CHAPTER IV

DEVELOPING OBJECTIVES, PERFORMANCE MEASURES, AND AN ACTION PLAN

After conducting a problem analysis and identifying intervention points and potential interventions, decisions will need to be made about what the specific objectives are, how performance will be measured and which intervention or set of interventions will be implemented. This chapter describes the intervention development process, the tools that can inform the decisions regarding the development of effective interventions and achievable outcomes within available resources, and how to develop and write objectives and performance measures.

The resulting action plan documents the objectives, the proposed interventions or activities, the target population, the persons/agencies responsible for completing the activities, and the deadlines for completion of the activities. This chapter:

- Provides definitions of terms introduced in this chapter
- Discusses program intervention development to achieve targeted outcomes
- Describes the process and methods of developing objectives and measures
- Introduces the use of logic models
- Describes the development of specific program activities
- Describes the action plan

Definitions

There are many terms and various definitions of the same term that have been used over the past 30 years to describe goals, objectives, theories of intervention, and the measurement of progress towards desired change. It is necessary that staff and planning group members understand and agree on the use of terms and their definitions. The following are the definitions that we use in this guide.

Intervention

A defined effort to effect change. The effort is based on analysis of the precursors and consequences of a problem.

Program

An organized set of activities supported by identified designed produce resources and to desired outcomes/results among a defined population or geographic area. A program has an administrative structure and accountability. The program is accountable for the outcomes of its defined target or participant population. For example, a County MCH program addresses the health of women, children, adolescents and their families who live in the county. It generally has component programs that may encompass either one intervention developed to target a single problem or precursor or several interventions that address different, usually related, precursors or problems.

Goals

Timeless aspirations that describe where a group or program will target efforts in order to actualize its vision of the future. They are broad statements of long-term ideal accomplishments.

Objectives

Specific statements of desired achievements that are expected to occur as a result of an intervention or program. Objectives are S.M.A.R.T. That is, an objective is Specific, Measurable, Achievable, Realistic, and Time-framed. It employs action verbs and precise terms that cannot be misinterpreted. Objectives set the standard by which accomplishments will be measured. They are extremely important as they provide the basis upon which activities are developed and evaluation conducted.

Public/Population Health Objectives

Public health objectives target change in an entire (geographic, ethnic/racial, population population). They focus on the totality of programs or interventions that are aimed at a particular problem for the entire population of a health jurisdiction. There may be many interventions or programs aimed at reaching these population health objectives. They are statements of desired measurable results in health status, health outcomes, or health care systems, the achievement of which is expected to take many years. The sources of data used to track change include population-based data sets, such as birth certificate data, infant mortality data, payor source data (MediCal claims), and surveys based on representative samples of the population.

Program Objectives

Program objectives target change in the specific population a program serves. The sources of data used to track change are generally program-generated data, including program documents, pre- and posttests, client surveys, client records and administrative databases. If the program is broad in scope and the impact on community-level outcomes is being evaluated, population-based indicator data may be used in addition to program-specific data. There are two types of program objectives—program outcome and program process objectives.

Outcomes

The quantifiable results of the specific interventions undertaken. They may represent a change in the health status, environmental conditions, awareness, knowledge, intentions, behaviors, or attitudes of individuals or communities. Outcomes may also include changes in systems, if the changes are associated with corresponding changes in health status or risk factors.

Outcome Objectives

Concrete, specific, and usually quantifiable statements of the expected *results* of a broad public health initiative/intervention or a particular health program. A good question to ask when developing outcome objectives is "what specific 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 and short-term objectives should also be developed to measure progress towards achievement of the long-term objectives. Sometimes it is useful to label and group objectives in this sequence, i.e., in a program logic model (see logic model definition below).

Public health outcome objectives measure the *cumulative effect of all programs* targeting a particular health problem on *the entire population effected*. Program outcome objectives focus on the *effectiveness of a specific program* and generally capture desired *changes in the program's target group or participants*

Long Term
Outcome Objectives

These are usually population or public health outcome objectives and often their focus is on the totality of programs or interventions that are aimed at a particular problem for the entire population of a health jurisdiction. They can cover the same domains as mentioned under program outcome objectives. They are statements of desired measurable results in health status or health outcomes, the achievement of which is expected to take many years. Examples include a decrease in infant mortality rate, or a decrease in sexually transmitted disease incidence

Intermediate
Outcome Objectives

Statements of desired measurable results that can be expected in a shorter period of time than most health status changes. These are generally the objectives that can be expected to be achieved within the time period of most funded projects (2-3 years). They address the precursors identified in the problem analysis and are steps in a specific pathway towards the long-term objectives. They can include positive effects on behaviors, and conditions such as access to services. Examples include an increase in the percent of mothers who report placing infants in a prone position to sleep or an increase in the percent of the population that reports use of condoms when engaging in sexual intercourse.

Short Term Outcome Objectives Statements that reflect expected initial changes in a sequence of steps in a pathway towards long term outcomes. These include more immediate changes in knowledge or attitude or the completion of a short-term product such as a plan. They are used to track progress towards intermediate and long-term outcome objectives. Examples include an increase in knowledge about the risk of infant mortality from placing babies in a supine position to sleep, or the increased awareness of the beneficial effect of the use of condoms to prevent STDs immediately after a specific educational session.

Process Objectives Process objectives are statements about the desired amount of specified resources, activities or participants of a program. They are used to determine what program services or interventions are delivered and how services were delivered rather than on the impact or results. They usually contain phrases such as "to develop (a plan)" or "to

conduct (6 trainings)" or "to provide (500 home visits)."

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 (sometimes considered an outcome)
- Systems changes (e.g., new policies, financing, or practices implemented by the program)

Performance Measures

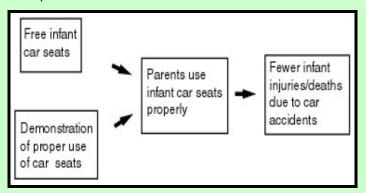
of a program on health behaviors, outcomes or services utilization of its participants; or the adequacy of implementation of intervention activities. Performance measures should be compared to a baseline or standard. A set of performance measures is often identified to assess the achievement of a program objective.

Quantifiable measures of either: the intended results

Theory of Change

A set of assumptions or a conceptual model that is used to support the use of a particular intervention and describe how and why desired change or health benefits will occur as a result of an intervention(s). A theory of change is usually based on the findings of a literature review, expert opinion, and/or experience. Alternatively, it may represent a new hypothesis to be tested.

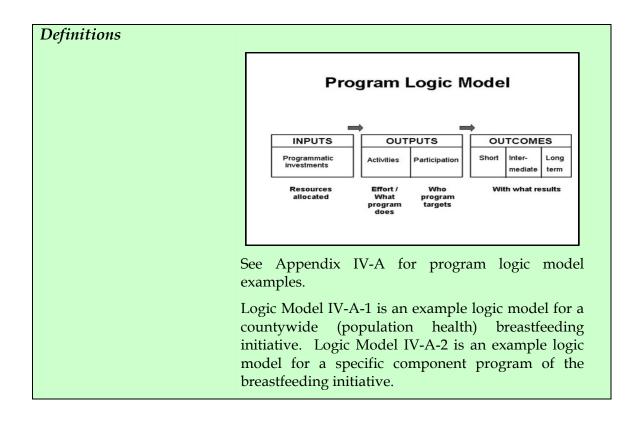
Example:



Logic Model

A graphic, longitudinal diagram of a series of the essential steps in achieving the desired long-term outcome(s) of an intervention. The model shows a logical progression from resources to program outputs to short, intermediate and long-term outcomes. When a group plans a program, it should develop a logic model beginning with expected outcomes and working backwards toward resource requirements. When evaluating a program, the logic begins with the resources and reads toward outcomes.

The following is a program logic framework:



PROGRAM INTERVENTION DEVELOPMENT TO ACHIEVE TARGETED OUTCOMES

An Inclusive Process

If the interventions being developed will incorporate partners other than MCH, if it will affect other programs, if it will benefit from the support of other community groups, or if there is resistance to program development by stakeholders, the inclusion of these other parties in the intervention development process is important because it:

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

Continuing an Organized, Systematic Planning Process

During the problem analysis process described in Chapter III, the planning group may have assigned subcommittees or working groups to each of the priority problem areas. Ideally each working group should include experts in the problem areas, as well as any possible collaborating partners or other stakeholders. As the work of each subcommittee is completed, it comes back to the larger group for review and approval. At the conclusion of the problem analysis process, key points of intervention, intervention pathways and feasible potential interventions were identified.

The group is now ready to begin the process of intervention development for the priority problems as illustrated below:



At the working group level, for each priority problem, a short list of feasible interventions is developed and there is a discussion about how the intervention would work (based on a combination of literature review, expert opinion, local experience and expected outcomes). These concepts are often discussed informally. In some groups they are developed more formally into a theory(ies) of change. A theory of change is the set of assumptions upon which proposed interventions are based. The workgroup will provide recommendations regarding interventions. The larger planning group may wish to review and approve which interventions to implement. If so, after review and approval it will send the selected interventions back to the working group or to staff. Once the key interventions are decided on, the working group should review and finalize the outcome objectives developed earlier in the process and develop program objectives, an intervention description and/or model, and specific implementation actions (activities). The work of this group will then be incorporated into the Program Action Plan, organized under the program's primary outcome objectives. Generally, for large multi-component programs, such as MCH, or large initiatives, there will be an overall action plan with supplementary, more detailed action/intervention plans for each specific component program. For example, the local MCH 5 year plan will be a "global" action plan that shows the intervention strategies and expected outcomes for the jurisdiction's priority problems. interventions/programs developed to address the problem may have, in addition, its own program plan.

DEVELOPING OBJECTIVES AND PERFORMANCE MEASURES

The Importance of Measures of Success: Outcome Objectives and Performance Measures

Over the previous twenty years, the government, foundations and the public have increasingly demanded accountability for program results. Their focus is on implementing programs that can achieve results and demonstrate those results or outcomes. Outcome objectives and performance measures will enable your planning group to describe and concretely measure what will change as a result of the interventions. Program evaluation is not specifically discussed in this chapter; however, note that well developed, specific objectives and their performance measures are essential to any good evaluation. Remember to include your program evaluators or other persons with evaluation expertise as early as possible in your process of intervention, objective and performance measure development.

Developing Objectives

If objectives were developed earlier in the process or in a previous planning process, your planning group should take the time to evaluate whether these objectives still apply and whether they are specific to the intervention points and pathways selected as a result of the problem analysis. While the group may have adopted some outcome objectives from federal or state program guidance, its own problem analysis will assist in the development of intermediate and short term objectives and program intervention strategies that are specific to its community.

The short term and intermediate objectives will be derived from the intervention points and causal pathways identified in the problem analysis. The facilitator should repeatedly refer the group to the problem analysis diagram to examine the problem pathway, the theory of change adopted or developed by the group and the program model it has developed.

Objectives should be **SMART**. They should be:

- <u>Specific</u>—identify who will receive the intervention, what will be done and where it will happen
- Measurable what benefit is expected and how much change is expected
- Achievable be sure the objective is attainable
- Realistic it can be achieved given the time and resources available
- <u>Time-Framed</u>—identify when or within what period the objective will be achieved

Writing Objectives

The elements of the statement of an objective are the time frame, the quantified target or change expected, the persons or entities receiving the intervention, and the result expected. The order of the elements of the objective can be changed according to style preference. Below is a suggested *format* to assist the development and writing of objectives.



Examples of Long Term Public Health Outcome Objectives

By July 30, 2005, 90% of babies born to African American mothers will be born at greater than 38 weeks gestation.

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

Check List for Developing Outcome Objectives		
Is the objective:		
Significant (represent an important expected outcome)? A valid representation of the desired outcome? Related to the selected intervention point? Clearly written? Is the data necessary to measure the objective available?		
Is it SMART:		
Specific (who, what, when)?		
Measurable (what benefit, how much)?		
Achievable (attainable)?		
Realistic (doable within resources and timeframe)?		
Time-framed		

During a group process, it is unlikely that the objectives will be developed in their final form. Point out to the intervention planning group that it will probably take many years to achieve many of the outcome objectives. Ask them what intermediate and short term achievements, sometimes called benchmarks, would tell them the program is making progress towards the desired long term result.

Example of a Group's Development of Objectives and Measures

The case study below continues with the case study presented in Chapter III:

Asthma Case Study (continued from Chapter III)

The AWG 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. Note that since the program was a county wide effort the long term objectives are identical to public health objectives

The long-term outcome objectives were:

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

- Asthma-related school absenteeism in kindergarten through 6th grade in schools within identified neighborhoods where baseline data shows high absentee rates
- Child (under 12 years) hospitalizations in the county related to asthma
- Child emergency room visits related to asthma (assessed to be ambulatory care sensitive)

They used the problem analysis and their theories 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 the group initially developed and gave to staff for refinement, identification of measures and of data sources are:

- Increase the public's awareness of asthma.
- Increase the education of health care providers related to the use of nationally recommended treatment plans
- Educate the public of the need for medical care for asthma symptoms and the importance of asthma treatment plans
- Create or identify community-based support services and resources for children/families with asthma

At this point the AWG was ready to bring their work back to the larger group for review. They used their problem analysis diagram to depict the "asthma story" in their community and to illustrate the causal pathway(s) and intervention points. Once the coalition members understood the causal pathway and the rational for the intervention points the AWG had identified, they adopted the AWG's recommended objectives.

The objectives were incorporated into the MCH 5 year plan objectives and staff was asked to develop a program(s), which would engage community partners in efforts to reach these objectives.

Performance Measures

If objectives are specific and well written, performance measures easily flow from them. Performance measures should be identified or at least discussed at the same time that the objectives are developed because participants should be sure that data is or could be available to measure accomplishment. Performance measures provide the data that tell stakeholders how they will know the program objectives have been accomplished.

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 (more will be said about this in Chapter V, Program Evaluation and Performance Monitoring). 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 an objective. Members of a program planning group and program staff may not fully understand this need for precise measures and they may, in fact, resist them. They may be worried about the program results being explicitly measured and the program being held accountable to the standards they set. You may need to review the reasons for this necessary precision several times with program stakeholders to build consensus about the benefits of measuring performance.

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% parents are aware of the need for child car seats		
	85% of parents install seats correctly	85% of parents understand how to select and install a seat correctly		
The Related Performance Measures:				
Percent of child motor vehicle-related injury rates in the target population per year	% of parents who receive program services each year who use child car seats	% of parents receiving 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	% of parents receiving program services who understand how to select and install a seat correctly		

Considerations When Developing Objectives and Measures

For each problem, the facilitator should consider the following when guiding a group through the process of developing and refining objectives and measures:

Setting Targets

Your group must make decisions about the reasonable amount of change that can be expected. It is important to develop realistic objectives. You may want to review the section in Chapter III on relative risk and attributable risk to assist you in making a realistic estimate. Avoid setting objective targets that promise more than is feasible with existing resources or state of the art interventions. If at all possible, it is important to have local baseline data. If that is not possible, use standards such as Healthy People 2010 or published results of similar programs as your baselines from which you then set reasonable program targets. Progress towards these standards can then be tracked.

Determining the Number of Objectives

It is not necessary to have an outcome objective for every intervention point or risk factor that the program will address. It is important, however, 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).

Writing Objectives

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 the planning group 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 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 Outcome Objectives

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

Developing Realistic Program Outcome Objectives: Community vs. 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 component 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 July 2006, decrease emergency room visits for children (under age 12) diagnosed with asthma in Anywhere 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 program may be developed to increase the number of children diagnosed with asthma in elementary schools in targeted neighborhoods who have a written asthma management plan developed with the family by a doctor or other health care professional.

Thus, to assess the elementary school program's performance, the following more specific objective is necessary: By July 2006, 90% of children diagnosed with asthma in six targeted elementary schools will have a written asthma management plan developed by a health care professional with the child's family.

Developing Process Objectives and Measures

Process objectives and measures are developed once program activities and scope have been determined. The measures assess the degree to which a program is implemented as planned. They are very useful for monitoring the implementation progress and for identifying implementation problems.

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 is easily obtainable or there is agreement that the data will be collected.

USING LOGIC MODEL(S)

A useful tool for both planning and evaluating a program is the program logic model. This model will help you develop or assess your interventions within the framework of needed resources and desired outcomes. The logic model will also assist in identifying potential barriers to the accomplishment of the activities and, thus, allow the program to take steps to address these. Ideally, a program logic model will be developed during the program planning stage, since at this point you will be identifying your desired interventions with their respective

outcomes and performance measures. Unfortunately, in practice, it is often developed during program implementation when administrators and staff begin to focus on putting an evaluation plan into effect and evaluators are working with staff to understand how a program works. Logic models are very useful for checking the theory, logic and feasibility of a program and for communicating how a program will achieve its outcomes. Refer to the logic model definition presented earlier in this chapter and Appendix IV-A-1 and IV-A-2 for examples of logic models. If a logic model is used to assist the development of the program, the planners developing the model would be starting with the identification of expected outcomes (long term and intermediate), then the identification of the activities that will be needed to achieve the outcomes (including the target populations), and, finally, the identification of the resources needed. If the program is being adapted or is already operating and the components are known, you can simply construct the logic model working from resources to activities to target populations to outcomes. Logic models can be broad or more detailed depending on the need. Note that example A-1 in the appendix shows a logic model for a countywide breastfeeding initiative. It addresses multiple risk factors and intervention points, while the example in Appendix IV-A-2 is a more detailed component logic model of a provider education program to promote breastfeeding.

DEVELOPING INTERVENTION ACTIVITIES

It is essential to develop very specific activities through which the intervention strategies can be implemented. This requires breaking down the components of the intervention. It is also important to adapt and refine the intervention(s) chosen to meet the needs of the identified target population.

To determine the specific program activities, the workgroup/staff should use intervention models, such as a program logic model and either published program descriptions or other reports which describe an effective intervention in enough detail to allow the identification of 1) discrete activities and 2) the skills that are necessary to accomplish them successfully. This may mean contacting the authors of a published report or articles to get detailed job descriptions, personnel classification documents and copies of educational materials or curricula used by these programs. In the case where the health department itself has had experience with an intervention and that intervention has been thoroughly evaluated and shown to be effective, materials should be available internally.

We emphasize that every effort should be made to maximize the use of expertise and experience in a particular area rather than employ an untested strategy. This is especially important in an agency where the resources (in terms of both staff expertise and available funds) for the monitoring and evaluation of a demonstration project are very limited.

THE ACTION PLAN

Incorporating the results of the intervention development process as depicted in your program logic model, you will now focus on producing an action plan, also known as an intervention plan.

The action plan is the "blueprint" that guides the implementation of the intervention. It should be organized to capture key information and to be easy to use as a reference.

For each priority health problem identified, the action/intervention plan should include the following:

- Long term outcome objectives
- Precursors identified as intervention points
- Intermediate and short term objectives
- Target population or geographic area
- Major intervention activities
- Responsible entity (who will carry out these actions)
- Evaluation indicators (community level) or performance measures (program level)
- Data sources for evaluation
- A reasonable timeframe (when will actions take place and for how long)

Action plans are usually best displayed in a matrix format. See an example action plan matrix in Appendix IV-B-1. Appendix IV-B-2 provides the Action Plan component definitions. The difference between a collaborative level action plan and a component program action plan is the level of detail required.

Begin with the overall outcome objectives that have been approved by the planning group. Additional intermediate and short-term objectives should be included. Major process objectives will also be added as the activities are identified. Identify the precursors targeted as intervention points. Identify the major activities, which should be delineating how the outcome objectives will be achieved. Include enough detail to assure implementation and accountability. You should be able to use your program development description from the research conducted and the logic models developed to identify the major activities. For each strategy or activity in the implementation plan a specific responsible individual should be specified.

DEVELOP A TIMELINE FOR THE IMPLEMENTATION ACTIVITIES

It is important to develop realistic timelines. It is very common for public agencies to underestimate the time it will take to implement a major intervention. Most often the agency underestimates the bureaucratic obstacles in getting contracts approved, personnel issues resolved, supplies or equipment purchased, and, where appropriate, the development of necessary relationships with both the community and other agencies. It is wise to allow at least 6 months for a new program to be operational. This means that the projected quantity of services to be rendered and the degree of movement toward achieving the targeted outcome needs to be reflective of the amount of time that is allocated for actual implementation. If too much is promised over the short term, the program will be perceived as a failure before it 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. If published reports of interventions do not 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 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.

Revisit the outcome and process objectives here and modify the quantities and timelines as appropriate.

See Appendix IV-C for an example timeline.

OTHER PLANNING AND IMPLEMENTATION CONCERNS

Assess Internal Capacity to Implement the Program

In order to implement an effective intervention, it is critical that the skills required to successfully perform the activities need to be very clearly identified. Drafting very specific job descriptions and qualification requirements based on successful programs is important. This will help to determine if the health department currently has qualified staff, needs to hire new staff, train staff, or identify a partnering agency that has staff with the required expertise. If these activities must occur they should be early in the sequence of activities in the plan, before any intervention begins.

Calculate a Cost Estimate

Before adopting the implementation plan it is essential to estimate the associated costs for all of the proposed activities in the plan. This entails developing a budget for all of the activities in the plan, delineating staff qualifications, estimating the amount of staff time and the operating expenses needed for each activity. If the estimate reveals that existing resources are inadequate to implement the program, you must decide whether to defer the program until a source of funding is found, to reallocate resources from less important functions, or to scale down the project by focusing on a particular geographic area or subpopulation. In the latter case the program could be treated as a pilot that could be used to advocate with policy makers for more funds to truly impact the problem on a community-wide basis.

CHAPTER IV SUMMARY

In this chapter we have defined terms and discussed strategies for developing objectives and performance measures, interventions and activities, and an action plan. We have recommended and described the use of an intervention/program logic model and the identification of effective interventions through a literature review or through experience. Finally, we have described the recommended content and format of an action plan.

Key Points to Remember:

- Develop outcome objectives that directly relate to the planned intervention. Refer back to the problem analysis and theory of change models to inform the development of these objectives.
- Use a program logic model for communicating the theory of how the proposed program will work to achieve its objectives and to assist in the development of the specific program activities included in the action plan.
- Identify those specific activities that are the most likely to affect the expected outcomes.
- Create an action plan that provides an explicit blueprint that will be used to guide implementation of the program. At a minimum, it includes the expected outcomes, activities, responsible agencies and timeframe for the intervention.
- Create a timeline to reflect the appropriate sequencing of interdependent activities so as not to underestimate the time required to fully implement the interventions.

REFERENCES

An Evaluation Framework for Community Health Programs. The Center for the Advancement of Community Based Public Health, Chapel Hill, North Carolina June 2000. www.cdc.gov/eval/evalcbph.pdf

Friedman, Mark. The Fiscal Policy Studies Institute. http://www.resultsaccountability.com

June 2000 Prevention Works! A Practioner's Guide to Achieving Outcomes. 2001 CADCA Conference Edition. Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. www.samhsa.gov,

Rossi, Peter H, Freeman, Howard E, Lisey, MW. Evaluation: A systematic Approach, 6th Edition. Thousand Oaks, CA: Sage Publications. 1999.

Taylor-Powell, Ellen, Steele, Sara and Douglah, Mohammad. Planning a Program Evaluation. University of Wisconsin - Extension. 1996.