Maryland Department of Health & Mental Hygiene

Cigarette Restitution Fund Program

Tobacco Use Prevention and Cessation Program

LOGIC MODEL

Martin O'Malley
Governor
State of Maryland

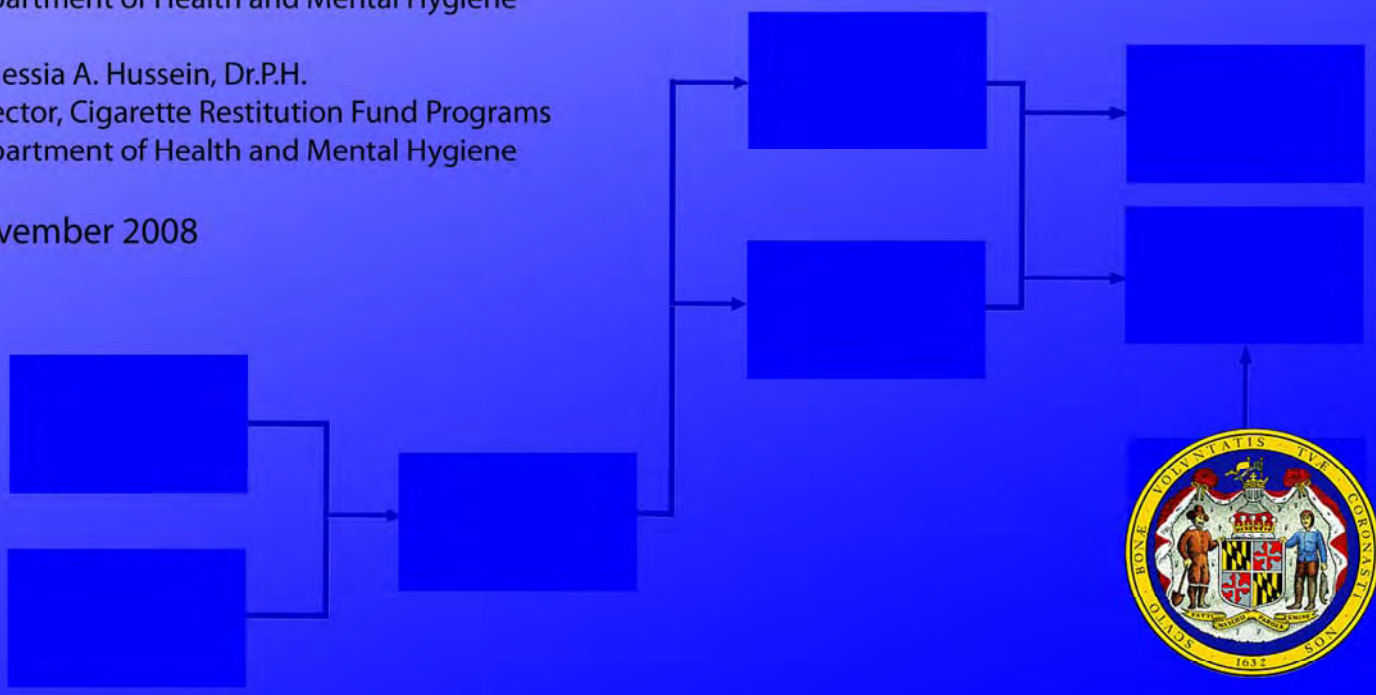
Anthony G. Brown
Lieutenant Governor
State of Maryland

John M. Colmers
Secretary
Department of Health and Mental Hygiene

Arlene Stephenson
Deputy Secretary, Public Health Services
Department of Health and Mental Hygiene

Carlessia A. Hussein, Dr.P.H.
Director, Cigarette Restitution Fund Programs
Department of Health and Mental Hygiene

November 2008



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Executive Summary

The State of Maryland's Department of Health and Mental Hygiene (DHMH) has commissioned the development of logic models for the Maryland Tobacco Use Prevention and Cessation Program. These logic models are intended to serve two purposes:

- They make explicit the assumptions and reasoning underlying the Department's conceptualization of the Maryland Tobacco Use Prevention and Cessation Program initiative and its evaluation
- They provide visual illustrations of the assumed connections between the Program resources, activities and accomplishments.

This document includes an overarching logic model and four sub-logic models addressing each of the Program's goals:

Goal #1 – Prevent Initiation of Tobacco Use. This goal is to reduce initiation of smoking and tobacco use in Maryland among youth and adults.

Goal #2 – Reduce Disparities in Tobacco Use. This goal is to reduce relatively higher tobacco use among certain youth and adult minority populations and adults of low socio-economic status.

Goal #3 – Reduce Exposure to Secondhand Smoke. This goal is to reduce adult exposure to secondhand smoke in the workplace as well as to reduce under-age youth exposure to secondhand smoke.

Goal #4 – Increase Smoking Cessation. This goal is to increase the number and proportion of adults who want to quit smoking, are trying to quit smoking, and who succeed in quitting smoking and use of other tobacco products.

Planners, implementers, and evaluators working at both the local and the state levels can use these models, which are grounded in the "best practice" recommendations of the Centers for Disease Control and Prevention (CDC 2007; Starr et al. 2005) to plan, implement, and evaluate specific individual programs and the overall Statewide effort as a whole.

Sub-logic model have been developed for each of the four specific goals of the Maryland Tobacco Program. Elements are similar to the overarching logic model; however, for each sub-logic model, only selected elements have been included to emphasize the activities funded in support of that goal and the outputs and outcomes that are the expected focus of such activities. For example, the logic model for:

Goal 1 (focused on initiation) does not include longer-term outcomes for cessation (only reduced prevalence).

Goal 2 (focused on reduced disparities) includes the MOTA and coalition building activities and a pathway to a disparities reduction outcome.

Goal 3 (focused on reduced exposure to secondhand smoke) includes individual and system-level pathways for both activities (e.g., policy and regulatory action) and short-term outcomes (creation of tobacco free policies) as pathways to reduce exposure to secondhand smoke.

Goal 4 (focused on cessation) includes a longer-term outcome to reduce tobacco use prevalence among youth and adults.

INTRODUCTION

A logic model is a systematic and visual tool that represents the *theory of change* that guided the planning of a program. A theory of change is "a systematic and cumulative study of the links between activities, outcomes and contexts" or a working "theory of how and why an initiative works" (Connell & Kubisch, 2001; Weiss, 1995). A *logic model* graphically displays a program's theory of change. It presents and shares the associations among the resources available to operate a program, the planned activities, and the expected changes or results that guided the design of the program (The KW Kellogg Foundation 2004).

The following logic models have been prepared to graphically display the overarching Maryland Tobacco Use Prevention and Cessation Program as well as each of the state's four specific goals: 1) prevent initiation of tobacco use; 2) reduce disparities in tobacco use; 3) reduce exposure to secondhand smoke; and 4) increase smoking cessation.

These logic models were constructed based on narratives of the State's program in existing reports, best practice models provided by the Centers for Disease Control and Prevention (CDC), and a review of logic models developed by other states with similar programs.

The Overarching Logic Model

The Overarching Logic Model

The overarching logic model shows the interconnections among the available resources to operate the Program, the activities the Program conducts, the expected outcomes, and the contextual factors that may hinder or promote the achievement of these outcomes. This model includes the following elements recommended by t*he CDC's Best Practices*: cessation, counter-marketing, school programs, community programs to reduce tobacco use, statewide programs, enforcement, surveillance and evaluation, as well as administration and management.

The overarching logic model shows the six components of a program: inputs, activities, outputs, short-term outcomes, medium-term outcomes, and long-term outcomes. These components illustrate the association between the program that is planned and the expected outcomes or results of the program (see figure 1).

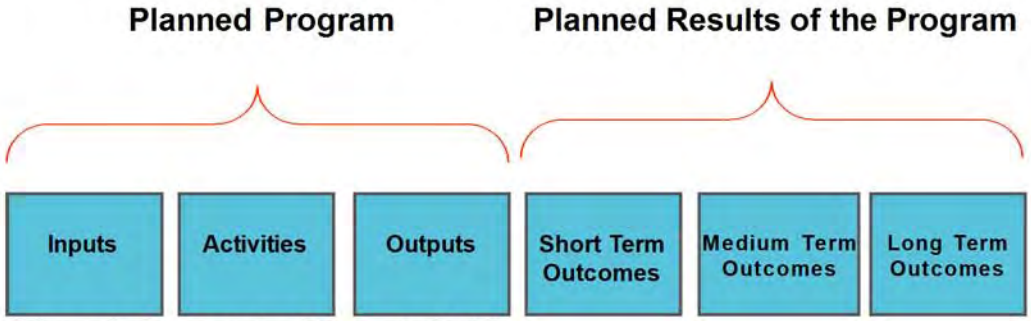


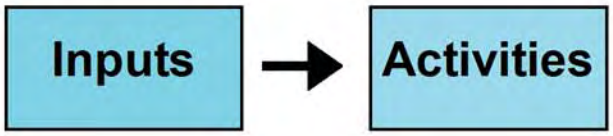
Figure 1. Components of the Logic Model

Starting from the left side of the model, each component follows logically from the previous component. Also important are contextual factors (not included in the above model). These are factors other than the program itself that could affect outcomes, such as political forces, economic issues, or marketing trends.

Following are brief descriptions of each component of the logic model. It should be noted that the components are described in general terms but their description can be modified or expanded as necessary, depending on the program for which the model is being used. Figure 5, which follows these descriptions, presents a graphic depiction of the components that are described and their relationships.

I. INPUTS

The first component in a logic model is the inputs (see figure 2). These are the resources provided by the state, local communities, or other sources that enable *the Maryland Tobacco Use Prevention and Cessation Program* activities to take place. Inputs for this Program include funding, health departments, local partners , regional partners, state partners, coalition members, local media outlets, public policy and legislation, t*he CDC Best Practices Model*, and *the Statewide Workgroup for Targeted High Risk Populations*. In the logic model these are represented as leading to the program activities:



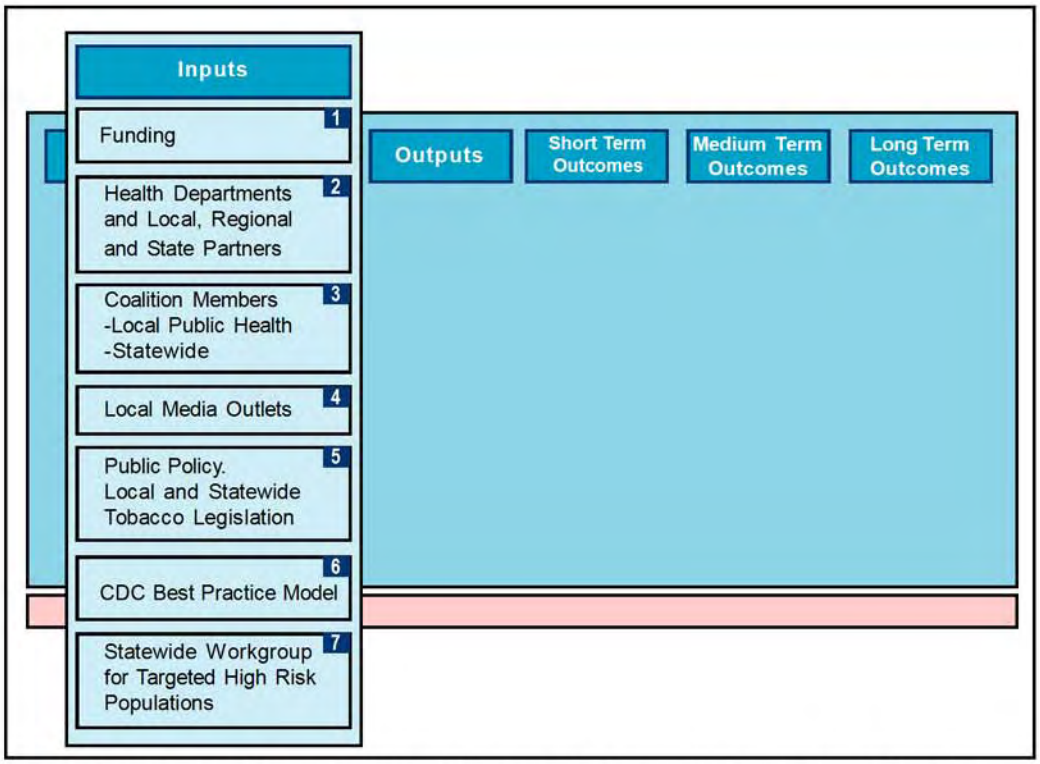


Figure 2. Inputs of the Overarching Logic Model. Maryland Tobacco Use Prevention and Cessation Program.

II. ACTIVITIES

The second component of a logic model is the activities (see figure 3), which comprise a variety of statewide and local public health initiatives including the following: 1) statewide—*Minority Outreach and Technical Assistance* (MOTA); the 1-800-QUIT-NOW hotline; and high-risk priority population projects; and 2) locally—community-based programs (including school-based prevention and enforcement); cessation programs; merchant education on youth access; and coalition building. In addition, the state has provided support for counter-marketing and media campaigns, surveillance and evaluation activities, and administration. In the logic model, these are represented as leading to the outputs.

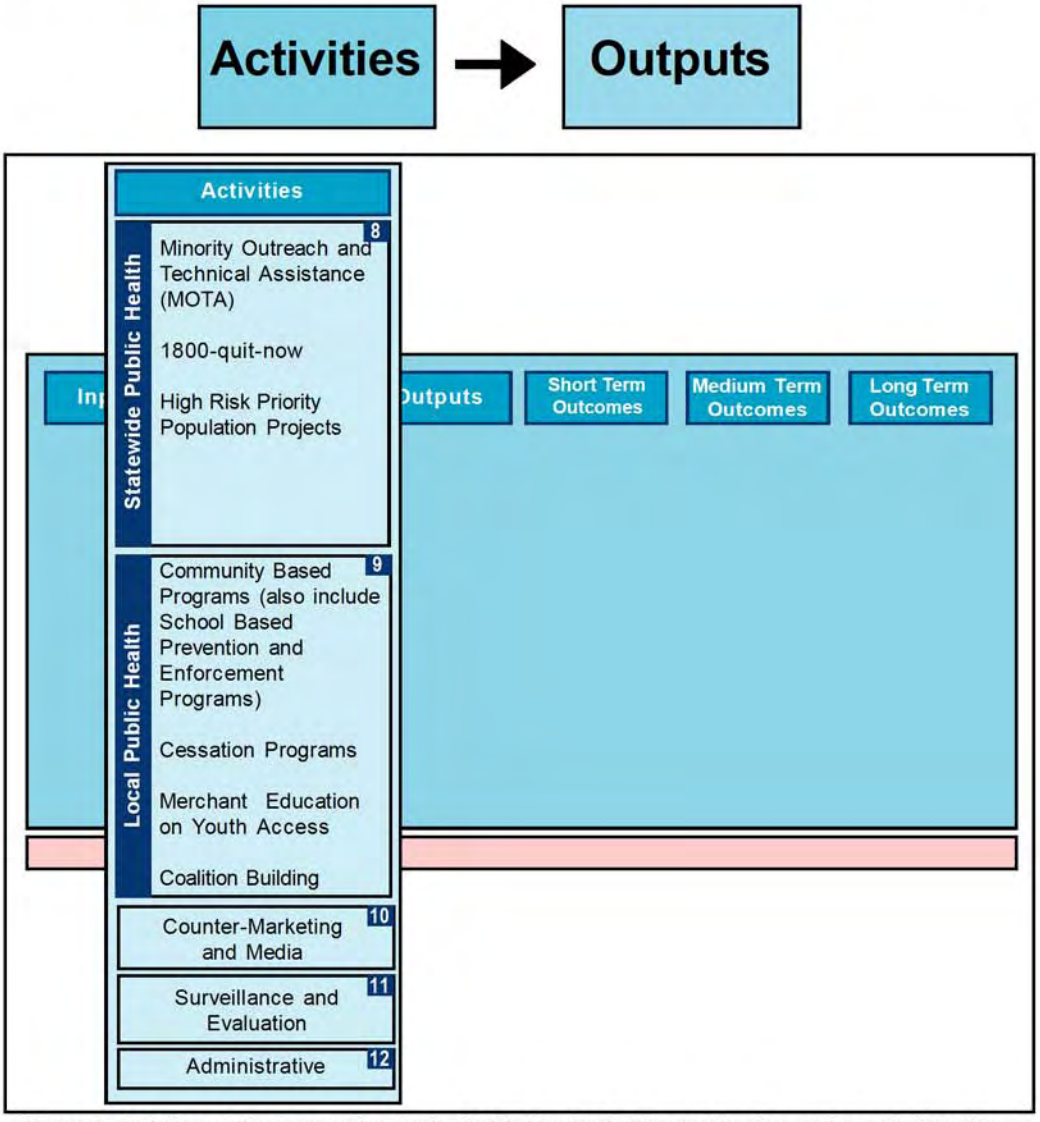
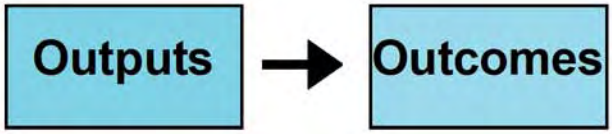


Figure 3. Activities of the Overarching Logic Model. Maryland Tobacco Use Prevention and Cessation Program.

III. OUTPUTS

Outputs are the immediate products of the activities (see figure 4). The overarching logic model includes the following outputs: the number of people exposed to no-smoking and health behavior messages, the increase in the number of cessation and related services available, the number of people made aware of cessation services, the number of physician and dentist referrals to 1 800 QUIT-NOW, the number of bans and no-smoking regulations and policies created, the amount of data collected and reported, the hours of training provided, and the number of community and state partnerships established. These outputs, in term, are expected to lead to certain outcomes.



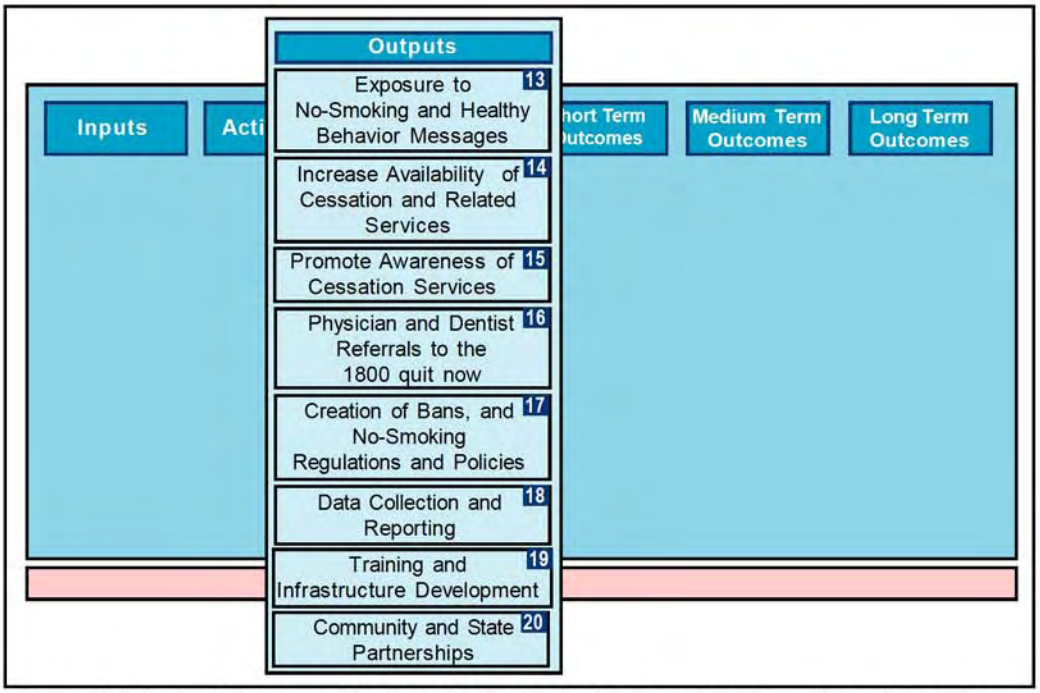


Figure 4. Outputs of the Overarching Logic Model. Maryland Tobacco Use Prevention and Cessation Program.

IV. OUTCOMES

Anticipated short-term, medium-term, and long-term outcomes of the overall *Maryland Tobacco Use Prevention and Cessation Program* are outlined below. Short-term outcomes are expected most immediately, e.g., within one to two years of program implementation. Medium-term outcomes are expected shortly thereafter, e.g., 3 to 4 years from implementation. Longer-term outcomes are expected to show observable progress by 5 years after implementation. Outcomes within each category can also be characterized as individual-component or system-level outcomes according to whether the change is expected to occur in individuals or in social systems. Figure 5 shows the complete overarching logic model for the *Maryland Tobacco Use Prevention and Cessation Program*.

Short-term Outcomes

Individual level:

- Increase in knowledge, attitudes, intentions, and behaviors
- Reduced tolerance of tobacco use
- Reduced promotion of tobacco use
- Increased use of cessation and related services

System-level:

- Increased compliance by merchants and/or youth with regulations and policies
- Inclusion of participating groups' issues in county annual plans

Medium-term Outcomes:

Individual level:

- Decreased disparities in tobacco behaviors for racial-ethnic minority groups at risk for morbidity and mortality
- Reduced initiation among youth and adults
- Reduced use of tobacco products

System-level:

- Decreased access through increased prices (via taxation) on tobacco products
- Increased environments (public and private) with no smoking

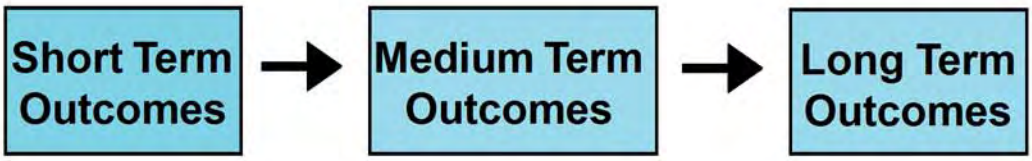
Long-term Outcomes:

Individual level:

- Increased cessation among youth and young adults[1]

System-level:

- Reduced exposure to second hand smoke

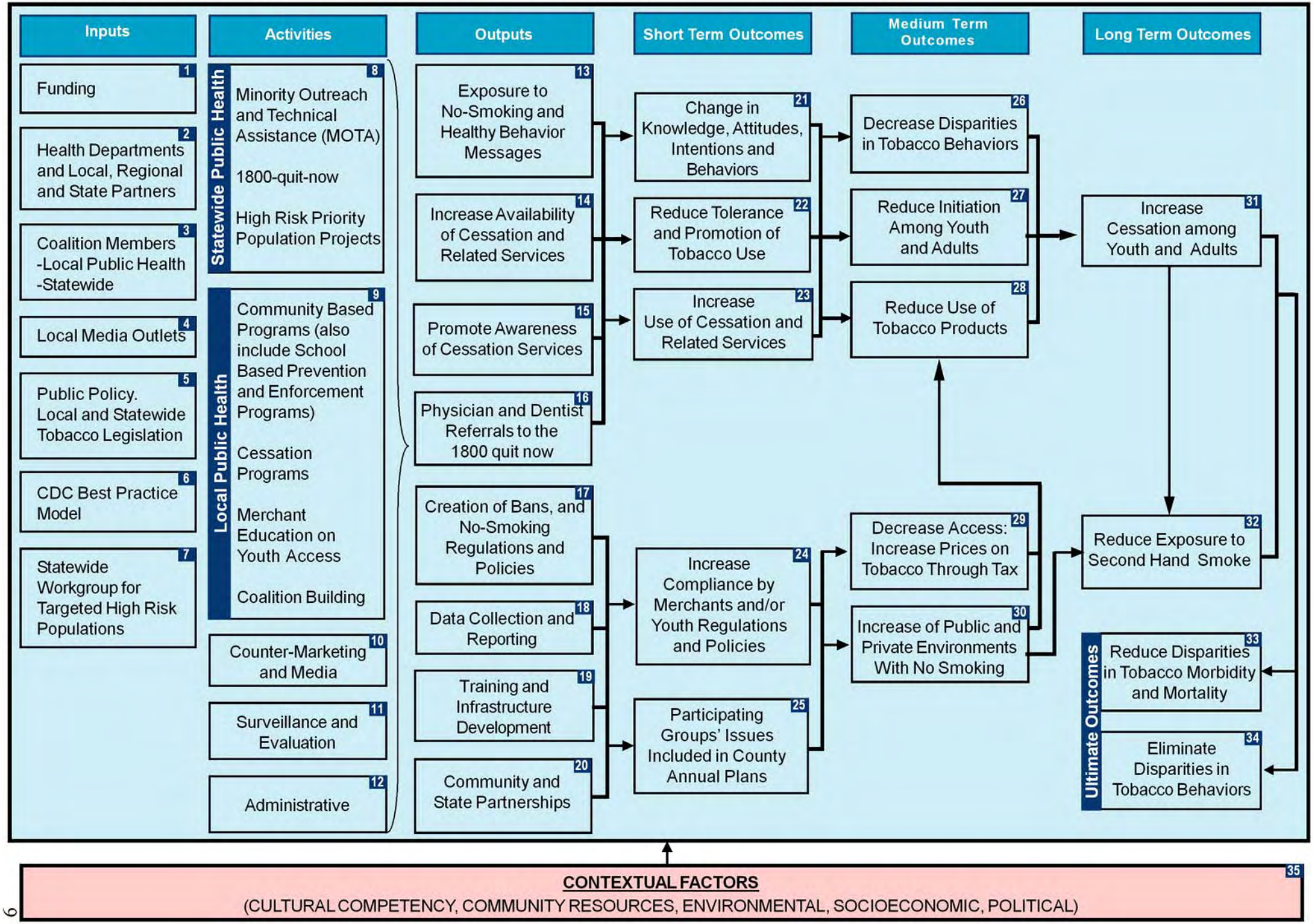


V. CONTEXTUAL FACTORS

In addition to the standard elements of program logic models (inputs, activities, outputs and outcomes), "Contextual Factors" are also included. This category indicates that various elements in the social, cultural, or policy environments in which these programs are implemented must be considered as barriers to or facilitators of success along these pathways. The contextual factors vary by program goal and are not specified in these models, but can be considered in later attempts to arrive at explanations of program success or lack of progress. This aspect of the evaluation will complement data specifically collected in the planned evaluation activities.

[1] NOTE for all logic models herein: "Young adults" (ages 18-30) are the focus of "cessation" outcomes rather than all adults (as is the case with "reduced initiation"), as the state assumes it is unrealistic to expect that programs, which are funded for short durations, would be able to change (cease) the behaviors of life-long smokers/users of tobacco products.

Figure 5. Overarching Logic Model. Maryland Tobacco Use Prevention and Cessation Program.



Sub-Logic Model for Goal 1 Prevent Initiation of Tobacco Use

Sub-Logic Model for Goal 1 Prevent Initiation of Tobacco Use

Figure 6 shows this sub-logic model, which is intended to serve as a tool for developing effective decision-oriented evaluations as well as providing a useful visual instrument. The interconnection of the program resources, activities and outcomes presented in this sub-model presents a dynamic aimed at accomplishing the goal of preventing initiation of tobacco use among youth and adults.

This sub-logic model includes seven components: inputs, activities, outputs, short-term outcomes, medium-term outcomes, long term outcomes and contextual factors. Starting from the left side of the model, each component follows logically from the previous component with the exception of the contextual factors component that influences all of the other components.

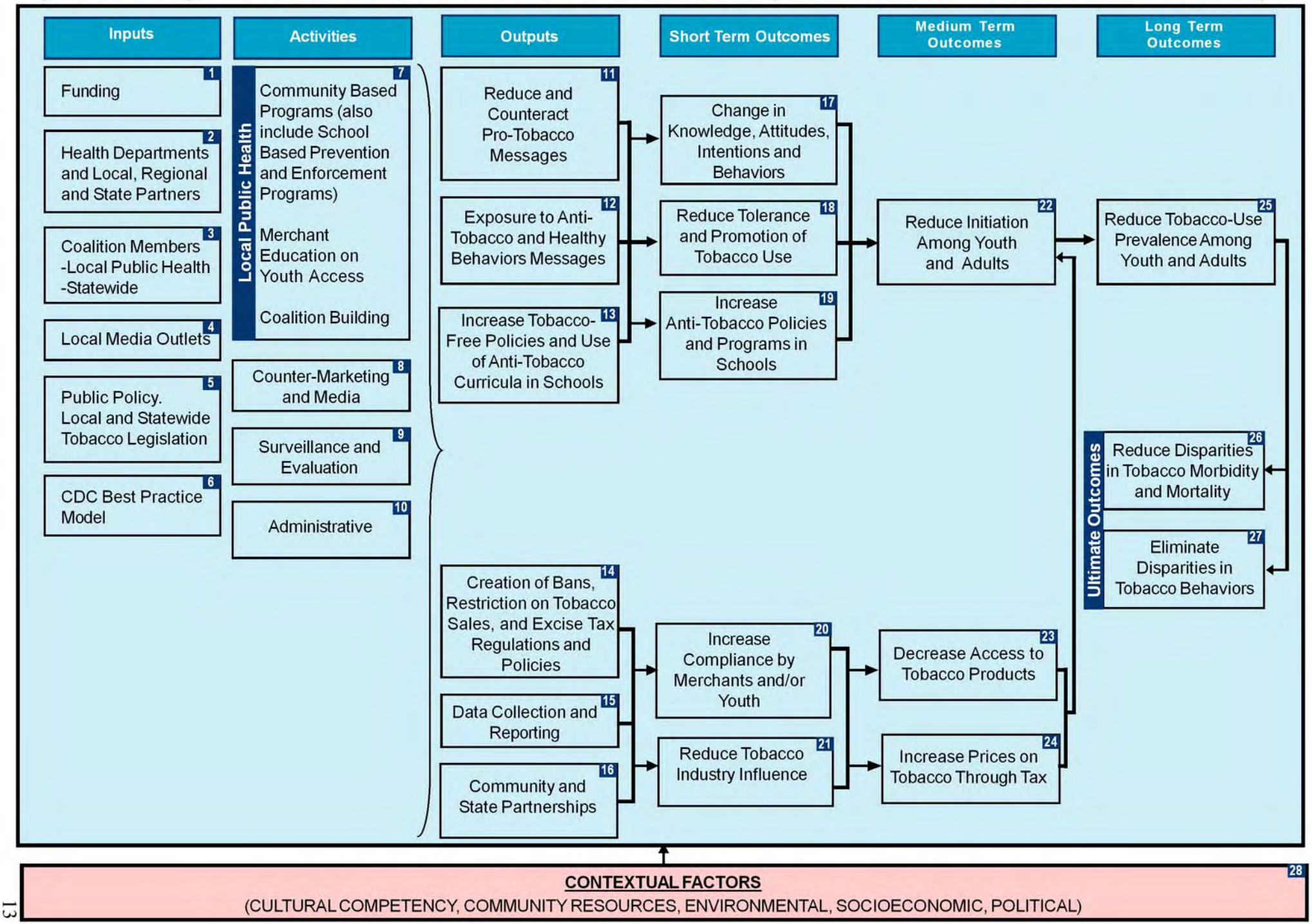
In the present sub-logic model, the inputs are: funding, Health Department, local partners, regional partners, State partners, local public health and statewide coalition members, local media outlets, public policy including local and statewide tobacco legislation, and *the CDC Best Practice Model*. These resources allow the Program to engage in the activities. As shown in the sub-logic model, there are four activities: local public health, counter-marketing and media, surveillance and evaluation, and administrative support. Local public health activities are comprised of community-based programs (including school- based prevention and enforcement programs), merchant education on youth access, and coalition building.

This model assumes that these activities will result in six outputs: 1) reduce and counteract pro-tobacco messages; 2) exposure to anti-tobacco and healthy behavior messages; 3) increase tobacco-free policies and use of anti-tobacco curricula in schools; 4) creation of bans, restriction on tobacco sales, and excise tax regulations and policies; 5) data collection and reporting; and 6) community and state partnerships. This model also includes five short-term outcomes: 1) change in knowledge, attitudes, intentions and behaviors; 2) reduce tolerance and promotion of tobacco use; 3) increase anti-tobacco policies and programs in schools; 4) increase compliance by merchants and/or youth; and 5) reduce tobacco

industry influence. As seen in the logic model, the first three short-term outcomes follow logically from the first three outputs and the fourth and fifth short-term outcomes are the result of the last three outputs.

The model illustrates the assumption that these five short-term outcomes contribute, in turn, to the following three medium-term outcomes: 1) reduce initiation among youth and adults; 2) decrease access to tobacco products; and 3) increase prices on tobacco through tax. This model also assumes that the first three short-term outcomes influence the "reduce initiation among youth and adults" medium-term outcome and the last two short-term outcomes influence two medium-term outcomes: 1) decrease access to tobacco products; and 2) increase process on tobacco through tax. In turn, the "decrease access to tobacco products" and the "increase process on tobacco through tax" medium-term outcomes are expected to "reduce initiation among youth and adults" (another medium term outcome). The latter influences the "reduce tobacco-use prevalence among youth and adults" long-term outcome. This sub-logic model has two ultimate outcomes: 1) reduce disparities in tobacco morbidity and mortality; and 2) eliminate disparities in tobacco behaviors. Finally, the model illustrates the assumption that the contextual factors influence all of the other components. This model includes cultural competency, community resources, environmental, socioeconomic, and political contextual factors.

Figure 6. Sub-Logic Model for Goal 1: Prevent Initiation of Tobacco Use . Maryland Tobacco Use Prevention and Cessation Program.



Sub-Logic Model for Goal 2 Reduce Disparities in Tobacco Use

Sub-Logic Model for Goal 2 Reduce Disparities in Tobacco Use

This sub-logic model (shown in figure 7) is intended to serve as a tool for developing effective decision-oriented evaluations as well as providing a useful visual instrument. The interconnection of the Program resources, activities and outcomes presented in this sub-model presents a dynamic aimed at accomplishing the goal of reducing relatively higher tobacco use among certain youth and adult minority populations and adults of low socio-economic status.

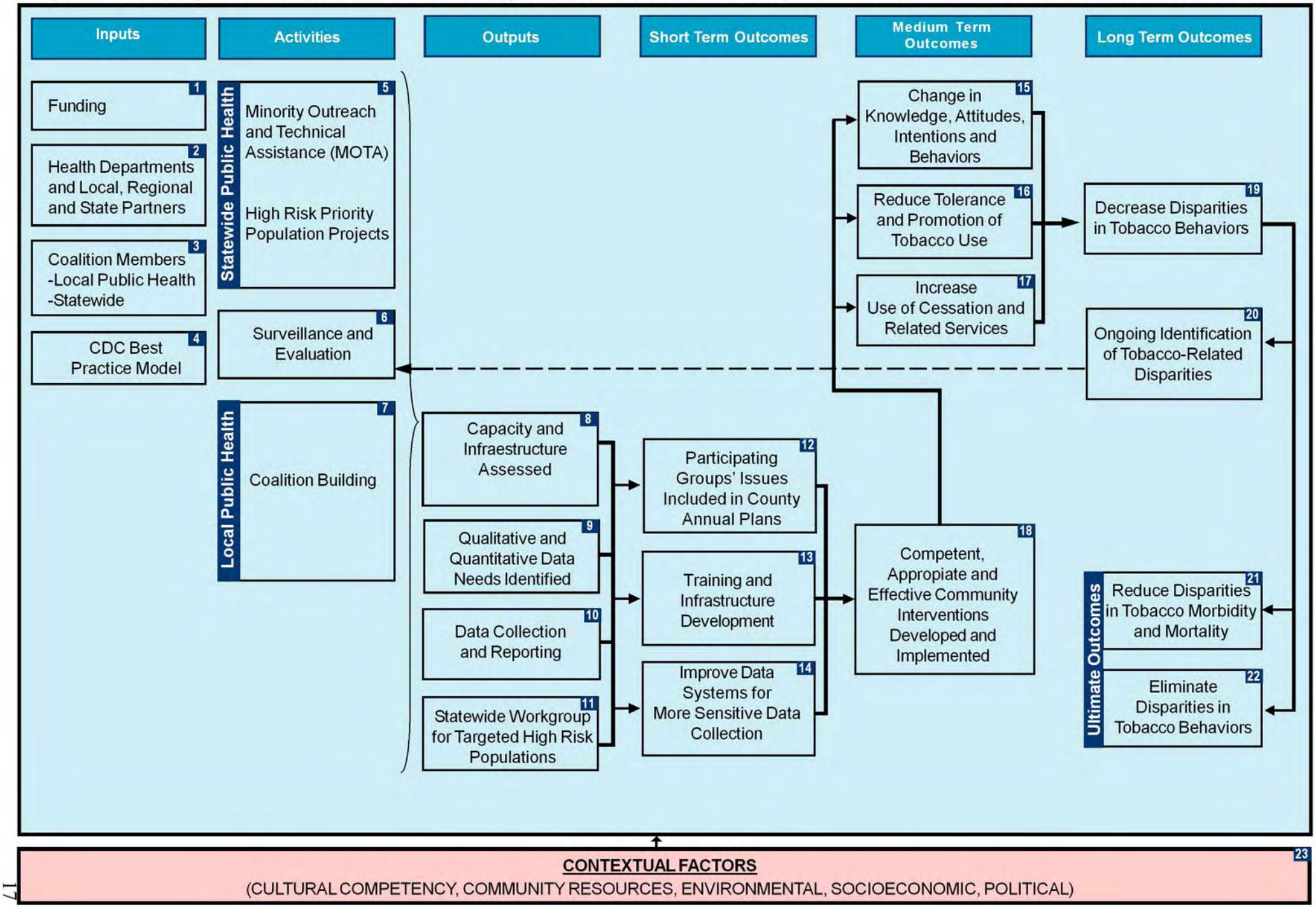
The second sub-logic model includes seven components: inputs, activities, outputs, short-term outcomes, medium-term outcomes, long-term outcomes, and contextual factors. The inputs are: funding; health department, local partners, regional partners, State partners, local public health and statewide coalition members; and *the CDC Best Practice Model*. With these resources, the Program is able to engage in three primary activities to address Goal 2: statewide public health, surveillance and evaluation, and local public health. Statewide public health activities include *Minority Outreach and Technical Assistance* (MOTA) and High Risk Population projects. Local public health activities include coalition building.

This model assumes that these activities will result in four outputs: 1) an assessment of the infrastructure that influences capacity; 2) identification of qualitative and quantitative data needs ; 3) data collection and reporting; and 4) development of a statewide workgroup for targeted high risk populations. This model also includes three short-term outcomes: 1) participating group's issues included in county annual plans; 2) training and infrastructure development; and 3) improved systems for more sensitive data collection. As seen in the logic model, these short-term outcomes follow logically from the four outputs.

The present model illustrates the assumption that the three short-term outcomes contribute, in turn, to the medium-term outcome, "competent, appropriate and effective community interventions developed and implemented," It also shows that the latter influences three

other medium-term outcomes: 1) change in knowledge, attitudes, intentions and behaviors; 2) reduce tolerance and promotion of tobacco use; and 3) increased use of cessation and related services. These medium-term outcomes "decreased disparities in tobacco behaviors" (a long-term outcome). Finally, the latter also influences the "ongoing identification of tobacco-related disparities," as well as two ultimate outcomes: 1) reduced disparities in tobacco morbidity and mortality; and 2) elimination of disparities in tobacco behaviors. Finally, the model includes contextual factors such as cultural competency, community resources, environmental, socioeconomic, and political contextual factors

Figure 7. Sub-Logic Model for Goal 2: Reduce Disparities in Tobacco Use. Maryland Tobacco Use Prevention and Cessation Pro-



Sub-Logic Model for Goal 3 Reduce Exposure to Secondhand Smoke

Sub-Logic Model for Goal 3 Reduce Exposure to Secondhand Smoke

This sub-logic model (see figure 8) is intended to serve as a tool for developing effective decision-oriented evaluations as well as providing a useful visual instrument. The interconnection of the program resources, activities and outcomes presented in this sub-model presents a dynamic aimed at accomplishing the goal of reducing adult exposure to secondhand smoke in the workplace as well as to reducing under-age youth exposure to secondhand smoke.

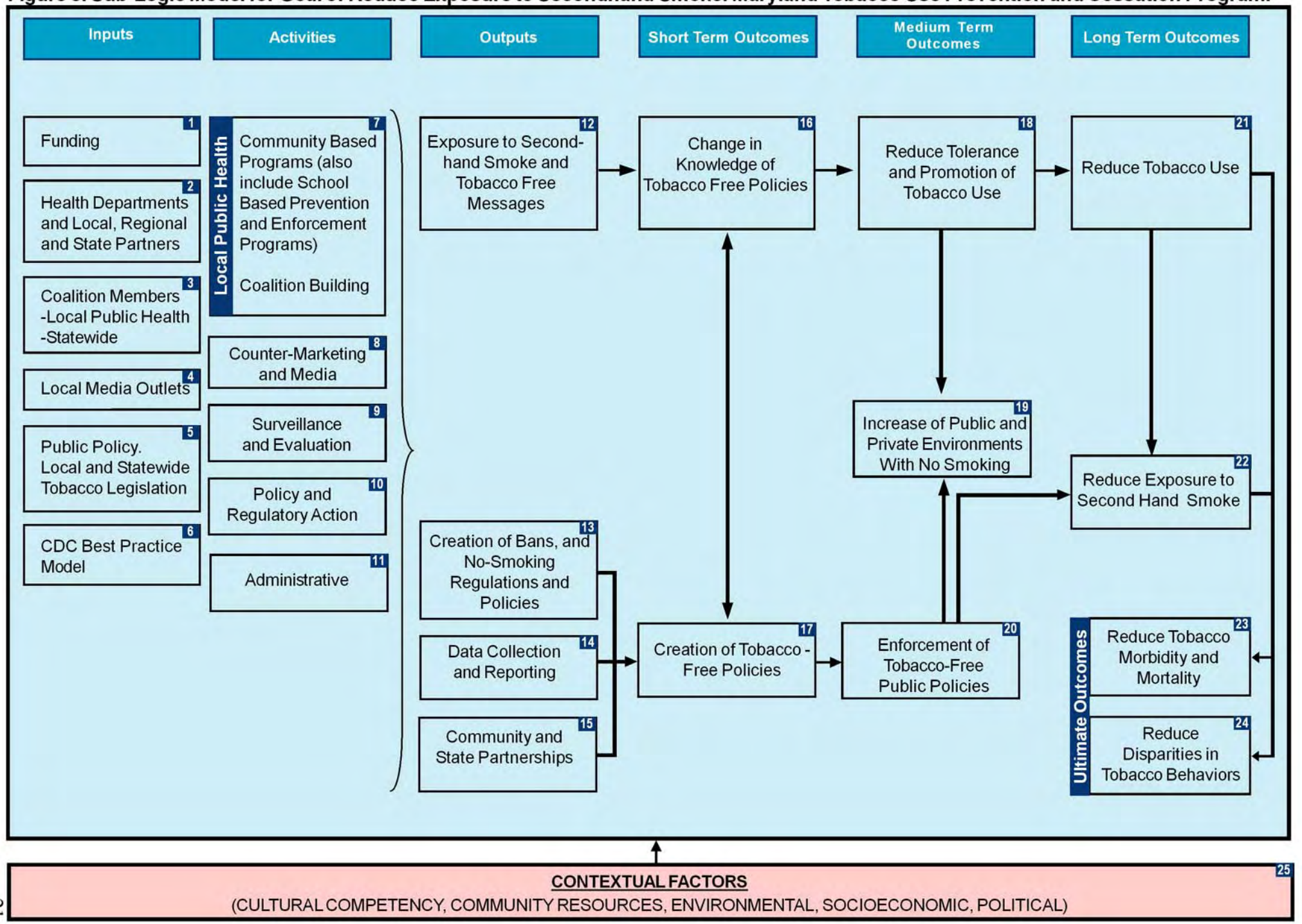
This third sub-logic model includes seven components: inputs, activities, outputs, short-term outcomes, medium-term outcomes, long-term outcomes, and contextual factors. Starting from the left side of the model, each component follows logically from the previous component with the exception of the contextual factors component that influences all of the other components.

In the present sub-logic model, the inputs are: funding; health department, local partners, regional partners, State partners; local public health and statewide coalition members, local media outlets, public policy including local and statewide tobacco legislation and, *the CDC Best Practice Model*. With these resources, the Program is able to engage in five activities: local public health, counter-marketing and media, surveillance and evaluation, policy and regulatory action, and administration. Local public health activities are comprised of community-based programs (including school-based prevention and enforcement programs) and coalition building.

This model assumes that these activities will result in four outputs: 1) exposure to secondhand smoke and tobacco-free messages; 2) creation of bans and no-smoking regulations and policies; 3) data collection and reporting; and 4) community and state partnerships. The first output influences the "change in knowledge of tobacco free policies" (a short-term outcome) and the last three outputs influence the "creation of tobacco-free policies" (also a short-term outcome). This model includes three medium-term outcomes: 1) reduce tolerance and promotion of tobacco; 2) increase public and private environments with no

smoking; and 3) enforcement of tobacco-free public policies. As seen in the sub-logic model, the first long-term outcome, "reduced tobacco use," follows logically from the first medium-term outcome and the "reduced exposure to secondhand smoke" long-term outcome is the result of the "enforcement of tobacco-free public policies" medium-term outcome. This sub-logic model has two ultimate outcomes: 1) reduced tobacco morbidity and mortality; and 2) reduced disparities in tobacco behaviors. Finally, the model illustrates the assumption that the contextual factors influence all of the other components . This model includes cultural competency, community resources, environmental, socioeconomic, and political factors.

Figure 8. Sub-Logic Model for Goal 3: Reduce Exposure to Secondhand Smoke. Maryland Tobacco Use Prevention and Cessation Program.



Sub-Logic Model for Goal 4 Increase Smoking Cessation

Sub-Logic Model for Goal 4 Increase Smoking Cessation

This sub-logic model (see figure 9) is intended to serve as a tool for developing effective decision-oriented evaluations as well as providing a useful visual instrument. The interconnection of the Program resources, activities and outcomes presented in this sub-model presents a dynamic aimed at accomplishing the goal of increasing the number and proportion of adults and youth who want to quit smoking, are trying to quit smoking, and who succeed in quitting smoking and use of other tobacco products.

The fourth sub-logic model includes seven components: inputs, activities, outputs, short-term outcomes, medium-term outcomes, long-term outcomes, and contextual factors. Starting from the left side of the model, each component follows logically from the previous component with the exception of the contextual factors, which influence all of the other components.

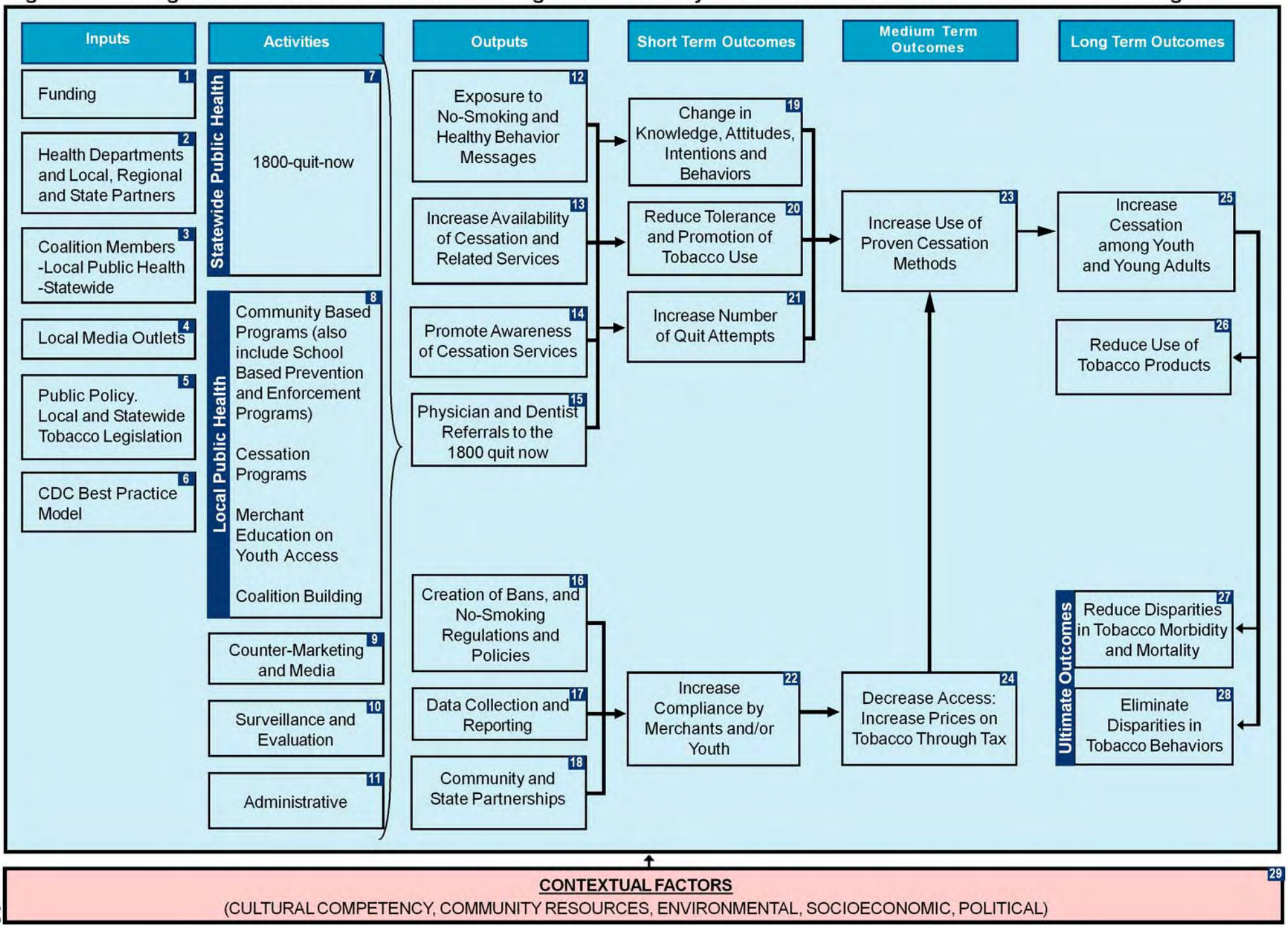
In the present sub-logic model, the inputs are: funding; health department, local partners, regional partners, State partners, local public health and statewide coalition members, local media outlets, public policy including local and statewide tobacco legislation and, *the CDC Best Practice Model*. With these resources, the Program is able to engage in five activities: statewide public health, local public health, counter-marketing and media, surveillance and evaluation, and administration. State public health activities include the 1-800-QUIT-NOW telephone service. Local public health activities are comprised of community-based programs (including school-based prevention and enforcement programs), cessation programs, merchant education on youth access, and coalition building.

This model assumes that these activities will result in seven outputs: 1) exposure to no-smoking and healthy behavior messages; 2) increase availability of cessation related services; 3) promote awareness of cessation services; 4) physician and dentist referrals to the 1800-QUIT-NOW telephone service; 5) creation of bans and no-smoking regulations and policies; 6) data collection and reporting; and 7) community and state partnerships. This model also includes four short-term outcomes: 1) change in knowledge, attitudes, intentions and behaviors; 2) reduced tolerance and promotion of tobacco use; 3) increased use of

quit atttemps; and 4) increased compliance by merchants and/or youth. As seen in the sub-logic model, the first three short-term outcomes follow logically from the first four outputs and the last short-term outcome is the result of the last three outputs.

The present model illustrates the assumption that these four short-term outcomes contribute, in turn, to two medium-term outcomes: 1) increase use of proven cessation methods; and 2) decrease access (increase prices on tobacco through tax). This model also assumes that the "decrease access (due to increase prices on tobacco through tax)" medium-term outcome also influences the medium-term outcome "increase use of proven cessation methods." The model also illustrates the assumption that the "increase in number of proven cessation methods" is expected to "increase cessation among youth and young adults." The latter outcome is also expected to "reduce use of tobacco products" (another long-term) outcome and influence two ultimate outcomes: 1) reduce disparities in tobacco morbidity and mortality; and 2) eliminate disparities in tobacco behaviors. Finally, the model assumes that the contextual factors influence all of the other components. This model includes cultural competency, community resources, environmental, socioeconomic, and political aspects as contextual factors.

Figure 9. Sub-Logic Model for Goal 4: Increase Smoking Cessation. Maryland Tobacco Use Prevention and Cessation Program.



Tailoring A Logic Model

Tailoring a Logic Model

A logic model can provide a systematic and visual way to present and share your understanding of the relationships among the resources to operate your tobacco prevention and control program, your planned activities, and your expected changes or results. The following example provides guidelines to tailor the sub-logic model 1 aimed at understanding how we can reduce youth and young adult initiation of smoking to the realities and scope of a community based project.

Katherine Smith is the program coordinator of the smoking prevention and control program of the Blue Sky community. She is tailoring a logic model aimed at addressing the high rated of smoking initiation among youth and young adults.

STEP ONE: Establish a Working Group and Perform Literature Review

Before you start tailoring the logic model to your community program, it is necessary to establish a working group. Program staff, collaborators, evaluators, and other stakeholders should be integrated into this working group. This group should discuss the purpose and steps for constructing a logic model. Members of this group should review relevant literature, planning documents, reports, and data sources to identify tentative activities and intended outcomes. Subsequently, they can use brainstorming techniques to understand:

- Problems that this sub-logic model is trying to solve.
- The impacts and long term outcomes you want to achieve.
- The needs and/or assets of your community that this program should address.
- Realistic results expected to be achieved in a near- and long-term period.
- Factors that may influence change in your community.
- Strengths and weakness of different strategies used in other regions or states to address this problem. What can you learn from these programs?

Katherine created a working group including program staff, collaborators, evaluators, and stakeholders. At this initial stage, Katherine and her working group are asking themselves:

- What is the specific problem or question they want to define?
- What type of literature should they review?
- What issues should they be looking more closely?

They are several first and second hand resources and methods for collecting data. First hand qualitative and quantitative information can be located at the website http://www.crf.state.md.us/html/stats.cfm. You will be able to review the following publications:

- Maryland Department of Health and Mental Hygiene. Report on Disparities in Tobacco Use Behaviors by Adult Minority Populations in Maryland, 2006. November 2008.
- Maryland Department of Health and Mental Hygiene. Report on Disparities in Tobacco Use Behaviors by Youth Minority Populations in Maryland, 2006. November 2008.
- Maryland Department of Health and Mental Hygiene. Exploring Cultural, Psychosocial, and Environmental Factors Influencing Tobacco use among Asian Americans, Hispanics, African Americans and American Indians in Maryland, September 2008.

You can also collect first hand quantitative information by implementing small research pilots using surveys/questionnaires. First hand quantitative information can also be collected by performing focus groups, or by observing directly the reality of your community in public meetings (direct observation). Another alternative is to perform in-depth interviews with community leaders or with other program planners.

Other secondary sources of data include:

- Health status data: demographics, vital statistics, hospital records, morbidity and mortality reports
- Cancer Control PLANET (http://cancercontrolplanet.cancer.gov)
- State Cancer Profiles (National Cancer Institute, CDC)
- Literature review.
- U.S. Census Bureau: http://www.census.gov
- National Center for Health Statistics: http://www.cdc.gov/nchs
- State Cancer Profiles: http://statecancerprofiles.cancer.gov
- American Cancer Society's Facts and Figures: http://www.cancer.org/docroot/STT/stt_0.asp

After reviewing relevant literature, planning documents, reports, and data sources to identify tentative activities and intended outcomes, Katherine's working group is ready to discuss the following topics:

- Which is the most important tobacco related problem in the Blue Sky community?
- Which specific population sub-groups are experiencing this burden?
- What is the demographic profile of these subgroups? What is their race/ethnicity? Education level(s)? Age ranges? Socioeconomic status? Specific jurisdictions? Languages spoken?
- Where/how do they spend the majority of their time?
- What are their health beliefs regarding this tobacco related problem?
- What are their gaps in knowledge or barriers to heath information?
- What are their health needs?
- Are there some specific cultural factors that may predispose them to be exposed to this problem?
- How we can reach them? Are they some specific community places where they meet? Are they some mass media resources they generally use?

After brainstorming is complete, let's assume that Katherine's group has used the information they gathered to make a decision to reduce the initiation of tobacco use in the community. They can now start filling the boxes of the logic model with detailed information. They begin with identifying the available resources and inputs.

Step Two: Identify Your Resources/Inputs

During this step, you will identify available human, financial, organizational, and community resources to direct toward doing the work. In this example, we identify the following resources directly related to a program:

- At the community level: tobacco coalitions, local health department tobacco programs, local health department sub-vendors, the Department of Health and Mental Hygiene (DHMH), tobacco programs and DHMH sub-vendors.
- It is also important to consider other resources that can provide some regulations and guidelines to your work. In fact, you should be familiar with local and state tobacco legislation and regulations, the US Centers for Disease Control (CDC) Best Practice Model and the CDC Community Guidelines.
- You can also identify grants that are providing support to your program. This example recognizes the MD CDC Tobacco Grant, the General Fund Tobacco Grant and the Cardiovascular Research Foundation (CRF) Tobacco Grant as the most important current sources of funding for a project.

Katherine and her working group considered it important to involve the following resources located in the Blue Sky community: tobacco coalitions, local health department tobacco programs, local health department sub-vendors, the Department of Health and Mental Hygiene (DHMH), tobacco programs and DHMH sub-vendors. They also recognized the importance of approaching some grants that can provide support to their program. They found that the Maryland CDC Tobacco Grant, the General Fund Tobacco Grant and the Cardiovascular Research Foundation (CRF) Tobacco Grant could provide support to their work. Finally, they created a sub-committee in charge of reviewing local and state tobacco legislation and regulations, the US Centers for Disease Control (CDC) Best Practice Model and the CDC Community Guidelines to adapt their strategy according to local and national regulations and guidelines.

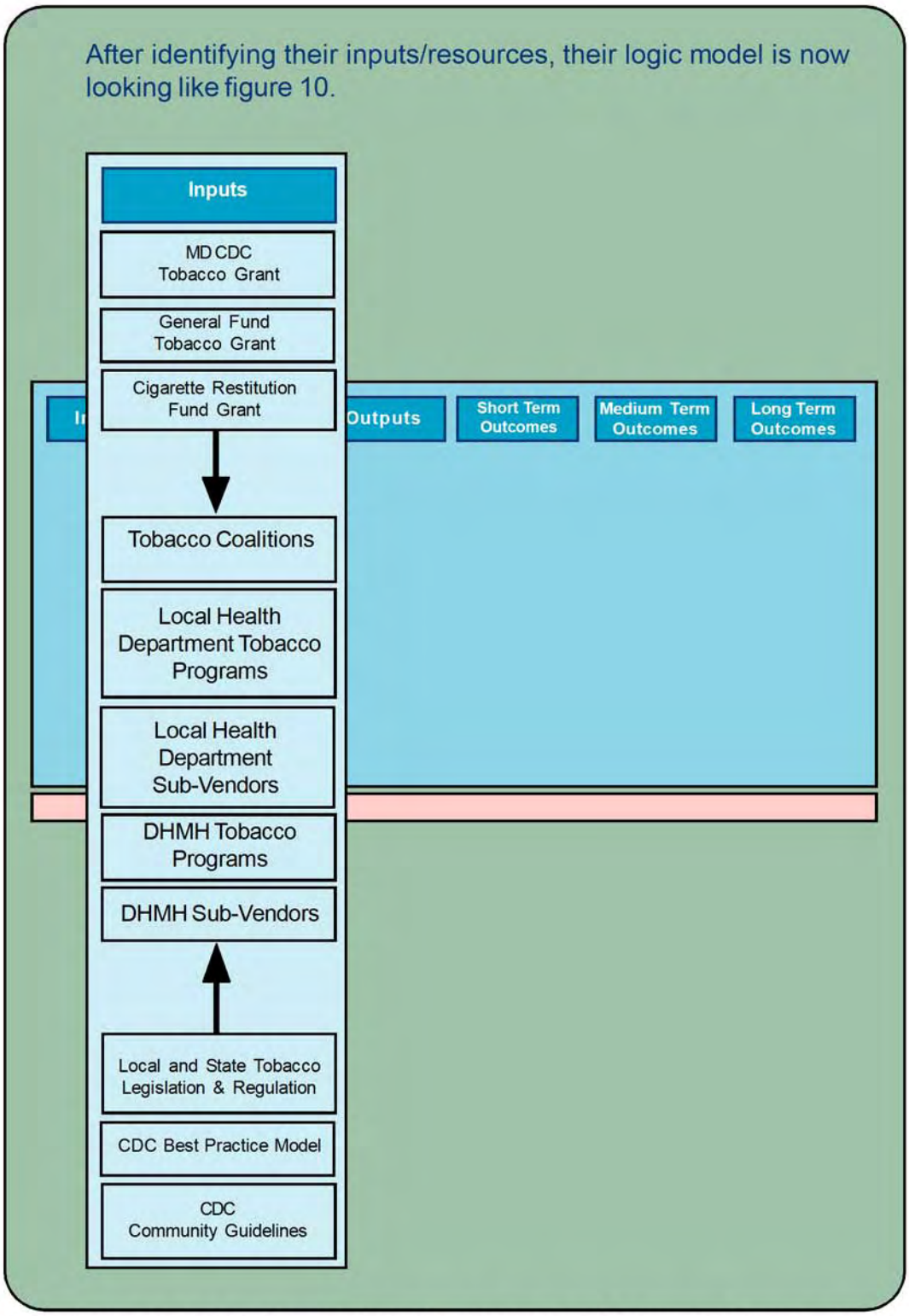


Figure 10. Inputs of the Overarching Logic Model (Case Study). Maryland Tobacco Use Prevention and Cessation Program.

Step Three: Program Activities

In the following step, you will clarify what the program will do with the resources. You should identify the processes, tools, events, technology, and actions that you are performing and/or plan to perform.

The working group in Blue Sky is now ready to identify which activities are necessary for achieving the goal of preventing initiation of tobacco use in their community. In fact, they identified the following three elements: enforcement, school-based and community-based elements.

Brainstorming allowed them to develop a more detailed description of each element. As seen in the following graphic, they recognized that the enforcement element should include retail education, retail enforcement and youth enforcement. The school-based element combines youth enforcement, school policy advocacy, curricula and programs. Finally, the activities that should be performed at the community level include: prevention education, prevention events, mass media health messages, anti-tobacco activities, anti-tobacco clubs, and issue advocacy.

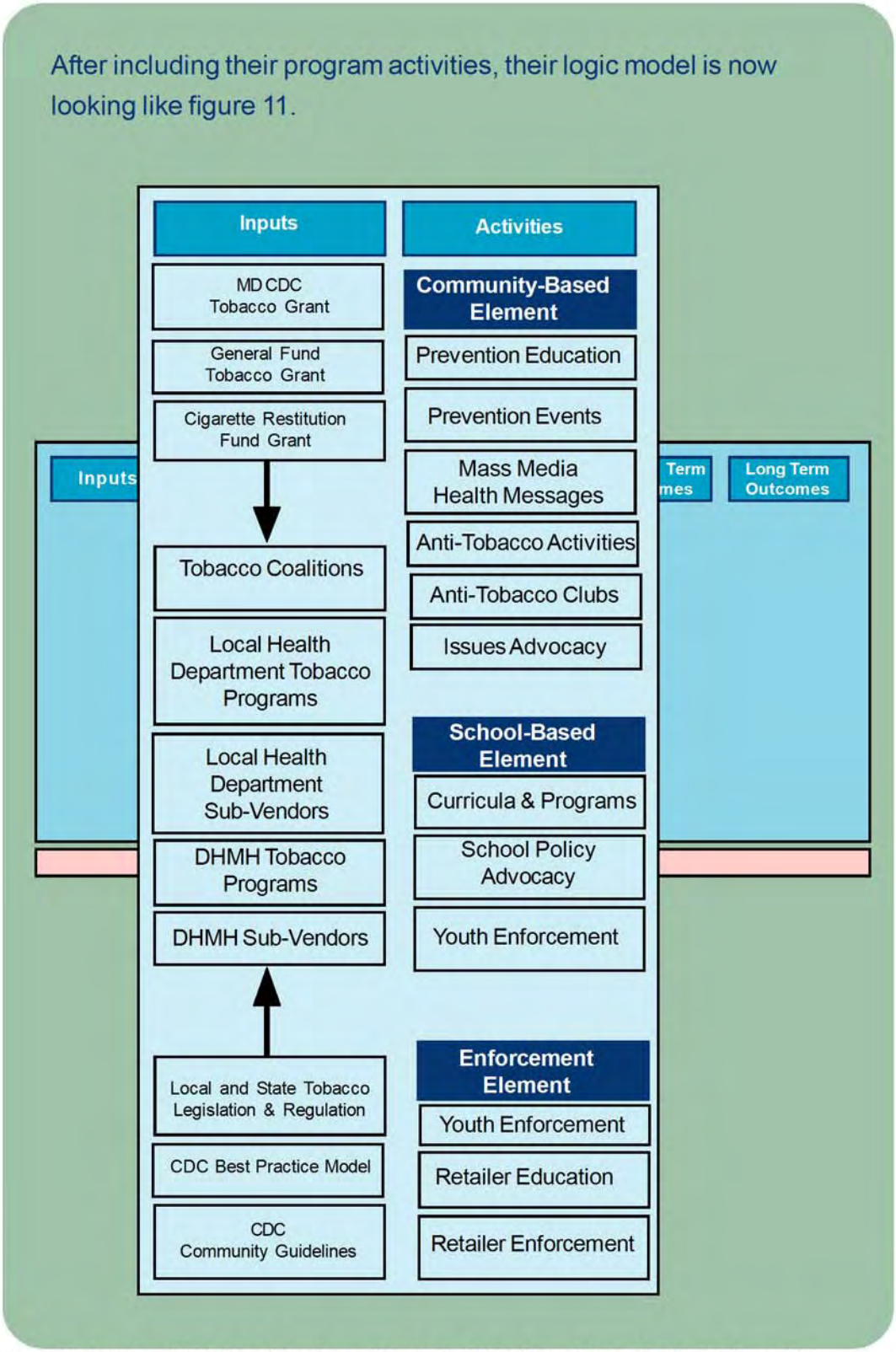


Figure 11. Inputs and Activities of the Overarching Logic Model (Case Study). Maryland Tobacco Use Prevention and Cessation Program.

Step Four: Outputs

It is now time to identify the direct outcomes resulting from your program activities. Monitoring your outputs allow to identify if your program activities have been delivered to the intended audiences and at the intended "dose."

As you can see, the activities proposed by Katherine's working group involve a lot of human and economic resources. The group is now defining the outputs they expect from their program so that they can monitor their progress. These outputs will provide them with information on whether an intervention is on track or on budget and whether it is reaching the desired number of community members.

They will monitor the retail education by analyzing if the retail education plan was completed. The retail enforcement element will be assessed with the number of retailer compliance checks completed. Youth enforcement will be evaluated by the number of youth compliance checks completed. School policy advocacy will be measured by determining the number of school advocacy activities completed. Finally, the curricula and programs as well as the community based elements will be appraised with the percentage of youth and young-adults exposed to facts about tobacco-use and impact upon health.

After including their program outputs, their logic model is now looking like figure 12.

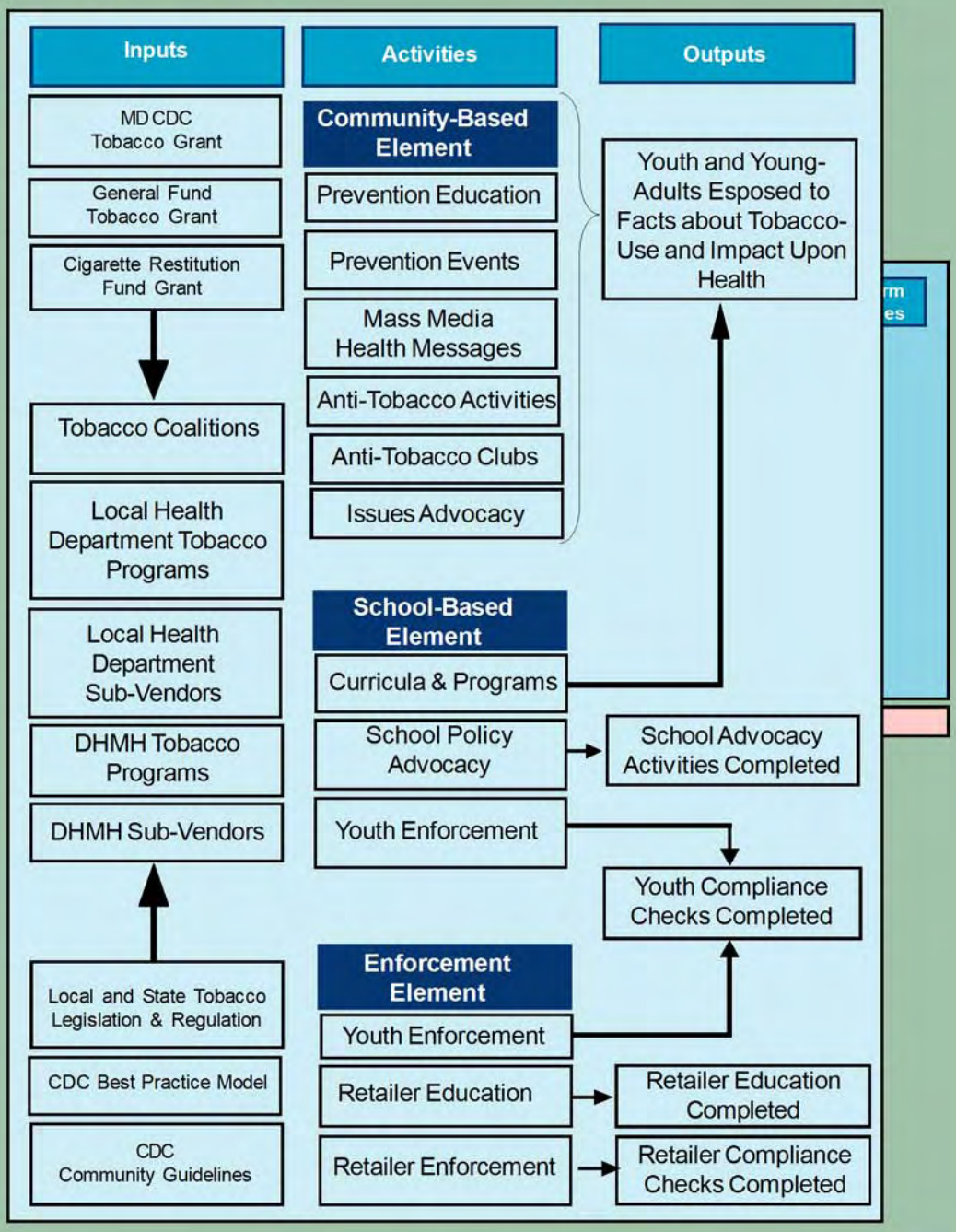


Figure 12. Inputs, Activities and Outputs of the Overarching Logic Model (Case Study). Maryland Tobacco Use Prevention and Cessation Program.

Step Five: Outcomes and Impact

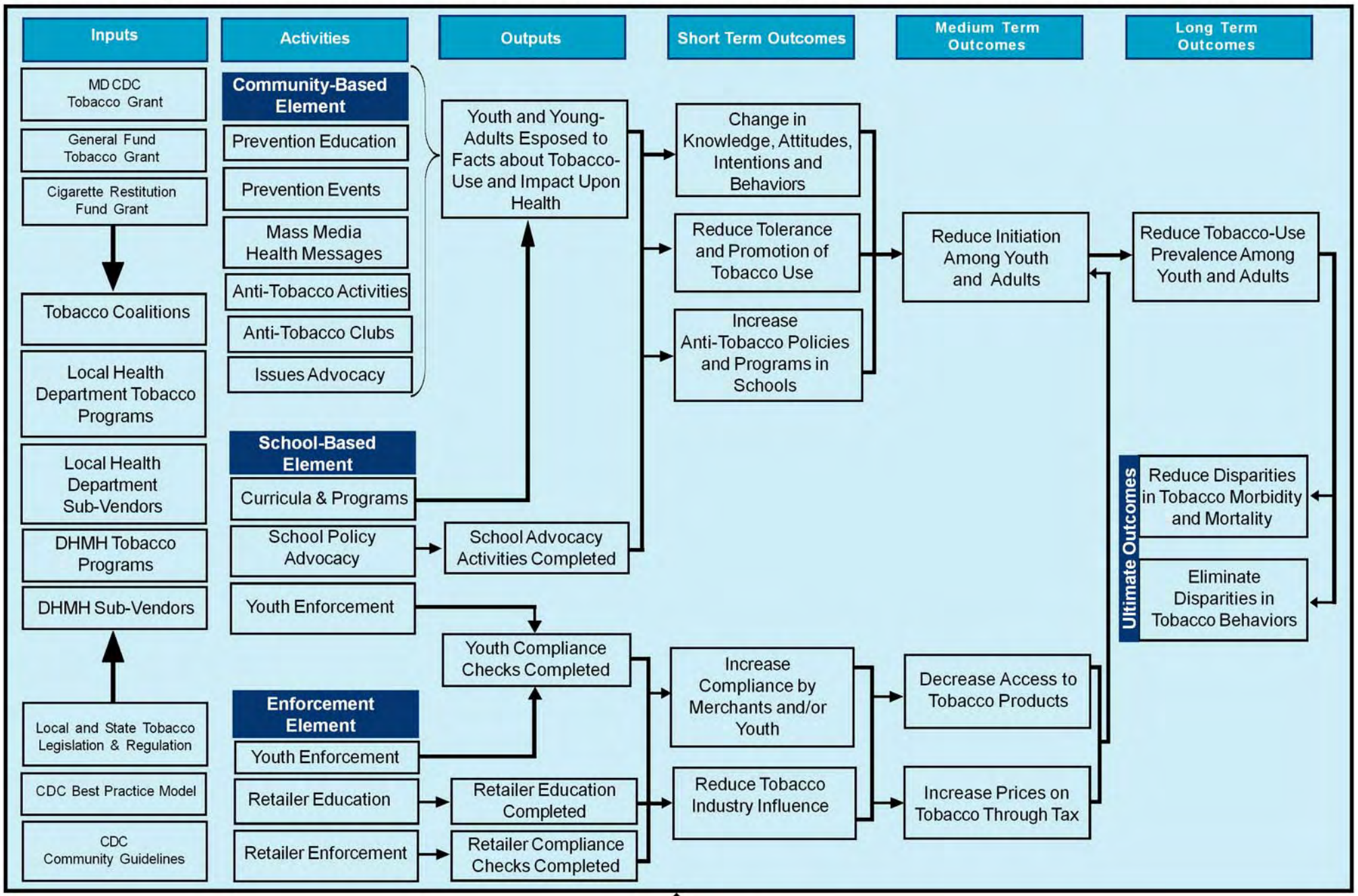
It is time to identify your program outcomes. This step will allow you to define specific changes that your target population is expected to have in several dimensions such as behavior, knowledge, skills, status and level of functioning. When defining your outcomes, you need to take into consideration that short-term outcomes are expected to be attainable within 1 to 2 years and medium term outcomes are expected to be achieved shortly after, e.g. 3 to 4 years from implementing your program.

Katherine's working group has decided to use the program outcomes presented in the sub-model one (Prevent Initiation of Tobacco Use). They decided to include five short-term outcomes that will be achieved within 1 to 3 years: 1) change in knowledge, attitudes, intentions and behaviors; 2) reduce tolerance and promotion of tobacco use; 3) increase anti-tobacco policies and programs in schools; 4) increase compliance by merchants and/or youth; and 5) reduce tobacco industry influence.

As seen in figure 13, they expect that these five short-term outcomes will contribute to three medium-term outcomes that will be achieved in three to four years: 1) reduce initiation among youth and adults; 2) decrease access to tobacco products; and 3) increase prices on tobacco through tax.

They also considered it important to include two ultimate outcomes: 1) reduce disparities in tobacco morbidity and mortality; and 2) eliminate disparities in tobacco behaviors. They also considered it important to constantly monitor if their strategy is adapted according to the culture of the community, the resources of the community, the community environment as well as socioeconomic, and political contextual factors. Their final sub-logic model is looking like figure 13.

Figure 13. Sub-Logic Model for Goal 1: Prevent Initiation of Tobacco Use (Case study). Maryland Tobacco Use Prevention and Cessation Program.



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