities that could improve the quality of life and health outcomes for these children.

Two members of the CBC wanted to co-chair the AWG. They asked the CBC for suggestions of community leaders who, and organizations that, might be interested and received eight suggestions. The co-chairs agreed to start by each asking 4 people from the list. They were surprised by the interest expressed by the people they asked, and 7 of the 8 people wanted to join. So, the committee started with 9 members: the two co-chairs, a parent of a child with asthma who was on the PTA, a nurse from the hospital *ER*, practitioner (who while he gave written material and information to the committee never made it to one of the meetings), a representative from the Free Clinic who was also actively involved with La Leche League, the hospital planner, a health educator from the local health department and a member of the American Association of Retired Persons (AARP).

The AWG met and reviewed the findings from the community assessment and a literature review done by a student intern from the health department. The review identified the following risk factors for children who develop asthma or who have frequent asthma attacks:

- A history of exposure to allergens that trigger asthma symptoms such as house dust mites, cockroaches, animal dander, and mold
- A history of exposure to environmental conditions that trigger asthma symptoms, such environmental tobacco smoke, air pollution (ozone, sulfur dioxide and particulate matter) and poor housing conditions.
- Have limited or no health insurance
- Are of African American or Hispanic descent
- Live below the poverty line.
- Have not been nursed (breastfed) longer than three months
- Have had few siblings and less pre-school exposure to allergens

Literature revealed that children with an asthma diagnosis without primary care providers were 3 times as likely to visit the ER with asthma attacks and missed 4 times the number of school days as those with a primary care provider. The literature review also found that there was no treatment that would cure asthma; but that the use of national treatment protocols by physicians was associated with a statistically significant decrease in asthma attacks and ER visits and hospitalizations for asthma. However, reports also showed that not many children are treated according to the national guidelines for asthma care. Four of the 5 parents on the AWG who had children with asthma said that their children did not have written treatment plans – one component of the guidelines.

The AWG had the benefit of staff support. Staff provided an overview of a method for conducting a problem analysis. Agreeing this method would be useful, the group brainstormed the risks, contributors and consequences of the child asthma problem in their community. Using a problem analysis diagram they were able to identify areas where more information was needed as well as to begin their discussion about possible interventions.

To determine which of the factors identified in the literature were operative in their community, the AWG asked staff to review emergency room visit and hospital admissions data to characterize the population of children who received asthma-related care at the hospital and local emergency department over the past year. The staff report showed that the majority of these children were African American or Hispanic, lacked heath insurance or were insured by Medi-Cal and, based on zip code data, many of them were living in an area of the community with crowded and poor housing conditions. A review of a randomly selected subset of these children's medical records revealed that almost 80% of children who had been seen in the ER over the past 6 months had never been given an asthma action plan by their physician, 75% of children

(Case Studies Continued)

were not taking the proper medical regimens at the time of their asthma attack, only 20% had ever been tested for allergens and half of the Hispanic families had difficulty understanding English. They also noted that a disproportionate number of visits occurred over the weekend.

The AWG decided that they wanted the benefit of additional representation from "stakeholders". They conducted a broad outreach and invitation to "stakeholders" who represented the clinical, public health, patient/family, and community perspective of asthma in children. This expanded AWG met once in a half-day community forum and participants were sent materials for review and comment during the remainder of the planning process. Participants in the forum included health care providers from the hospital and other health care sites across the community (school nurse, pharmacies, clinics, the home health provider, etc.), nurses and health educators from the local health department, children/families with asthma, social workers, educators including two school principals, representatives from ethnic groups, neighborhood groups (representing environmental and housing conditions), and faith communities.

The CBC also worked with the AWG to convene several focus groups in the local community. Focus groups were held in an elementary school, a middle school and a high school; at a meeting of the Chamber of Commerce; at two churches after child-related activities; at the Head Start day care center and at a local branch library. A focus group meeting at the local health department was considered, but there was no special asthma clinic day, so the meeting was not held. The purpose of these focus groups was to further identify and explore the barriers and opportunities related to asthma as perceived by members of the community.

Focus group participants identified the following barriers related to asthma:

- A lack of knowledge regarding the diagnosis and management of asthma;
- A lack of access to a consistent source of health care;
- Those without insurance or with Medi-Cal who had taken their child to the ER and had difficulty getting seen again for follow-up;
- Schools had barriers to the use of medicines;
- Children were teased who used inhalers;
- A lack of written treatment plans;
- Two of the groups spent a lot of time discussing their fear of steroids and having their children on steroids.
- A lack of financial resources necessary to improve their living conditions (decreasing exposure to allergens

The AWG worked to understand the key intervention points and causal pathways. They reviewed their earlier drafts of the problem analysis diagram.

Example

It was found that one of the common causal pathways that led to repeat ER visits and hospitalizations was related to patients not taking the correct medications to control their asthma. (See the case study Diagram A *Causal Pathway: School Aged Children With Asthma.*) In this case, the causal pathway began with the MD not adhering to national asthma practice guidelines and therefore not giving a proper asthma management plan to the patient. In this situation, the patient was not able to take their medications in such a way that they were able to control their asthma symptoms at home. Many studies have shown that when MDs comply with the national asthma guidelines (provide the patients with an asthma action plan and proper medical therapy) patients can control most of the asthma attacks without going to the emergency room.

In determining which pathways to focus on they relied on the relative contributions of the various precursors as described in their investigation. They refined their work and identified what they considered to be the key intervention points and causal pathways in their community.

Based on this analysis, the group decided that they would focus on identifying interventions that improved the education of health care providers related to the diagnosis and management of asthma. Several times, due to a study found in the literature that drew their attention, they went back and reconsidered an intervention point or strategy they initially had discarded. They began to move their focus to identifying and exploring potential "proven interventions" that would address the intervention points and pathways they had selected for intervention. Several members, together with staff, contacted programs in other communities successfully intervening with health care providers and families to reduce child asthma attacks.

At this point the AWG was ready to bring their work back to the larger group for review and as the basis for the development of program objectives and a theory of change. They used their problem analysis diagram as a good way to depict the "asthma story" in their community

Case Study Diagram 3 - Causal Pathway: School-Aged Children With Asthma



Component 6: Determine the most effective points in the causal pathways for intervention (continued)

The process presented here continues to be inclusive of hospital, government agency, community agency and patient/consumer representatives; however, it takes advantage of any staff, health department or other resources available to perform analysis and develop the theoretical basis upon which accountability will be based. The membership of the working group may once again reconfigure to include appropriate representation and expertise in the identification and development of intervention strategies. At any point in the process, representation by appropriate experts and or stakeholders may change to reflect the current stage of planning. Likewise, some members may drop out of the process or take a review and comment role at different stages in the planning process. Work groups may also be formed to accomplish specific analyses and tasks.

Once the group has determined the points in the causal pathways that they think have the most intervention potential, they can begin to assess which interventions are most likely to be effective.

There are usually many precursors and, thus, potential intervention strategies. This is demonstrated in the case study diagram. After the precursors have been identified, the group must determine:

- Which precursors are most amenable to intervention
- For those precursors amenable to intervention, which intervention strategies have the greatest potential impact
- Whether there are community assets that can be built upon
- Whether there are efforts or services already in place that effectively address these precursors

Example

In the case study, a combination of quantitative and qualitative data indicated that strongest precursors of increased ER visits are lack of access to medical care as indicated by lack of health insurance, poor quality health care as indicated by the lack of treatment plans and testing for allergens, and lack of knowledge in the community as indicated by limited English capabilities and the incorrect use of medications. There is some anecdotal and qualitative data about other possible factors such as lack of school support for taking medications but there is no quantitative data to indicate that these factors impact ER visits.

Identify Effective Intervention Strategies*

- Assess the adequacy and effectiveness of current programs
- Review health and social sciences literature to identify proven and promising interventions
- Consult the target community
- Determine the feasibility of implementing the identified interventions

*Many of these activities can occur simultaneously. The literature review to identify proven and promising interventions may have been started in conjunction with the literature review on the causes, risk factors and contributors to the problem.

Assess the Adequacy and Effectiveness of Current Programs

When considering the need for an intervention, it is important to identify existing community programs and resources addressing the problem and the implementers and other stakeholders in these interventions. If these stakeholders have previously not been part of your group's planning process, they should be included now. Their inclusion is necessary to avoid duplication and engender support and participation in the development of new strategies and to assure coordination of efforts and the efficient and effective use of resources.

After these additional key players/informants have been included, inventory existing services and collect information on the type of service, location, numbers served, sociodemographics of the population served and the results of evaluations that have been done. It could be that there already are effective interventions, but that the agencies providing them don't have the resources to serve all of those in need.

Assess the appropriateness of these services, i.e., do they address the precursors/risk factors that have been identified in your causal model?

Assess their adequacy: have their services been evaluated and shown to result in improved outcomes in a similar population (e.g. cultural appropriateness)? What proportion of those in need of services is receiving them?

Inventory Existing Community Services:

- type of service
- location of service
- number of clients served
- socio demographic characteristics of clients
- evaluation results
- unmet needs identified

The Resource Matrix in Appendix B-3 is a useful way to organize this information.

Review Existing Health and Social Sciences Evaluation Literature to Identify Proven and Promising Interventions

Before the planning group meets to discuss possible interventions, staff, consultants or designated members should gather information on both effective and failed interventions relevant to the problem and population. This information will prepare the planning group with state of the art information, on what has been proven or shows promise in similar populations to the community of interest. Where there are not any effective interventions a planning group may wish to test or develop an innovative approach to achieving change. We encourage innovative approaches tailored to community needs. However, generally, building on the proven or promising work identified through a literature search will be efficient and increase the likelihood of intervention success.

Although the review of the research literature is presented at this point, it is likely that when the literature review was conducted to identify causes, risks and protective factors, this review was conducted simultaneously.

The following methods and tools can assist this task:

- **Perform a Medline search** collect and summarize key studies. Look for Metaanalyses that review and summarize the findings of many studies.
- Search the World Wide Web focus on those data bases that might be most relevant to the area of interest: e.g., if unintentional injuries are a problem, first look at the state's injury prevention site or the Centers for Disease Control and Prevention (CDC) site.
- **Call recognized experts in the field** find out if they know of a literature review or can direct you to the most pertinent articles or refer you to another expert with this information, or invite them to do a presentation to the group summarizing current knowledge as it pertains to your community of interest.
- **Contact organizations** that compile this type of information and have an interest in this area, e.g., the American Lung Association and the March of Dimes.

When possible have someone who has the expertise to evaluate the data review the results of this investigation.
Example

A staff member (or a member of the group participating from the health department or a university) who has an understanding of statistics and evaluation design should analyze the results to see if the evaluation design is valid and if the changes achieved are statistically significant. The evaluation studies should be reviewed to assess the linkages between interventions and outcomes. Increasingly, for many public health problems, Federal, State or health related associations are conducting reviews and providing information on proven/promising interventions. For example, CDC has recently convened a task force to identify proven and promising interventions in many health areas and the Center for Substance Abuse Prevention (CSAP) has, likewise, compiled information on proven and promising substance abuse interventions.

Consult the Target Community

For many public health problems there is inadequate data on the efficacy of specific interventions, Thus, it is always important to collect timely qualitative data from the target community or key informants, other than service providers (who may have a bias in favor of the services provided by their agency), familiar with the target community. These groups can be asked about contributors to the problem, perceived barriers to successfully addressing the problem and the protective factors that may be present and could be built upon to achieve positive change. They may also be consulted about the relative importance of the problem to the health of the community as perceived by the community, their ideas on the root causes of the problem and their suggestions for where to target interventions. They can be asked about interventions or services with which they are familiar, and which interventions they think would be effective in a given situation (e.g., would a particular intervention described in the literature be acceptable in the target population?). The above process should lead to a short list of effective intervention strategies for the planning group to consider.

Determine the Feasibility of Implementing the Identified Intervention Strategies

Decisions about which interventions to implement should be based on the costeffectiveness of the intervention as determined from the literature review and the program evaluation documents described above as well as whether the intervention fits within the communities values and the potential resources available. If possible, for each potential intervention, a cost should be assigned for a given unit of service or a given increment in improved outcome. The appropriateness of each intervention to the community of interest should be determined. To do so, again review and consider the socio-demographic makeup of the community of interest, the geography of the area, the availability of appropriately skilled personnel and how acceptable the intervention might be to that community.

For each potential intervention strategy/program identifies:

- Anticipated benefits
- Potential barriers to implementation
- Resources required and available for implementation
- Potential for institutionalization in a given community
- Cost/benefit ratio of the program (if possible)

Resources include available funding, community assets/support, programmatic linkages, available existing personnel and other forms of support that might facilitate program implementation and sustainability. Barriers might include political, financial, operational, logistical or behavioral roadblocks to program implementation or success.

A feasibility assessment should be done that includes a simple accounting of required versus available resources (in both the short and long term), anticipated barriers to implementation and/or program sustainability, anticipated benefits of the program, and likelihood of implementation success and program sustainability.

Community Planning Step 4: Setting Goals, Outcome Objectives and Performance Measures

Once the pathways and key intervention points have been identified, the planning group will develop goals, outcome objectives and performance measures, and a theory or theories of change. These will guide the development of an action plan and a program(s).

How did we get here and why did we take this path?

Before proceeding, let us briefly review how you got to this point. At the beginning of the assessment process, the Coalition or planning group had developed a mission and goals. The goals were probably rather general, such as "All people in our community will enjoy optimal health", related to the group's work, "or "All residents in our Community will have access to health care".

Review

A *goal* is a broad statement of a long term, ideal accomplishment needed to achieve the vision. It is a big picture statement and often is not achieved in the life of a program or project.

An *indicator* is a precisely defined, quantifiable measure of a population's socio-demographic, health, health system or community asset status. Indicators are community level measures used for comparison and to assess need. They are not used here as measures of intervention or program effect unless the program target population and the community population are the same.

The Coalition then developed and selected a set of indicators for each goal. The collection and reporting of these indicators gave the group a good picture of the health status of its community. This picture included a comparison to standards such as Healthy People 2010, National or state data, other similar geographic or population data and/or comparison of local indicators in relation to themselves over time.

From this big picture, the Coalition used criteria to select priority health problems. Some groups developed overall outcome objectives at this point. For example, if the priority problem chosen was unintentional injuries among seniors, the overall outcome objective might be "To reduce the rate of unintentional injuries among senior residents in this county." Then, the group, or a reconstituted, more focused "Collaborative", returned to the data for more specific information about priority problems, specifically the distribution of this problem among age, race/ethnic and geographic subgroups. This helped to focus the problem analysis. The group examined information about the precursors and consequences specific to the defined problem and identified causal pathways. It collected and examined information about what interventions have been shown to be effective or promising in reducing the problem in communities and populations similar to your targeted community. It honed in on specific intervention points or strategies have the potential to be effective in its target community and it examined the adequacy of existing services that address the problem.

Based upon the findings of all of this assessment and research work, the Collaborative is ready to make decisions about desired program outcomes, the strategies it will implement and the program(s) that will be developed.

Common Problem:

It is at this stage that many groups and even experienced program developers skip a crucial step. They immediately start to develop the activities that they believe will benefit individuals and communities. Stop. Activities should not be defining the outcome objectives, rather, the activities should be derived from the objectives.

Better Approach

Goals and outcome objectives should be developed and agreed upon as the beginning step in the process of formulating a theory of change and *before* program activities are developed. Outcome objectives should be based on the results of the assessment, problem analysis, and exploration of intervention strategies. These will be the basis upon which program/activities are developed.

Think of the outcome measures as the framework upon which the activities and resource requirements hang.

Understanding Outcomes and Performance Measures

The purpose of the Hospital Community Benefits Program is to improve the health and well being of people in our communities. Over the previous twenty years, government, foundations and the public have increasingly demanded *accountability*. The focus is on implementing programs that can achieve desired results and demonstrating those results or outcomes. Outcome objectives and performance measures will enable your Collaborative to describe and concretely measure what will change as a result of the interventions you choose and implement. Program evaluation is not specifically discussed in this chapter; however, note that well developed, specific objectives and their measures are an essential component of good evaluation.

Definitions and Concepts

There are a plethora of terms that have been used over the past 30 years to describe goals, objectives and measuring progress towards desired change. Many of these terms are overlapping or are nuances of a concept. For this reason it is necessary that members of your collaborative agree on common terms and their definitions prior to any group development of goals and objectives. It is not necessary to use the terms provided in this guidance, however, we suggest that the elements and specificity discussed here are used. The following are suggested definitions of goals, objectives and measures that we use in this guide.

- **Program** An organized set of activities, supported by identified resources and designed to produce desired outcomes/results among particular individuals, groups and communities. A program has an administrative structure and accountability. Programs may encompass one intervention developed to target a single precursor or several interventions that address different, usually related, precursors. Programs may target an entire community or a defined segment of a community. A program is accountable for the outcomes of its defined target or participant population (which usually is not the entire community).
- **Goals** Broad statements of a long term ideal accomplishments
- **Outcomes** The results of an intervention that represent change in the health status, environmental conditions, awareness, knowledge, behaviors, and attitudes of individuals and communities. Outcomes may also encompass changes in systems, if the desired changes have been documented to be positively associated with improvements in the health status, environment, behaviors, attitudes, awareness of individuals and communities.
- **Objectives** Specific statements of desired achievements. Objectives are S.M.A.R.T. That is, an objective is Specific, Measurable, Achievable, Realistic, and Time framed. It uses action verbs and precise terms that cannot be misinterpreted. Objectives set the standard by which accomplishments will be measures. Objectives are extremely important as they provide the basis upon which activities are developed and evaluation conducted.

Program

Objectives There are two types of program objectives—outcome and process objectives. They are described below:

Program Outcome

- **Objectives** Concrete, specific, usually quantifiable statements of the desired *results* of a program. They are statements about expected changes or results in knowledge, attitude, behavior, health status, community conditions or norms, systems of health or social services, or policy. A good question to ask when developing outcome objectives is "what difference will this intervention or program make in the health or quality of life of those receiving it?" Usually, the changes desired will be long-term outcomes. In these cases intermediate objectives should be developed to measure progress towards achievement of the objectives.
 - Long term outcome objectives -- statements of desired change in health status (e.g., decreased infant mortality rates), quality of life (e.g., decreased community violence), or systems change (e.g., development of a comprehensive, integrated system of care). The achievement of long term outcomes is expected to take a number of years.
 - Intermediate outcome objectives statements of desired measurable results that can be expected in a shorter period of time than most health status changes. They address the risk factors and assets identified in the problem analyses and are steps in a specific pathway towards the long term objectives. They can include positive effects on knowledge, skills, attitudes, beliefs, behaviors, and conditions such as access to services. Examples are increase in exercise and decrease in smoking.
 - Short term outcome objectives –statements that reflect expected initial changes in a sequence of steps in a pathway towards long term outcomes. These generally include more immediate changes in knowledge or attitude or the completion of a short term product such as a plan. Used to track progress towards intermediate and long-term outcome objectives. An example is the improvement in knowledge immediately after an educational program.

Program outcome objectives focus on the effectiveness of a program and generally capture desired changes in the following:

- changes in participants' knowledge
- changes in participants' behavior
- changes in participant's health status
- changes in community conditions or norms
- changes in health care system
- longer-term changes in population health status (e.g., impact on teen pregnancy rate in the county)

Process

Objectives Statements of the important expected inputs, processes and outputs of the program. They focus on what and how services or interventions are delivered rather than on the impact or results. They usually contain phrases such as "to develop" or "to conduct" or "establish". They cannot be developed until the program resources, activities and services have been identified.

Process objectives capture how a program will operate, for example:

- units of service provided
- number of people served
- percent of target population participating in the program
- client satisfaction
- systems changes (e.g., new policies, financing, or practices resulting from the program)

Performance Measures:

Explicit evaluation measures of the intended effects of a program or strategy. In this guide, they are used to assess achievement or steps in the pathway towards achievement of objectives. They are usually quantitative and can be compared to a baseline or standard

Theory of Change: A conceptual model or set of assumptions about how and why desired change will occur as a result of an intervention(s) or program(s) and the benefits it is expected to produce. A theory of change may be based on the results of a literature review, expert opinion, experience, or it may propose a new hypothesis to be tested.



Logic Model A graphic representation of a linear sequence of activities and resources (i.e. inputs) and expected results (i.e., program outcomes) for an intervention derived from a selected theory or theories of change. The model shows a logical progression from resources to program outputs (e.g. units of service) to short to intermediate to long-term outcomes. When planning a program, the logic model is developed by beginning with outcomes and working back towards resource requirements. When evaluating a program, the logic begins with the resources and reads to outcomes.

The following is an example of a program logic framework.



See Appendix B-4 for program logic model examples. Logic Model B4-1 is an example logic model for a countywide breastfeeding initiative. Logic Model B4-2 an example logic model for a specific component program of the initiative.

The process of developing outcome objectives and performance measures

Although staff or a small group may do preliminary work to provide data and research to assist the informed selection of outcomes, the entire collaborative should be involved in developing and approving the outcome objectives.

This process is important because it:

- Builds consensus on what the group wants to achieve
- Promotes commitment and accountability to the outcomes
- Builds trust and respect among partners
- Promotes understanding and specificity of desired outcomes
- Assures the planned effort fits in with other efforts in the community
- Promotes a comprehensive community approach

If objectives were developed before this step, your collaborative should take the time to evaluate whether these objectives still apply and whether they are specific enough to the intervention points and pathways selected for intervention. The problem analysis diagram is an excellent tool to help the group link their outcome objectives to those important risk factors and key intervention points identified previously and to develop a theory of change. A collaborative will benefit from the guidance of a facilitator during this process. The facilitator should lead the group through a process of consensus building since groups often resist making their outcomes concrete and measurable.

Outcome objectives should include the following elements and be constructed to answer these questions:

Who will receive the intervention?

<u>What benefit</u> will be received or what changes occur? <u>How much change</u> can be expected given the number of people impacted, the resources available to the program and the effectiveness of the intervention? <u>By when</u> will the result be achieved?

These objectives should be SMART:

- **S**pecific—identify who will be affected, what will be done and where it will happen.
- Measurable—identify how many, how much change is expected
- Achievable—be sure the objective is attainable
- Realistic—be sure it can be achieved given the time and resources available
- Time-framed—identify when or within what period the objective be achieved

Below is a suggested format to assist the development of objectives.

Objective (the order of the elements of the objective can be changed according to style preference):

By _____, ____ of _____ will _____. (when) (% or % change) (who) (what result, change, benefit).

Example

By July 30, 2007, there will be a 25% reduction for children ages 1-5 years old, who are residents in X,Y,Z neighborhoods, in the rate of injuries due to motor vehicle accidents.

Check List for Developing Objectives	
Is the objective:	
 A valid representation of the desired outcome? Related to the selected intervention point? Significant (represent an important expected outcome)? Specific (who, how much, what, when)? Measurable? Clearly written? Achievable? Is the data necessary to measure the objective / performance measure available? 	

During the group process, it is unlikely that the objectives will be developed in their final form. What is important is that the elements (who, how much change, what benefit and by when) of the objective be identified and agreed upon by the group. Pointing out to the group that it will probably take many years to achieve an objective, ask what secondary achievements, sometimes called benchmarks, would tell them they are making progress towards the desired long term result. These will be short term and intermediate objectives.

The short term and intermediate objectives should flow from the intervention points and causal pathway identified in the problem analysis. The facilitator should repeatedly refer the group to the problem analysis diagram and the major intervention points identified through that process.

If objectives are specific and well written, performance measures easily flow from the objective. Performance measures should be identified or at least discussed at the same time the objectives are developed because participants should consider and be sure that data is or could be available to measure accomplishment.

Example:

Long Term Objective 🗲	Intermediate Objective 🖌	Short Term Objective
Reduce child injury rates due to auto accidents by 25%	90% of parents use child car seats	95% of parents are aware of the need for child car seats and
	85% of parents install seats correctly	understand how to select and install a seat correctly
The related Performance N	leasures:	
Annual child motor Vechicle-related Injury rates in the target population	% of parents who receive program services each year who use child car seats	% of parents who receive program services each year who are aware of the need for child car seats
	% of parents who receive program services each year who install seats correctly	and understand how to select and install one correctly

When guiding a group through the process of developing and refining objectives and measures, consider the following:

Number of objectives It is not necessary to have an outcome objective for every intervention point or risk factor the program(s) will address. It is important to have objectives for the major significant outcomes expected and for those outcomes for which accountability is required. The number of objectives will vary by the scope of the program(s).

Developing Long term outcome objectives. These objectives logically flow from the consequences identified in the problem analysis and captured by the indicator data gathered in the community assessment.

Developing short term and intermediate objectives. These objectives are derived from the identified risks and contributing factors to the problem. The review of intervention theories, proven and promising interventions, local experience and resource capacity are also considered in the development of these objectives.

Setting targets. Your group must make decisions about the reasonable amount of change (outcome objective) that can be expected. If at all possible it is important to have baseline data. If that is not possible, set the program targets at levels that seem reasonable given standards such as Healthy People 2010 or published results of similar programs. Progress towards these standards can then be tracked.

Writing objectives The objectives are not easy to develop or to write. Groups often resist developing specific objectives. As a result, it is easy to end up with vague general objectives. However, it is important to have agreement in a collaborative about the desired result. After a group determines the content of the objective (who, how much change, what benefit, by when) staff or other experienced persons in objective development will need to refine the objectives.

Developing realistic program outcome objectives: community versus program objectives It is important to be sure the group understands that a program level objective should be specific enough to be achievable. In the process of prioritizing problems the group may have identified an objective relating to the entire population of a community. However, at the point of implementing a specific program, the group must recognize that it can only be accountable for what it can realistically achieve given the scope and resources of that program.

Example

A large collaborative that has been working together over time may have a 5 year community level objective: By 2006, to decrease emergency room visits for Type II diabetes for African Americans in _____ County by 25%.

This objective would be appropriate for an initiative that encompasses many smaller, more specifically defined programs. As part of this effort, a particular hospital may be participating as a major partner in a specific program developed to assist African Americans in one neighborhood in the county to manage their disease,

Thus to assess it's performance the following more specific objective is necessary: To increase by 25% the % of African American individuals living in ______ neighborhood reporting physical activity at least 3 X weekly on a cross sectional conducted biannually on a representative sample of neighborhood residents. **Developing performance measures** A performance measure translates an objective into its very specific measurable parts. Measures should specify the calculation used (i.e., percent, rate), the numerator and denominator for the calculation, and the data source for each. They are used for tracking change and for comparison with a standard or baseline measure over time. Several different measures may be needed to capture progress towards or achievement of an objective. Members of the planning group may not fully understand the need to be precise and they may, in fact, resist being precise. They may be worried about the program results being explicitly measured and the program being held accountable to the standards they set. A facilitator may need to review the reasons for the precision required several times. He/she will also need to assist in building consensus about the benefits of measuring performance.

Data sources for measurement. For an objective to be relevant there must be a data source for the performance measure. The data sources used to track change are generally program-generated data, including program documents, pre-and post-client knowledge or behavioral assessments, client surveys, client records and program administrative databases such as claims data. If the program is broad in scope or the goal of multiple programs is the same, and is an expected impact at the community-level, population-based data may be used in addition to program-specific data. It is crucial that the necessary data be easily obtainable or there is agreement that the data will be collected.

The following example of a goal, an objective and performance measures for a program to eliminate disparities in the rates of type II diabetes between African Americans and Whites in Anywhere County illustrates the specificity required.

Example

Problem being addressed is Type II adult diabetes

<u>Goal</u>: Eliminate disparities in the rates of Type II diabetes between African Americans and Whites in Anywhere County.

<u>Community Outcome Objective</u>: By July 2006, reduce by 25% the disparities between African Americans and Whites in Anywhere County in the rates of Type II diabetes. (Note: This is a long term objective and may not be realized within the life of the program. Progress towards reaching this objective could be tracked by the County Health Department, using a set of community indicators)

<u>Program Intervention Strategy</u>: Increase physical activity by African Americans in targeted neighborhoods.

<u>**Program Outcome Objective:**</u> By June 30, 2004, there will be a 25% increase in the percent of African American individuals living in targeted neighborhoods who report physical activity at least 3 times a week.

<u>Performance Measure</u>: % of African American individuals living in targeted neighborhood (s) reporting physical activity (PA) at least 3 X weekly (number of individuals with PA / total # surveyed x 100)

Source of Data: Telephone survey conducted biannually

<u>Performance Measure</u>: % of African American individuals reporting increased physical activity in targeted neighborhood where an intensive media campaign has been conducted. (number of individuals with PA / total # surveyed x 100)

Source of Data: Convenience survey conducted in targeted neighborhood

Note that in the above example the objectives and measures are quantifiable, time framed and specific to the subgroup of individuals targeted by the selected intervention. Data collection methods are defined. Numerators and denominators are specified for the performance measures. It is important to develop realistic objectives. Avoid setting objective targets that promise more than is feasible with existing resources or state of the art interventions. It is assumed in the example that a literature review revealed the expected impact of a particular intervention that is being implemented in this community.

Asthma Case Study (continued)

In collaboration with the CBC, the AWG invited leaders and key informants from the local community to become active partners on the Partners Against Asthma Coalition. The purpose of this coalition was to provide guidance and resources to the planning, implementation and evaluation of the asthma related and community-based activities. The Coalition represented or had representatives from the following organizations and interests:

- Children and families with asthma
- Schools principals, coaches, teachers and school nurses
- A local representative from the Parent Teachers Association (PTA)
- Daycare and preschools, including a representative from the licensing agency and a local Head Start supervisor
- Faith communities
- Housing
- Environmental/air quality advocates
- Environmental Protection Agency
- American Lung Association
- Ethnic communities
- Physicians pediatricians and family practice
- Non-physician health care providers nurse practitioners, nurses, respiratory therapists, pharmacists, and health educators
- Social service providers
- Social clubs (Elks etc.)
- Local health department
- City Council/government
- Neighborhood groups
- Local businesses
- Community Health Clinic
- The local home health agency
- A representative from the Women Infant and Children (WIC) Program
- The local initiative MediCal plan
- Healthy Families
- The County Medical Society

All members of this group received copies of minutes and materials but many of the members only attended AWG meetings where issues relevant to their particular area of interest were discussed. The average meeting attendance was 12 to 15, a more workable number.

The AWG worked collaboratively with the Partners Against Asthma Coalition to clarify the key intervention points and causal pathways they had identified using the problem analysis diagram developed previously. They also reviewed the literature summary to understand the rationale for the proposed intervention. They used the indicators that had alerted them to the serious asthma problem in their community to frame long term outcome objectives. They understood that it could take many years to achieve these results; however they felt it was important for everyone to understand what they were trying to achieve and how they would know when they were successful.

The long-term program outcome objectives were:

Within 3 years following the implementation of the program activities, they hoped to reduce by 25% the rates of:

- Asthma-related school absenteeism
- Child hospitalizations
- Child emergency room visits

Members of the AWG networked with their local, state and national constituents to learn about successful programs and activities. They used resources and literature, introduced to them by the constituents, to identify effective strategies that addressed several of the barriers and opportunities identified in the focused assessment described above. Staff summarized the thinking of the AWG that through education of providers in the use of treatment plans there would be an increase in the knowledge level of parents and an improvement in the number of children taking appropriate medications resulting in fewer asthma attacks and fewer ER visits (theory of change).

They use the problem analysis and their theory of change to draft intermediate outcome objectives. These were not yet quantified, however as the program developed, staff and those designing the program would come back and make these objectives S.M.A.R.T. The objectives they developed are:

- 1) Increase the public's awareness of asthma
- 2) Increase the education of the public and health care providers related to the use of national recommended treatment plans
- 3) Educate the public of the need for medical care for asthma symptoms and the importance of asthma treatment plans
- 4) Create community-based support services and resources for children/families with asthma

Community Planning Step 6 - Developing a Community Action Plan and / or Program Action Plan

Your Collaborative has been systematically making decisions based on analysis of quantitative and qualitative data. See Diagram 1, page 2, which illustrates the decision and analyses points of the planning process. Each decision has helped to focus the planning effort to achieve selection of potentially effective interventions and the development of effective programs that can promote achievement of objectives. The findings and results of this planning process will be documented in the Action Plan. The Action Plan serves as documentation of what is planned. It is the working document or blueprint for program implementation.

Developing the Program

The Collaborative will select the most promising interventions using the literature review, local experience, cultural considerations and resource capacity. With the help of a facilitator (can use staff), the group should refine its chosen strategy or program and articulate a theory of change. Using its previous assessment, research, analyses and decisions, it should now translate the strategy into planned actions focused on clearly defined outcome objectives.

Once the outcome objectives have been defined it is important to develop very specific activities through which the intervention strategy can be implemented. This requires breaking down the components of the intervention into discrete pieces.

The detailed information needed to develop these pieces may be found in published program descriptions of effective interventions. If there is not enough detail to allow the identification of discrete activities and the type of skills that are necessary, it may mean contacting the authors of a published report or article to get detailed job descriptions, personnel classification documents and copies of educational materials or curricula used by these programs. There should be supporting material for each of the strategies/programs in the collaborative action plan.

An effective tool for assisting this process is a program logic model (see page 29 for a definition). It illustrates the logical relationship of individual program components to each other. Appendix B-4 contains two examples: Diagram B4-1 is an example of a collaborative community-wide breastfeeding promotion initiative. Diagram B4-2 is an example of one of the component programs of this larger effort. Note that the examples represent completed models. They were developed by starting with the long term objective(s) and working backwards. When used for evaluation purposes they are read from left to right.

Program Development Questions

In planning interventions or a program, groups should be starting with their goals and objectives and asking questions at each step of program development. The questions should be answered sequentially as follows:

- What is the measurable result(s) we want to achieve? These are the outcome objectives (may include long, intermediate and short term objectives)
- How will we know we are successful in achieving these results? These are performance outcome measures.
- What will it take to achieve the changes? These are identification of the target populations, specific activities broken down into their component parts, resources and the identification of responsible entities for achieving these changes.
- How will we know the program is operating as planned? These are performance *process* measures.

Levels of Action Planning

There are two levels of action planning that may take place depending on the size and scope of a collaborative assessment and planning. They are:

1) *Development of a Community Action Plan*. If your hospital is leading or participating in a large collaborative with many partners willing to take responsibility for different interventions or sets of interventions, you will be involved in developing a community action plan. This is sometimes called a strategic plan. If your collaborative has addressed a problem on a community wide level, it should develop a community action plan or strategic plan that includes the overall community level objectives, strategies (interventions/programs), organizations (or partnerships) responsible for each specific intervention or program, a timeline and overall process and outcome measures.

In addition to the Community Action Plan, the participating partners responsible for identified components should develop a *program* action plan. The details of these program's specific outcomes and the activities for which they will be responsible should be clearly outlined in their program action plan.

Thus, the Collaborative's Action Plan documents the aggregate effort and the individual component plans provide a detailed program action plan. The component action plans are specific to the program's intervention and capacity. They specify the specific objective or objectives that the program will address and detail the activities that will occur, when those activities should be completed, what staff will be responsible for the activities, what resources will be needed and provide the evaluation measures (outcome and process). This plan is analogous to the plan described below, under number 2.

In this circumstance, your hospital should be included in the community action plan and will also have its own program action plan. Or, if the hospital is participating in developing and implementing a program with other partners, the program action plan that is developed should specifically indicate which of the objectives, resources, activities and evaluation measures will be the responsibility of the hospital.

2) *Development of a Program Action Plan*. Many of the collaborative or hospitals working in smaller partnerships will not have the resources to impact community-wide problems. Small groups will only need to develop a program action plan, often referred to as a program implementation plan. If this is the case your program action plan will constitute the community benefit plan. Like the component program plans described above, it should be detailed and specific to the objectives and capacity of the program.

The Action Plan

Whether a community action plan or a program action plan, it should be a clearly written document that summarizes the assessment, the review and selection of intervention strategies, the theory of change and/or program logic model and the intervention or program plan. It presents what will be accomplished (goals and objectives), how (actions/activities), by whom (responsible entity), when (timeline) and specifies the evaluation measures.

The Action Plan helps collaborative to:

- Focus on long term objectives
- Articulate what interventions have been adopted
- Provide accountability when partners have committed

An action plan is developed after the group has determined the vision, mission, objectives, and strategies, usually within the first six months of initiating planning. The action plan will give the collaborative and the participating entities / program staff a blueprint for program implementation. Action plans should be reviewed regularly and modified when necessary. Action plans needn't be long documents. In fact a clear, specific document will be most useful for purposes of communication and use as an implementation tool.

Elements of the Community Action Plan

The Community Action Plan should consist of the following:

- 1. A summary of the priority problem or problems (narrative)
- 2. A summary of the analysis for each identified problem (narrative) and for each problem addressed:
- 3. Goals and objectives *
- 4. Intervention strategies or programs (actions) through which the intervention strategies can be implemented
- 5. Responsible entity (who will carry out these actions)

A reasonable timeline (by when will actions take place and for how long)

- 6. Evaluation indicators (community level) or measures (program level)
- 7. Estimation of the costs of the defined intervention (what resources are needed to carry out these interventions)

Elements 3-8 are usually best displayed in a table format. See example *Table 1*, Program Action Plan Format and *Table 2*, Suggested Collaborative Action Plan Format. The difference between the Collaborative level Community Action Plan and a component or stand alone Program Action Plan is the level of detail required.

Table 1: PROGRAM ACTION PLAN FORMAT

Program: Healthy Babies

Outcome Objective: To decrease the infant mortality rate to no more than 9 per 1000 live births by 2005

County Baseline: The current rate is 11 per 1000 (2000)

Healthy People 2010 Objective: The Healthy People 2000 Objective is "Reduce the infant mortality rate to no more than 7 per 1,000 live births"

Precursors Associated with Targeted Outcomes	Program Outcome Objective	Activities to Meet Objectives (Describe the steps of the intervention)	Accountable Agency, Staff Position, etc.	Target Group or Target Area	Data Sources for Evaluation	Performance Measure	Timeline
Inappropriate positioning of an infant for sleep	To decrease by 30% the number of infant deaths due to SIDS where inappropriate infant sleep positioning is an associated factor	Provide postpartum patients with the opportunity to view a video on proper positioning Provide each postpartum mother with an informational packet on SIDS	Delivery hospitals Delivery hospitals and OB clinics	Women in Maple County who will deliver a live born infant in the next 36 months	Birth certificate	<u>Outcome</u> : # infant deaths due to SIDS where infant sleep position is a factor/# of inf. deaths due to SIDS <u>Process:</u> # of patients viewing the video/# of patients # of informational packets given	Jan/2002 to Dec/2004
Women entering prenatal care late in pregnancy				African- American women living in the county			

Table 2: Suggested Collaborative Action Plan Format

Goals & Objectives	Implementation Strategies/Actions (What will be done)	Entity Taking Responsibility	Timeline (start and completion dates)	Resources Required	Collaborators/ Coordination	Performance Measures

Identifying the responsible agency (or staff, if a component plan)

For each activity in the action plan a specific responsible entity should be specified.

Developing timelines for the implementation activities

It is very common to underestimate the time it will take to implement a major intervention. Most often this is due to neglecting to recognize the obstacles to be expected, i.e., getting contracts approved, getting through the personnel issues, purchasing supplies or equipment, developing the relationships necessary in both the community and with other agencies. It is wise to allow at least 6 months for a new program to be operational. This means that the quantity of services and the degree of movement toward the targeted outcome needs to be reflective of the amount of time there will be for actual implementation. It is dangerous to promise too much over the short term or the program will be perceived as a failure before it even has a chance to succeed.

The other factor to consider is the interdependence of one activity on another and to account for this. Again it is important to do your homework here. If published reports of interventions don't contain enough information to help with the timeline, contact the authors or program directors to get this information. It takes time to implement an intervention and it often takes s a certain amount of time for the impact of the activities to reach a critical mass where an effect on an outcome would be perceived.

Creating a Cost Estimate

Estimate the associated costs. This means developing a budget for all of the activities in the plan.

FAMILY HEALTH OUTCOMES PROJECT Overview of Confidence Intervals

Disclaimer: This document is designed to familiarize you with confidence intervals. It is not intended to be (or to replace) a proper course in statistics. It does contain suggested rules of thumb that will help you to interpret information commonly reported in tables, figures, and charts.

Is it Better or Worse?

If you know the value of an indicator for only one group of people (e.g. low birth weight for county X in 1994 is 6.23%), you might ask, "so what?" In order to know if this value has relevance, you also need to know if the value for one group is really "different" than the value for another group. In most cases, when we talk about "differences," we want to consider "statistically significant differences" between groups.

Populations and Samples

We usually use statistics to describe a characteristic of a specific group. All possible members of the group form what is called in statistical parlance, a population. In most cases, it is not possible to record information about every person or element of a population. Instead, one can select a smaller group from the population. This smaller group is called a sample of the population. One can then measure the characteristic of interest in the sample. The summary measure, the statistic, used to describe the sample can also be used to describe the whole population.

However, by definition, a statistic is always an approximate measure of the true value of the characteristic found in the population. It is always an approximate measure because of errors that may occur in selecting the sample, taking the measurements, and calculating the statistic. We can never be "100% certain" that the statistic we have produced actually represents the "true" value of the characteristic in the population. We can, however, set limits as too "how certain" we are that it does represent the true value. By convention, an acceptable level of accuracy is set at 95% accuracy. In other words, we consider a statistic to be accurate if it produces the "correct" value 95 times out of 100. Conversely, we can say that it is unacceptable if chance factors lead to errors more than 5 times out of 100.

Data contained in Vital Records, such as number of live births or number of infant deaths, represent complete counts of these occurrences. Thus, they are not influenced by sampling error. They may be affected by non-sampling error, however. This is one reason to measure the accuracy of any statistics associated with data from vital records. In addition, The National Center for Health Statistics states that "when the figures (such

as the number of births or deaths) are used for analytic purposes, such as the comparison of rates over time, for different areas, or among different subgroups, the number of events that actually occurred may be considered as one of a large series of possible results that could have arisen under the same circumstances" (NCHS, Monthly Vital Statistics Report, Vol. 46, No. 6(S)2, February 26, 1998) For these reasons, it is advisable to measure how well a statistic measures what it purports to measure.

Confidence Limits

We can use the concept of 95% accuracy to tell how well our statistic measures the true characteristic of the population. We can set limits above and below our statistic, between which the "true" value found in the population will lie in 95 out of 100 cases. That is, if we take 100 samples from our population, the summary statistic for each of these samples will be within these limits in 95 out of the 100 samples. We call these limits the 95% confidence limits around the statistic. The lower limit is called the lower 95% confidence limit; the value above the summary statistic is called the upper 95% confidence limit. These limits form what is known as the 95% confidence interval.

When we create a confidence interval, it allows us to say that we are 95% confident that the true value for the population lies between the lower and upper limits we have determined.

Confidence intervals vary in width (the distance between the lower and upper limits) depending on the number of events or the denominator upon which they are based. As the number of events or the denominator with which a rate is calculated grows larger, the confidence interval surrounding the rate grows narrower. The confidence interval surrounding a rate such as the low birth-weight rate in a county in which there are, for example, 1,000 births (the denominator upon which the low birth-weight rate is based) will be wide. On the other hand, the confidence interval surrounding the low birth-weight rate in a county in which there are 10,000 births will be much narrower than that of the 1,000-birth county, even if the low birth-weight rates are identical in the two counties. The following figure shows how the width of a confidence interval varies by the size of the denominator from which the rate is calculated (in this case, the number of live births). As the number of live births decreases, the confidence interval widens, even if the rate remains the same.



Formula for calculation of 95% Confidence Interval

The FHOP Data Templates use the following formula to calculate 95% confidence intervals:

 $\pi \pm z_{\alpha/2} \sigma_{\pi}$,

where

у	=	Number of events
n	=	Denominator
π	=	y / n
$Z_{\alpha/2}$	=	1.96
σ_{π}	= √	π (1 - π)
		n

Statistical Differences

We often want to determine if the values of a statistic for two different groups really are different from each other. To do so, we can not simply look at the value of each statistic, because there is always error involved in calculating a statistic. We can use 95% confidence intervals to compare statistics for different groups, or use statistical tests such as chi-square tests and t tests.

Thus, using confidence intervals is simply one way to determine statistical differences. For example, we may have statistics and confidence intervals for the infant mortality rates for county X and for the state of California. The most conservative way to compare these rates is to compare the confidence intervals around each rate. If the confidence intervals do not overlap (if the lower limit of one is above the upper limit of the other or

the upper limit of one is below the lower limit of the other), then we can say that the two rates are significantly different. On the other hand, if the confidence intervals do overlap (if either the lower or upper limit of one confidence interval is within the range of the other confidence interval), then we cannot say that the two rates are significantly different.

The data templates use confidence intervals in several ways. First, by looking across an individual row, you can compare the confidence interval between the state and the county to determine if there is a significant difference. Secondly, by comparing the confidence intervals in the columns from one year to another, you can determine if there has been significant change over time. Third, you can compare the state or county confidence intervals to the Healthy People 2000 Objective. There is no confidence interval for the Healthy People 2000 Objective, so you can compare to the objective itself.

FAMILY HEALTH OUTCOMES PROJECT

Calculating and Interpreting Relative Risk

Relative risk is a statistical measure that indicates the strength of the association between two related events. Relative risk is the calculated ratio of incidence rates of an outcome between two groups of people. It is used to determine if a specific risk factor or disease is associated with an increase, decrease, or no change in the disease or outcome rate in those two groups of people.

Consider the following table of exposure to a risk factor and presence of a poor outcome. Relative risk can be calculated from a simple 2 X 2 table such as this one. The letters a, b, c, and d represent the number of cases in each table cell.



The formula for calculating relative risk is:

Relative risk =
$$\frac{a}{(a + b)}$$
$$\frac{c}{(c + d)}$$

When the relative risk associated with a factor is more than 1, then the factor is called a risk factor.

When the relative risk associated with a factor is less than 1, then the factor is called a protective factor.

If the relative risk equals 1, then factor is not associated with the outcome. Example: smoking during pregnancy (risk factor) and low birthweight (poor outcome).

	LBW	Not LBW	
Smoked While Pregnant	19	139	158
Did not Smoke While Pregnant	53	789	842
U	72	928	1,000
	<u>a</u>		
Relative risk =	(a + b)		
	C		
	(c + d)		
	19		
	(19 + 139)		
Relative risk =	53		
	(53 + 789)		
	19		
5.1.4	158		
Relative risk =	53		
	842		
Relative risk =	.12		
	.06		
Relative risk =	2.0		

In this example, the relative risk of low birth-weight associated with cigarette smoking while pregnant is 2.0. In other words, women who smoke while they are pregnant are twice as likely as those who do not to have a low birth-weight infant.

FAMILY HEALTH OUTCOMES PROJECT

Calculating and Interpreting Attributable Risk and Population Attributable Risk

Relative risk helps you determine whether a precursor is associated or causally linked to a particular outcome. Attributable risk helps you determine how much of an outcome may be attributable to a risk factor. Calculating attributable risk allows one to estimate the number or proportion of cases of an outcome attributable to a risk factor (for simplicity's sake, in this section we will refer to all precursors that contribute to a poor outcome as "risk factors"). This is a valuable measure, since it estimates the reduction in the poor outcome that could be achieved if the risk factor were eliminated. Attributable risk can be measured in two ways. On the one hand, attributable risk can mean the portion of the incidence of an outcome among people exposed to a risk factor that can be attributed to the exposure to the risk factor. This is called the attributable risk. Calculating the attributable risk determines the rate of the adverse outcome that may be attributable to the risk factor. On the other hand, one might want to know the proportion of all cases of an outcome in the total population that could be attributed to the exposure to the risk factor. This is called the population attributable risk percent. Calculating the population attributable risk percent allows you to determine what percent of an outcome could possibly be prevented if a risk factor were to be removed from the population.

ATTRIBUTABLE RISK

Let's first talk about attributable risk in the sense of the portion of the incidence of an outcome among people exposed to a risk factor that can be attributed to the exposure to the risk factor. This measure of attributable risk is defined as the difference in the incidence rates of an outcome between those exposed to a risk factor and those not exposed to a risk factor:

Attributable risk = incidence rate among exposed - incidence rate among non-exposed

Recall the data presented in the overview of relative risk, showing the 2 X 2 table for smoking during pregnancy and low birth-weight:

	Lc Birth-v		
Smoked During Pregnancy	Yes	No	
Yes	19	139	158
No	53	789	842
	72	928	1,000

Assuming that we are measuring incidence as a rate per 100, one can calculate the incidence of low birthweight attributable to smoking during pregnancy:

Attributable risk = incidence rate among exposed - incidence rate among non-exposed

Attributable risk = $((19/158) \times 100) - ((53/842) \times 100)$ = $((19/158) \times 100) - ((53/842) \times 100)$ = 12.0 - 6.2= 5.8

POPULATION ATTRIBUTABLE RISK PERCENT

Let us now consider the proportion of all cases of an outcome in the total population that could be attributed to the exposure to a risk factor. The Population Attributable Risk percent (PAR%) can be calculated if you know the relative risk of an outcome and the proportion of the population with the risk factor. We can refer to the proportion of the population with the risk factor the "proportion exposed" to the risk factor.

PAR% = [1 + Proportion Exposed x (Relative Risk - 1)] x 100 x 100

The proportion exposed ranges from 0 to 1.

Again, we can refer to the 2 x 2 table showing smoking during pregnancy and low birthweight:

-	Lc Birthw		
Smoked During Pregnancy	Yes	No	l
Yes	19	139	158
No	53	789	842
	72	928	1,000

The relative risk from this example is 2.0. The proportion exposed to the risk is 158 persons out of 1000, or .158. Calculating the PAR%, we obtain:

$$PAR\% = \frac{Proportion Exposed x (Relative Risk - 1)}{[1 + Proportion Exposed x (Relative Risk - 1)]} x 100$$

$$PAR\% = \frac{.158 x (2.0 - 1)}{[1 + .158 x (2.0 - 1)]} x 100$$

$$PAR\% = \frac{.158 x (1)}{[1 + .158 x (1)]} x 100$$

$$PAR\% = \frac{.158}{1.158} x (1)$$

PAR% = 13.6%

A population attributable risk percent of 13.6 means that 13.6% of low birthweight cases are attributable to smoking during pregnancy. Elimination of smoking during pregnancy could possibly reduce incidence of low birth-weight by 13.6%.

RELATIVE RISK AND ATTRIBUTABLE RISK

Both relative risk and attributable risk are valuable tools for determining the contribution of risk factors to an adverse outcome. Relative risk gives you a measure of the strength of the association or causal link between a risk factor and an outcome. Attributable risk gives you a measure of the extent to which an adverse outcome is attributable to a risk factor.

The population attributable risk percent is an especially useful, and underutilized, tool in program planning. It is useful in predicting the impact of public health interventions on adverse outcomes, since it considers both the relative risk and the prevalence of an adverse outcome. A risk factor with a high relative risk and a high

prevalence poses the most severe public health risk. One with a low relative risk and low prevalence poses the lowest public health risk. Risk factors with low relative risks but high prevalence, or high relative risks and low prevalence form an intermediate group of public health risks. The population attributable risk percent quantifies the contribution of the risk factor to the outcome and can thus help direct interventions.

The higher the population attributable risk percent, the greater the proportion of the outcome that is attributable to the risk factor. One can compare the values of population attributable risk percents for selected risk factors to identify those risk factors that are most important to base an intervention upon.

Most of the time, when we examine risk factors, we look at behaviors, medical conditions, and environmental factors. It makes sense to talk of "eliminating" these kinds of risk factors. There are other risk factors, such as race or age, that it does not make sense to consider "eliminating." Instead, identifying people at risk for an adverse outcome among racial or age groups provides populations to target for interventions.

It is important to note, however, that population attributable risk percents calculated from a 2 x 2 table are crude measures of attributable risk, since the outcome is compared to only one risk factor at a time. There is no way to know if other risk factors may underlie or explain the associations found in a 2 x 2 table. More advanced statistical methods such as multivariate regression analysis can be utilized to calculate attributable risks for individual risk factors that adjust for the influence of other potential risk factors. Another option is to review the literature for multivariate analyses done as part of studies of the outcomes of interest or the risk factors of interest.

FAMILY HEALTH OUTCOMES PROJECT RESOURCE MATRIX

Type of Service	Causal Factor Addressed	Agency	Location(s)	Population Served (#, demographics)	Cost of Care/Source of Funding	Evaluation
Clinical	Lack of prenatal care	St. Mary's Hospital clinics	ZIP CODES 94772, 94553 94118	100 teens aged 14-19 per year	\$750 per teen served/Medi-Cal fee-for-service	Enrolled teens have 5% LBW rate

INPUTS	OUTPUTS		OUT	COMES – IMP	АСТ
	Activities	Participation	Short	Intermediate	Long-Term
 Financial Resources Financial Resources Breastfeeding promotion is a priority MCH function Staff with expertise in breastfeeding information Access to staff with assessment skills Liaison with Relationship with local provider organization / professional groups 	 Assess provider breastfeeding promotion/education policies & practices Assess availability of lactation services Develop breast- feeding promotion materials Provide lactation resource information to providers Educate providers Provider referral to breastfeeding classes In-hospital education of new mother Collaborate w/ local Hospital to develop "Baby-Friendly" policy Collaborate on nursing school breastfeeding curriculum Promote "Baby- Friendly" workplace policy for City of Educate businesses about "baby-friendly" practices Develop directory of businesses friendly to breastfeeding Promote "Baby- Friendly" rest area at County Fair 	 OB-GYN Physicians Family Practice Physicians Provider Staff Pediatricians Businesses / business organizations City and County Representatives Cregnant Women Lactating Women Local Hospital Staff College Nursing Program Faculty and Staff Local Medical Association 	Completed assessment of provider policies and practices 95% of providers educated about breastfeeding 90% of providers have educational material displayed in their offices 95 of mothers receive in-hospital nurse education Directory of BF friendly businesses Establishment of "Baby-Friendly" rest area at County Fair Nursing School curriculum Community awareness of benefits of breast- feeding	provider referrals to lactation resources 90% of providers implement a breastfeeding education policy ↑ #/% of women completing a breastfeeding class <i>"Baby-Friendly"</i> policy adopted by local Hospital Local College Nursing Program incorporates new curriculum "60% of businesses will display baby friendly stickers "Baby-Friendly" policy adopted by local Hospital	 70% of mothers in county chose to breastfeed at hospital discharge 50% of mothers continue to breastfeed up to 6 months of age (HP2010) 25% of mothers who breastfeed will continue up to 12 months of age better infant health outcome as measured by anemia rates
INPUTS	OUTPUTS		OUTCOMES – IMPACT		
---	--	---	--	---	---
	Activities	Participation	Short	Intermediate	Long-Term
 Allocation of MCH resources to this program:hours of MCH staff time monthly Volunteers (2) knowledgeable/trained about breastfeeding grant \$, prop 10 \$ Staff with expertise in breastfeeding education Access to staff with assessment skills Technology: internet & e-mail access County Breastfeeding Coalition Relationship with local provider organization / professional groups 	 Assessment of current provider breastfeeding policies and practices Conduct provider trainings Develop e-mail breastfeeding education newsletter Establish process of provider referral to breastfeeding class Provide resource materials to providers and staff 	 OB-GYN Physicians Family Practice Physicians Provider Staff Pediatricians Nurse/support Staff Local provider medical association 	 95% of providers assessed for policies/practices 65% of physicians / office staff attend provider education trainings ↑# of provider referrals to classes ↑# of provider referrals to breast- feeding resource agencies 90% of providers have materials displayed in the waiting room / examination room 90% of offices will provide breastfeeding information packets 85% of physicians have a written breastfeeding policy 	 85% of women delivering at local hospitals report their physician discussed breastfeeding with them 85% or women delivering at local hospitals report an intent to breast feed for at least months at interview with lactation specialists 	 70% of mothers in county chose to breastfeed at hospital discharge 50% of mothers continue to breastfeed up to 6 months of age (HP2010) 25% of mothers who breastfeed will continue up to 12 months of age Better infant health outcome as measured by: anemia rates

CALIFORNIA'S

HOSPITAL COMMUNITY BENEFIT LAW

A PLANNER'S GUIDE

CHAPTER FIVE COLLABORATION

Model Adapted from Taylor-Powell, E. (1996). The Logic Model: A Program Performance Framework, University of Wisconsin-Extension: 20

Collaboration

"An unforeseen dividend of SB 697 was a stimulus for community-wide, collaborative health planning on a scale that has not been witnessed for many years. Perhaps this should not have been too surprising, for this broader-gauged planning is the natural extension of individual hospitals conducting needs assessments and benefit planning together with other interested parties in the community" (Senate Bill 697: 1998 Report to the Legislature, OSHPD).

Collaboration was not the primary goal of California's not-for-profit hospital community benefit legislation. However, the law cited that various community members must be consulted during the needs assessment, prioritization, community benefit planning processes and evaluation thereof. The end result was many hospitals found collaborating with the local communities and/or participating in existing community initiatives was the most effective way to address unmet health needs.

While, collaboration alone will not improve community health, when resources are shared and efforts are focused, there can be a dramatic impact on community health. Therefore, the following chapter has been included to provide a basic framework for hospitals involved in collaborative efforts.

In this chapter the following concepts will be discussed:

- A definition for collaboration
- Building and growing a collaborative
- Identifying community stakeholders
- Operating principals for institutions (i.e., hospitals) and communities in collaboration.
- Seven key factors of effective collaboration
- Further reading on collaboration

"Collaboration" - a definition

In popular use, a collaboration occurs anytime people work together to achieve an agreed-upon goal. For purposes of hospital community benefit planning, collaboration incorporates working with a wide variety of community and public health organizations.

Collaboration is the most intense way of working together while still retaining the separate identities of the organizations involved. The beauty of collaboration is the acknowledgement that each organization has a separate and special function, a power that it brings to the joint effort. At the same time, each separate organization provides valuable services or products often critical to the health and well-being of their community.

There are many names for collaboration. In the table below, 10 different types of joint efforts are explained. What distinguishes these efforts is the level of intensity involved. Two elements are crucial to successful joint efforts: everyone must agree on the level of intensity, and the intensity must be appropriate to the desired results.

Advisory	Provides suggestions and assistance at the request of	
Committeee	the organization.	
Alliance	A union or connection of interest that have similar	
	character, structure, or outlook; functions as a	
	semiofficial organization of organizations.	
Coalition	A temporary alliance of factions, parties, et al. for	
	some specific purpose; mobilizes individuals and	
	groups to influence outcomes.	
Commission	A body authorized to perform certain duties or steps or	
	to take on certain powers; generally appointed by an	
	official body.	
Consortium	Association, same as alliance.	
Cooperation	The act of working together to produce an effect.	
Coordination	Working to the same end with harmonious adjustment	
	or functioning.	
League	A compact for promoting common interest; an alliance.	
Network	Individuals or organizations with a common interest	
	formed in a loose-knit group.	
Task force	A self-contained unit for a specific purpose, often at	
	the request of an overseeing body that is not ongoing.	

Collaboration changes the way communities and hospitals work together. In collaborations, persons from a diversity of cultures and sectors should be included, larger results and strategies should be planned, consensus should be garnered, and long-term results should be demanded. Hospitals that enter into collaboration will have a greater impact on community health, obtain access to more resources, and begin to build long- term relationships in the community.

Building and Growing a Collaborative: The Process

The process of developing a collaborative can, at times, be equally important as the end results of the collaboration. As such, it is critical to pay close attention to the early formative stages of a collaboration. The following suggestions may be helpful in developing your process.

First steps

Identify the recognized need or common interest that participants can embrace

(e.g., needs assessment, teen pregnancy, pediatric asthma)

• When identified, invite interested parties and key players to the table

Build trust and develop relationships

- Listen and ask questions ask thoughtful follow-up questions
- Communication: informal meetings, discussions, memos and e-mails well before the first official meeting

Gain initial buy-in and commitment of key participants

- Ensure commitment from key participants in the community. A broad representation of community members and organizations are essential to effectively addressing the community needs.
- What are the benefits to the participants? It may be helpful to think in terms such as "bottom line" and "practical." And be sure not to underestimate what the collaborative can offer

Establish purpose and goals

 What do you want to accomplish? Primary Goals Secondary Goals

Next Steps

Think backwards. What do you want the end results to look like?

1. What do you need to know to get there?

2. Who do you need to help you get there?

A. Identify Stakeholders (see page 6)

- 1) Decision-makers (CEO's, Directors, Board Members, Business Leaders, etc.)
- 2) Direct Participants: Steering Committee designated staff, middle managers, volunteers
- 3) The community at large:
- B. Use specific criteria in the selection of stakeholders and be able to answer:
 - 1) Why a particular person or organization is important to the process/project?
 - 2) What do they bring to the table?
 - 3) What can you offer them?
 - 4) Describe their exact role, and responsibilities in the process/project
- 3. When do you need/want to be there?
- 4. Where can you find support and willing participants?

5. Why would potential partners want to participate?

Remember – these participants should be involved through out the entire process – use their input judiciously, but use it.

Other considerations

Determine Leadership and Management

- How will the collaborative be managed?
- Who will have decision-making powers and responsibility?
- Type of governance desired?
- Will political factors be allowed to influence the collaborative?

Design a work plan that outlines all of the above and includes a timeline

• This will change constantly – be flexible

Create a funding plan

- Grants
- Hospital funding
- Community Agencies (United Way, March of Dimes)
- Businesses
- County Health Agency

Don't duplicate – Expand, partner and share!

- Review what has already been done by others. If your current project is not being addressed in your community, look to comparable, cities, counties or hospitals.
- What tools (surveys, processes, newsletters, organizations) have been successful that can be modified for your purposes?
- Use the expertise of all participants and their connections PR and Marketing staff Researchers and Analysts Facilitators

Make the collaborative and its project visible to the community

Create a communication plan (see the chapter seven for more detail):

- Who is your target population?
- What do you want to convey?
- How often?
- What form of communication: newsletters, web pages, town hall meetings, radio, television and print media, formal report updates, meeting minutes, etc.?

Stakeholder Types

This is just a partial list of potential stakeholders in the community.

- Public Safety and Criminal Justice: police, fire, paramedic
- Appointed and elected officials within local and state government: public health department, league of cities, board of supervisors, local assemblyperson, local senator, city council members
- Business: private sector, transportation and housing development,
- Foundations: corporate, private, religious, public
- Education: schools, school districts, universities and community colleges, PTA
- Health Care: community clinics, other hospitals, mental health advocates, alternative health care providers, managed care companies.
- Media: local paper, community newsletters, local radio and TV stations
- Religious communities: Interfaith Councils, local faith community
- Social Service/Advocacy: not-for-profit housing, social services, advocacy, social services foundations, Human Relations Commission

- Seniors: individuals, AARP, senior centers, retirement communities, senior nutrition programs
- Youth: YMCA/YWCA, Boys and Girls Clubs, Big Brother/Sister programs, DARE support groups,
- Ethnic Groups

What makes it work: Seven key factors of effective collaboration

Introduction

Working Together for Healthier Communities: A Framework for Collaboration

Building healthier communities is the process of people working together to address what matters to them -- whether that is reducing violence, revitalizing an urban neighborhood, or promoting child health. A *Community* is a group of people that have something in common, such as living in a rural community or urban neighborhood, being a teenager, or a person of an ethnic/racial group.

To address the unmet health needs of the community, community conditions must be changed, with the hope that changing those conditions will change people's behavior and more distant outcomes. For example, a community collaborative might advocate for an ordinance which would make it more difficult for teens to buy cigarettes, with the hope that those changes will result in fewer teens smoking, and fewer related deaths.

Collaborative partnerships should focus on community changes -- bringing about those changes that improve local conditions. These changes are an intermediate outcome in the long process of community health improvement. Community and systems changes fall in to one of three categories, all of which should relate back to community-determined goals:

- New or modified **programs** e.g., after-school programs or prevention services
- New or modified **policies** e.g., higher fines for selling illegal products to minors
- New or modified practices

 e.g., improved access to health services or increased opportunities for
 academic responding in schools

1. Clear vision and mission

Initiatives with a clear and specific focus, such as increasing rates of childhood immunization or lowering the rate of unemployment, bring about high rates of change. The vision and mission may reflect a continuum of outcomes, including:

a) categorical issues (e.g., adolescent pregnancy)

b) broader interrelated concerns (e.g., youth development),

c) more fundamental social determinants of health and development (e.g., children living in poverty).

2. Action planning

Identifying specific community changes (that is, new or modified programs, policies, and practices) to be sought may be the single, most important practice that can be implemented. The action plan should be precise, specifying with whom, by whom, how and by when each action step should be carried out.

3. Leadership

A change in leadership can dramatically effect the rate of change brought about by a community collaborative. The loss of strong leadership can be particularly difficult for an organization. Also the type of leadership can dramatically effect the movement of the collaborative. Recruiting a neutral leader (volunteer or paid staff) can be an important tool for true community collaboration.

4. Resources for collaborative staff

Hiring staff can aid in following up on action plans to address unmet health needs. It can be very difficult to maintain a major collaboration without some paid staff. Staff can help fan the flames and keep the level of excitement about the organization and its goals at a consistently high level. However, often resources are tight and paid staff is not an option. In that case, it is important that collaborative members have a clear understanding of workload and responsibilities. Also, a point person should be designated to ensure that workload objectives are being accomplished by members.

5. Documentation and feedback on the changes brought about by the collaboration

It's also very important to keep a record of what has been done and how it was accomplished. Having this history can be an invaluable guide for the collaborative work. Looking regularly (at least quarterly) at what the group has done, how quickly it has occurred, and outside events that effect the group's work has been shown to spur groups onto even greater heights.

6. Technical assistance

Outside help with specific actions, such as action planning or securing resources, is also a way to support a group's efforts to transform its community.

7. Measuring progress

This step is important for a myriad of reasons. It helps your collaborative members to evaluate what has been accomplished thus far and what needs to be addressed in the future. It is also important to note that grant makers have the ability to increase rates of community change through incentives or disincentives to their grantees. For example, the annual renewal of multi-year awards or the offering of bonus grants could be based on evidence of progress or accomplishment by the community group.

To sum it up

Community health -- the well-being of the people who share a common place or experience -- requires changes in both the behaviors of large numbers of individuals and in the conditions that affect their health. Although community members are best positioned to determine their concerns and strategies, other partners are needed to help with technical support, and in obtaining financial and other needed resources. In this section, we recommend adjusting the related roles and responsibilities of community. The aim is to build the capacity of community members to address what matters to them. Our hope is that these ideas will stimulate dialogue and enhance collaboration among those committed to building healthier communities.

Operating principals for institutions and communities in collaboration

Institutions should consider the following as they enter into collaborative efforts with community members and community based groups:

- Have respect for the wisdom of individual residents and resident associations.
- Do not expect citizens to do the work of institutions
- Recognize that they are fellow residents with one symbolic vote to use in association with other fellow residents.
- Walk with the community on its journey rather than making the path or leading the way.
- Offer useful information for local people.
- Share information in understandable forms.
- Provide information that mobilizes local citizens to develop and implement solutions.
- Use resources and connections to strengthen the community.
- Listen for opportunities to enhance local leadership, strengthen local associations and magnify community commitments.
- Ask how the system's resources might enhance the problem-solving capacities of local groups.
- Work from a community assets map.
- Escape the ideology of a deficit model.
- Understand that communities are built upon the gifts, skill capacities and associations of people, not their deficiencies.

CALIFORNIA COUNTY DATA RESOURCES ON THE WEB

Family Health Outcomes Project University of California, San Francisco <u>http://www.ucsf.edu/fhop/</u>

POPULATION

The U.S. Bureau of the Census offers "Quick Facts" for counties. <u>http://guickfacts.census.gov/gfd/states/06000.html</u>

More population data from the Census Bureau. http://www.census.gov/population/www/estimates/countypop.html

More basic data from the Feds. http://www.fedstats.gov/gf/states/06000.html

The California Department of Finance (DOF) is the authority on California population. For example, they have county-specific summaries from the 2000 census. <u>http://www.dof.ca.gov/HTML/DEMOGRAP/2000Cover1.htm</u>

DOF also does population estimates and projections from 1970 through 2040 for each county. You can select a file for a particular year or for a particular county. But recognize that the files are fairly large text files. http://www.dof.ca.gov/HTML/DEMOGRAP/Race.htm

Also, look at various DOF reports, some of which contain tabular data for counties. <u>http://www.dof.ca.gov/HTML/DEMOGRAP/drupubs.htm</u>

BIRTH, ILLNESS, DEATH

A good place to start is the California DHS Center for Health Statistics. New tables are added frequently. http://www.dhs.ca.gov/hisp/chs/OHIR/vssdata/tables.htm

Also, look through the DHS "Advance Report". <u>http://www.dhs.ca.gov/hisp/chs/OHIR/Publication/Highlights/highlights.htm</u>

DHS has a vital statistics query system for some basic birth and death data. <u>http://www.applications.dhs.ca.gov/vsq/</u>

DHS teen birthing data and maps; also prenatal care data. <u>http://www.dhs.ca.gov/pcfh/mchb/reports.htm</u>

The UC Berkeley School of Public Health has compiled some perinatal indicators. <u>http://datamch.berkeley.edu/ccpr.html</u>

The March of Dimes recently introduced PeriStats. <u>http://peristats.modimes.org/</u>

Item #2-1 on this page has births by residence and occurrence for all counties. <u>http://www.cdc.gov/nchs/datawh/statab/unpubd/natality/natab97.htm</u>

The U.S. Health Resources and Services Administration (HRSA) has compiled fairly extensive briefings on health related matters for counties. <u>http://www.communityhealth.hrsa.gov/</u>

Death and survival data on AIDS. <u>http://www.dhs.ca.gov/aids/Statistics/Counties/CountyReport.htm</u>

More county-level AIDS data. http://www.dhs.ca.gov/ps/ooa/Statistics/AIDSCaseArchive.htm

Cancer data. Click on "State with County Drill down". Then click on the California part of the graph. http://cas.popchart.com/cancer?ac=1

Data on motor vehicle accidents and fatalities. You can drill down to county data. <u>http://www-fars.nhtsa.dot.gov/report.cfm?stateid=6&year=2000&title=States</u>

A commercial product with free data on births, population and deaths in California. <u>http://www.ehdp.com/index.htm</u>

Scroll down to the mortality and natality databases. <u>http://wonder.cdc.gov/DataSets.shtml</u>

The California Health Interview Survey (CHIS) will provide useful data for all but the smallest of counties. http://www.healthpolicy.ucla.edu/chis/index.html

Look here for a report on "Foodborne Disease Outbreaks in California" which has some tabular data for counties.

http://www.dhs.ca.gov/ps/dcdc/pdf/Reported%20FBDOs%20in%20CA%201998.pdf

Several of the reports here have county-specific data on STDs.

http://www.dhs.cahwnet.gov/ps/dcdc/STD/stdindex.htm

Look in the California Rabies Control Program Annual Report. Also, see the California Plague Report, and the Rodent Borne Disease Surveillance Report. <u>http://www.dhs.cahwnet.gov/ps/dcdc/html/publicat.htm</u>

This page has reports on cancer, some of which have county data. <u>http://www.ccrcal.org/Publications.html#Anchor-Cance-24728</u>

HEALTH SERVICES

DHS has a variety of county-specific data on Medi-Cal. <u>http://www.dhs.ca.gov/admin/ffdmb/mcss/RequestedData/files.htm</u>

DHS also publishes data on the County Medical Services Program. <u>http://www.dhs.ca.gov/cmsp/counties/</u>

Selected data from Medi-Cal Policy Institute. http://www.medi-cal.org/countydata/index.cfm

The California Office of OSHPD (OSHPD) has an interesting database on health services.

http://www.oshpd.cahwnet.gov/hid/infores/Perspectives/index.htm

OSHPD also publishes county specific hospital discharge data. Look under "Patient Discharge Profile".

http://www.oshpd.cahwnet.gov/hid/infores/patient/discharges/index.htm#Database

Toward the bottom of this page are links to reports on home health agencies, clinics, hospitals and long term care facilities. <u>http://www.oshpd.ca.gov/hid/infores/index.htm</u>

Scroll down to find federal Medicare enrollment by county. The resulting table will include disability enrollment. http://www.hcfa.gov/stats/

Search for Health Professional Service Areas or Medically Underserved Areas http://bphc.hrsa.gov/dsd/

Some of the tables in chapter 1 of this report offer county-specific estimates of health insurance coverage and uninsurance. <u>http://chpps.berkeley.edu:80/publications/thanks99.htm</u> The UCLA Center for Health Policy Research offer estimates of uninsurance by Assembly and Senate districts. Scroll down to "Policy Research Reports". http://www.healthpolicy.ucla.edu/publications/index.html

Data in immunization levels. Look in the "Assessment Survey Results". http://www.dhs.cahwnet.gov/ps/dcdc/izgroup/index.htm

This site has data on EMS resources by county. http://www.emsa.ca.gov/data inf/data inf.asp

EDUCATION AND WELFARE

The California Department of Education (CDE) publishes a variety of data on education. Their DataQuest system allows for searching. http://data1.cde.ca.gov/dataguest/

CDE's data on academic performance. http://www.cde.ca.gov/psaa/api/

CDE's data on school test scores. http://star.cde.ca.gov/

Children Now has a report called "CA State of Our Children" with tables on counties in the appendices. http://www.childrennow.org/publications.html

Also, take at look at Children Now's California County Data Book (scroll down to the link).

http://www.childrennow.org/newsroom/news-01/pr-11-28-01.cfm

The California Department of Social Services (CDSS) offers a variety of "data tables" on AFDC, adult programs, food stamps, and foster care, which have county-specific data. Also, look at the various "reports" for data on child abuse, adoptions, etc. http://www.dss.cahwnet.gov/research/default.htm

OTHERS

The California Department of Justice has county-specific data listed under "Criminal Justice Profiles". Also, see their "Report on Juvenile Arrests". http://caag.state.ca.us/cjsc/pubs.htm

The California Highway Patrol reports on traffic collisions and fatalities by county. http://www.chp.ca.gov/html/switrs1999.html#section8

Labor force and unemployment data, major employers by county. See also County Snapshots.

http://www.calmis.cahwnet.gov/

Inmates at state prisons. http://www.cdc.state.ca.us/reports/offender.htm

The California Digital Library of the University of California has initiated the Counting California project to consolidate data collected from a variety of sources. A number of their tables are specific to counties. <u>http://countingcalifornia.cdlib.org/</u>

Check out the California Digital Atlas. <u>http://130.166.124.2/CApage1.html</u>

The National Atlas allows mapping for a variety of data, including some health information. <u>http://www.nationalatlas.gov/</u>

This census page has census tract maps for each of the counties. You will have to "inflate" the map to see the details. <u>http://ftp2.census.gov/plmap/pl_trt/st06_California/</u>

And this census page has maps for counties that reach down to the block level. <u>http://ftp2.census.gov/plmap/pl_blk/st06_California/</u>

The Rand Corporation offers a broad variety of social, demographic and economic data for counties.

http://ca.rand.org/stats/statistics.html

IMPLEMENTATION

OF

CALIFORNIA'S

NON-PROFIT HOSPITAL BENEFIT LAW

A PLANNER'S GUIDE

CHAPTER SIX

RESOURCES

Online Resources and Tools

Alliance for National Renewal

http://www.ncl.org/anr

Contains an organizational directory, community building models and a newsletter.

The Alliance

http://www.allianceonline.org/default.htm

Provides management and governance information and support services to nonprofit organizations.

Beacon Project

http://www.beaconproject.org

Offers volunteer assistance, management education and research information for non-profit management.

California Healthy Start

http://www.cde.ca.gov/healthystart

Brings schools, businesses, non-profits and governmental agencies together to develop school-linked services.

The Civic Network

http://www.civic.net:2401/ Delivers resources to promote civic involvement.

Civic Practices Network

http://www.cpn.org/

Brings individuals, community based organizations, businesses, and institutions together. Provides tools, tips and positive examples of civic engagement.

Coalition for Healthier Cities and Communities

<u>http://www.healthycommunities.org</u> Develops and provides resources, networking, and models for healthy community movements.

Chandler Center for Community Leadership

http://crs.uvm.edu/nnco/collab/wellness.html

Focuses on the practical application of research, proven success and action to solve community problems.

Community Development Society

http://comm-dev.org Promotes community development through conferences, networking and publications.

Community Tool Box

http://ctb.lsi.ukans.edu/

Provides tips, tools and resources on all aspects of community building including: visioning, facilitation, collaboration, media and communication, participation, planning and evaluation.

Community Works Toolbox

http://cdinet.com/Toolbox/

Provides resources, strategies and links to assist new and existing community organizations and neighborhood groups.

ERIC Clearinghouse

http://www.gseis.ucla.edu/ERIC/eric.html

Searchable database of reference materials and journal articles on collaboration and other topics.

HandsNet

http://www.handsnet.org/

Integrates effective online communications strategies with community organizations to strengthen their programs and policies for children, families and people in need.

National Community Building Network

http://www.ncbn.org

Supports community-building efforts to achieve social and economic equity by providing advocacy, conferences, information and technical assistance.

National Civic League

http://www.ncl.org/ncl

Advocates for and provides resources and support to civic engagement and community improvement efforts across the country.

Neighborhoods Online

http://www.libertynet.org/nol/natl.html Promotes neighborhood empowerment.

Pathways to School Improvement

http://www.ncrel.org

Research-based information on school improvement.

Pew Partnership

http://www.pew-partnership.org/

Civic research organization with information on successful community solutions and civic practices.

Together We Can Initiative

http://www.togetherwecan.org Leadership development and training support for collaboratives.

U.S. Department of Housing and Urban Development, Office of Community Planning and Development

<u>http://www.hud.gov</u> Funding for job development, housing, AIDS, and community development programs.

Suggested Reading

Amherst H. Wilder Foundation. 1997. *Community Building: What Makes It Work: A Review of Factors Influencing Successful Community Building.* To order, call 1-800-274-6024.

Axner, Marya. 1993. *The Community Leadership Project Curriculum*. To order, call the Topsfield Foundation at 203-928-2616.

Blank, Martin J. and Danzberger, Jacqueline 1996. *Creating and Nurturing Collaboration in Communities*. Details five cities working for collaborative change. To order, call 202-822-8405.

Blank, Martin J. and Lombardi, Joan 1992. *Toward Improved Services for Children and Families: Forging New Relationships Through Collaboration*. For more information, go to: <u>http://eric-web.tc.columbia.edu/abstracts/ed364356.html</u>

Blank, Martin J. and Melaville, Atelia 1993. *Together We Can: A Guide for Crafting a Profamily System of Education and Human Services*. Comprehensive tool for systems change in children, youth and family services. To order, call 202-219-2129.

Chrislip, David D. and Larson, Carl E. 1994. *Collaborative Leadership: How Citizens and Civic Leaders Can Make a Difference* (San Francisco, Jossey-Bass).

Chynoweth, Judith K. 1994. *A Guide to Community-based Collaborative Strategic Planning*. Provides basic tools for collaborative planning. To order, call 202-624-5386.

Crowley, James F. and Muldoon, Joseph A. 1989. *The Alliance for Change: Task Force Planning Guide.* To order, call Community Intervention, Inc. at 800-328-0417.

Gray, Barbara 1989. *Collaborating: Finding Common Ground for Multiparty Problems* (San Francisco, Jossey-Bass). For more information, go to: <u>http://www.josseybass.com/index.html</u>

Himmelman, Arthur T. 1992. *Communities Working Collaboratively For a Change.* To order, call 612-824-5507.

Hodgkinson, Harold L. and Others, American Association of School Administrators, Arlington, Va.; National School Boards Association, Alexandria, VA. 1991. *Beyond the Schools: How Schools & Communities Must Collaborate To Solve The Problems Facing America's Youth.* For more information, go to: <u>http://eric-</u> web.tc.columbia.edu/abstracts/ed346552.html

Kaye, Gillian and Wolff, Tom Ph.D. 1997. *From the Ground Up! A Workbook on Coalition Building & Community Development.* To order, call AHEC/Community Partners at 413-253-4283.

Kretzmann, John P. and McKnight, John L. 1993. *Building Communities from the Inside Out; A Path Toward Finding and Mobilizing a Community's Assets.* To order, call ACTA Publications at 800-397-0079.

Mattessich, Paul and Monsey, Barbara R., Amherst H. Wilder Foundation, 1992. *Collaboration: What Makes It Work.* Detailed descriptions of the 19 key elements of collaboration. To order, call 800-274-6024.

Melaville, Atelia I., with Blank, Martin J. 1991. *What It Takes: Structuring Interagency Partnerships To Connect Children and Families With Comprehensive Services*. For more information, go to: http://eric-web.tc.columbia.edu/abstracts/ed330748.html

Potapchuk, William, Crocker, Jarle and Schechter Jr., William. *Systems Reform and Local Government: Improving Outcomes for Children, Families and Neighborhoods.* Discusses institutional and cultural barriers to effective collaboration in communities. To order, call 202-783-2961.

Winer, Michael and Ray, Karen, Amherst H. Wilder Foundation. 1994. *Collaboration Handbook: Creating, Sustaining, and Enjoying the Journey.* To order, call 1-800-274-6024.