

Health Service



EASTERN ILLINOIS UNIVERSITY™

# Using Logic Models to Develop and Assess Prevention Programming

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# Who Are We

- Who are you and what institution do you represent?
- My prior experiences with logic modeling include:
- Today, I am hoping to take away from this training?
- I am excited to be here because...
- The aspect about logic modeling that I am most apprehensive about is: \_\_\_\_\_

Why have you chosen your  
current job/career/profession  
in higher education?

# We Have a Problem

- Dr. Indiana Jones, President of UR University calls in a crisis.
- The goonies are no longer good enough, and as one of your social organizations are wreaking havoc in Mr. Roger's neighborhood.
- He was gonna call the Ghostbusters, but they are unavailable because they're throwing parties for children
- The goonies' parties are just out of control
- CHiPs and the Emergency 51 crew have responded to several alcohol related emergencies at the House.
- Dr. Green from the nearby hospital is livid, and "tired of treating intoxicated drunk students"
- Your mission, being that you will accept it (you have no choice) is to "fix it", especially before a student dies, and UR gets negative national media attention.

# GROUP ACTIVITY

How do you go about resolving the problem?

# How we often create programs and interventions

- A problem develops/need is seen
  - “We prioritize by crisis”
- Knee jerk reaction – develop programming
  - “Is it really a problem? Have we gotten any data to determine the magnitude of the situation?”
- Implement programming
  - “Are we really addressing the issue, or attempting to address showing that we’re trying to do something?”
- If we’re lucky, evaluation shows program works.
  - “Will our assessments be biased because we developed them as an afterthought?”

What problems/challenges do we have with this model?

# How we should create programs and interventions

- A problem develops/need is seen
- Determine ultimate vision and impact
- Determine what actions/behaviors will get target population to ultimate vision
- Determine what data exists to show what actions/behaviors are actually occurring
- Determine what learning needs to occur in the target population
- Review literature, best practices and theories for evidence based, evidence informed, & best practice interventions.
- Develop program interventions that connect to outcomes
- Determine what is needed to carry out program interventions
- Evaluation occurs from end to beginning, and then beginning to end

# Benefits and Advantages to this Process?

# Our Changing World

What factors are driving a need  
to infuse  
assessment/evaluation into  
our program planning

“If you don’t know where you are going, how are you gonna know when you get there?”

-Yogi Berra

- *Where are you going?*
- *How will you get there?*
- *What will tell you that you’ve arrived?*
- ***Most importantly, how will your Trustees, Senior Level Administration, students, & other constituents know when you get there?***

# Accountability

- What gets measured gets done
- If you don't measure results, you can't tell success from failure
- If you can't see success, you can't reward it
- If you can't reward success, you're probably rewarding failure
- If you can't see success, you can't learn from it
- If you can't recognize failure, you can't correct it.
- If you can demonstrate results, you can win public support.

Re-inventing government, Osborne and Gaebler, 1992

# Factors leading to increased assessment in higher education

- Accountability Emphasis
  - Commission of the Secretary of Education , “student learning outcomes needs top be central in the process of accountability.” (US. Dept of Ed, 2006)
- Focus on Student Learning
  - An American Imperative: Higher Expectations for Higher Education (Wingspread Group on Higher Education, 1993)
  - The Student Learning Imperative (ACPA, 1996)
  - Liberal Education and America’s Promise: Excellence for Everyone as a Nation Goes to College (LEAP) program (Association of American Colleges and Universities, 2002, 2004, 2005, 2008)
  - Learning Reconsidered (Keeling, 2004)

# Factors leading to increased assessment in higher education

- Retention
- Political Pressure
  - Higher Education Re-Authorization Act Testimonies in 2002 & 2006
  - No Child Left Behind Legislation
  - Costs of attending higher education scrutinized
  - Concern regarding public accountability/stewardship
- Accreditation
  - Regional accreditors are stressing that institutions provide solid, empirical data on what students are learning both in and outside of the classroom

# Assessment does not Exist for the Sake of Assessment

- Assessment should be an organic part of on-going processes and activities
- Assessment is taking what many of us already do, and making it formalized and systematic

# Ultimately, the purpose of assessment is to REFLECT on the end outcomes (Bresciani, 2006)

- What are we doing and why?
- What are we supposed to be accomplishing?
- What do I want my students to be able to do and or know as a result of this health promotion program?
- Are we being successful in accomplishing what we say we will accomplish?
- How do we honestly know?
- How is this information then used to improve or celebrate successes?
- Do our improvements lead to greater success?

# Outcome-Based Assessment & Your Alcohol Program

- What decision did you make about your alcohol program within the last year?
- What decisions are you considering to make?
- What data or evidence did you use in making your decision?
- What was it that you were trying to alter or change about your program?
- What were the results

# The Difference Between What We Do and What Our Target Populations Do

## GROUP ACTIVITY/DISCUSSION

YOU ARE PLANNING TO IMPLEMENT AN ALCOHOL PROGRAM AND ARE ASKED TO ASSESS IT –

WHAT DATA DO YOU COLLECT?

# Traditional Performance Indicators Vs. Outcome Indicators

- Performance Indicators (Typically what we do)
  - Metric & Process Indicators
    - Number of Participants/Heads
    - Demographic data of participants
    - Number of Sessions We Delivered
    - Number of Sessions attended
    - Content delivered vs. Content Planned
    - Satisfaction with program
    - Staffing to participant ratio
    - Cost of program

# Traditional Performance Indicators Vs. Outcome Indicators

- Outcome Indicators
  - Knowledge
  - Attitudes
  - Behaviors
  - Perceptions
  - Skills

# Outcomes Vs. Process Indicators (Keeling 2009)

Student Learning Outcomes	Performance/Process Indicators
Originate from institutional, divisional, departmental/unit mission statement and purpose	Originate from the description and type of work/program/activities provided
Measure transformation students experience – learning that was acquired	Measure performance of a task that is completed
Achievement = Effectiveness in learning; students are different	Achievement = Productivity, Satisfaction or Accomplishment – Did we do what we said we were going to do
Requires criteria to define effectiveness	Requires criteria to define performance

# Outcomes Vs. Process Indicators (Keeling 2009)

Student Learning Outcomes	Performance/Process Indicators
Ind & collective feedback to shape dept./unit programs and divisional activities and priorities	Individual feedback to shape dept/unit systems
Assessment: How effective were we in creating change in our students	Assessment: How well did we perform our tasks
Are students learning something	Are students happy and satisfied with our programs and services

# Both Outcomes and Process Indicators Need to Be Assessed?

- Riding the Amtrak to New Orleans for a Conference?
- What factors will determine if I take the train again or fly to NOLA?
- Which factors are outcome driven?
- Which factors are process driven

# What is a Logic Model

# Why we should use logic models:

- Provides a common language
- Enhances communication between practitioners, administrators, participants, stakeholders
- Helps us manage the project, carrying our activities in a timely fashion
- Helps us differentiate between “what we do” and “results” --- **outcomes**
- Helps us determine what questions need to be addressed
- Increases understanding about program
- Guides and helps focus work
- Leads to improved planning and management
- Increases intentionality and purpose
- Provides coherence across complex tasks, diverse environments
- Helps us document the project and how it works
- Allows us to examine individual or groupings of projects

# Logic Models Help with Assessment & Evaluation

- Helps focus on the important matters
- Helps identify what should be measured, both in terms of outcomes and processes
- Helps match evaluation processes to program
- Helps match program content/curriculum to what is being evaluated and what matters

# A logic model

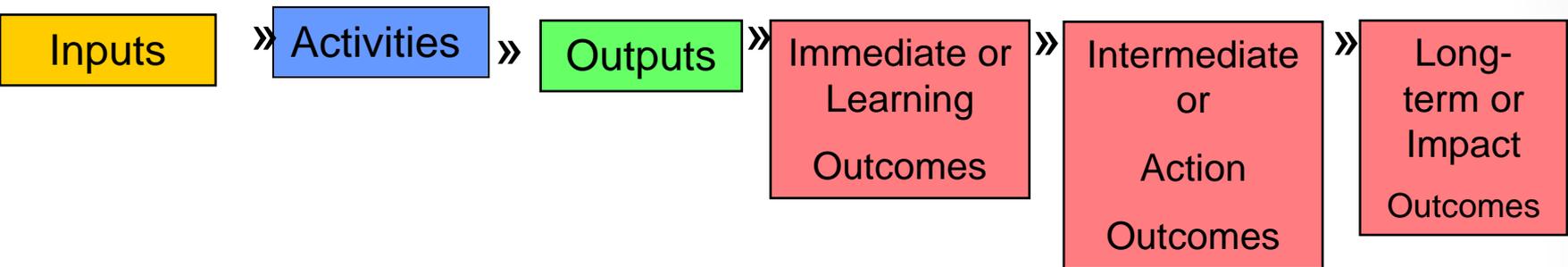
- is a picture indicating what your program or intervention will accomplish, and how you will do it!
- shows if-then relationships, that when implemented as indicated, should lead to the desired outcomes
- provides a map for planning AND evaluation

# Stephen R. Covey Advice

## Habit 2:

Begin with the End in Mind

# Generic logic model



A graphic depiction of relationships between activities and results

# Terms Commonly Used When Developing Logic Models

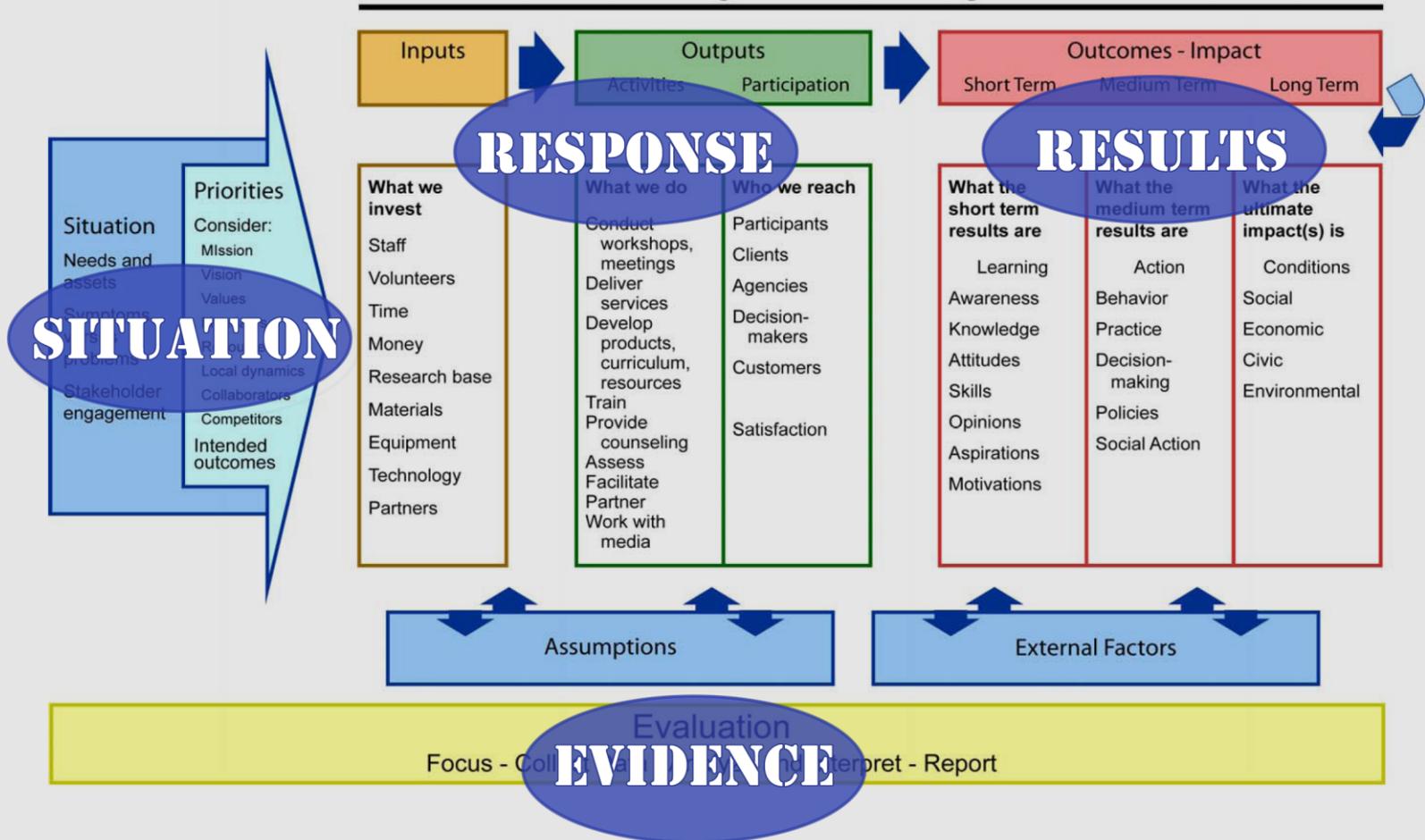
- Outcomes
  - Long-term, intermediate-term, short-term
  - Impact, activity, learning
- Outcome Indicators
- Outputs (Process Indicators)
  - Quantity
  - Quality
- Activities
- Inputs

# Logic model and reporting

## PROGRAM DEVELOPMENT

*Planning – Implementation – Evaluation*

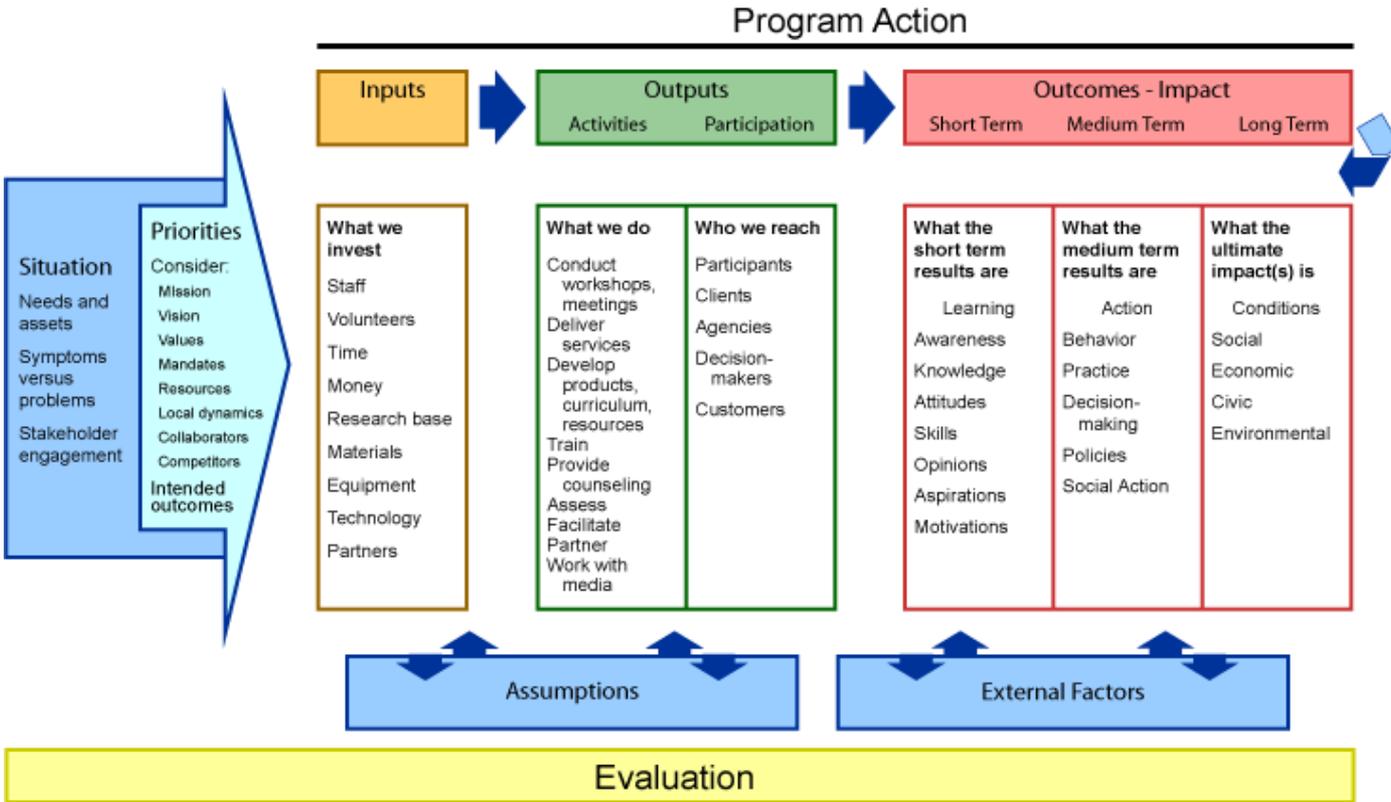
### Program Action - Logic Model



# Why measure outcomes

- We want to make sure that we make a difference in our students lives
- We want to improve our campuses
- We want to improve the programs and services we offer
- To meet standards of accountability
- Justify budget allocations and requests
- To meet standards of accreditation

**PLANNING: start with the end in mind**



**EVALUATION: check and verify**

# Looking at What Our Students Do As a Result of Our Program/Intervention

# Outcomes – The Actual Results

- How participants have been transformed as a result of the program
- States a CHANGE in knowledge, attitude, behavior, beliefs, policies, etc. that result from the program intervention
- Must be measurable and realistic
- How are students and/or campus different as a result of the work that was done

# Long-term or Impact Outcomes

- Changes that occur at the institutional, organizational, environmental and systemic level which create:
  - Improved learning and academic success
  - Improved health
  - Increased capacity
  - Changes in social situations
  - Economic changes
  - Environmental changes
  - Changes in actual social norms
- These occur after intermediate and immediate changes are achieved

# Intermediate or Action Outcomes

- Changes that typically occur in:
  - One's behavior
  - One's practices
  - One's decisions
  - Procedures
  - Policies
- These typically occur after immediate changed are achieved, may take several months to several years

# Immediate or Learning Outcomes

- Changes in
  - Beliefs
  - Attitudes
  - Values
  - Perceptions
  - Awareness
  - Motivations
  - Knowledge
  - Skills

# Outcome Indicators

- Assessment and evaluation methods used to measure immediate, intermediate and/or long term outcomes.
  - Indirect Assessment Methods
    - Standardized Surveys (self-report)
    - Focus groups
    - Interviews
    - Surveys
  - Direct Assessment Methods
    - Scoring Rubrics
    - Standardized Testing
    - Observations
    - Reflection – Essays or Verbal

# Writing Outcomes

- Make them Smart
  - Specific
  - Measurable
  - Attainable
  - Realistic
  - Time Oriented

# Format for Writing Outcomes

- Describe your target audience
- Indicate program and intervention students will be participating in/exposed to
- Indicate the changes that should occur/learning that should occur
- Indicate the time frame/frequency or accuracy expected

# Examples

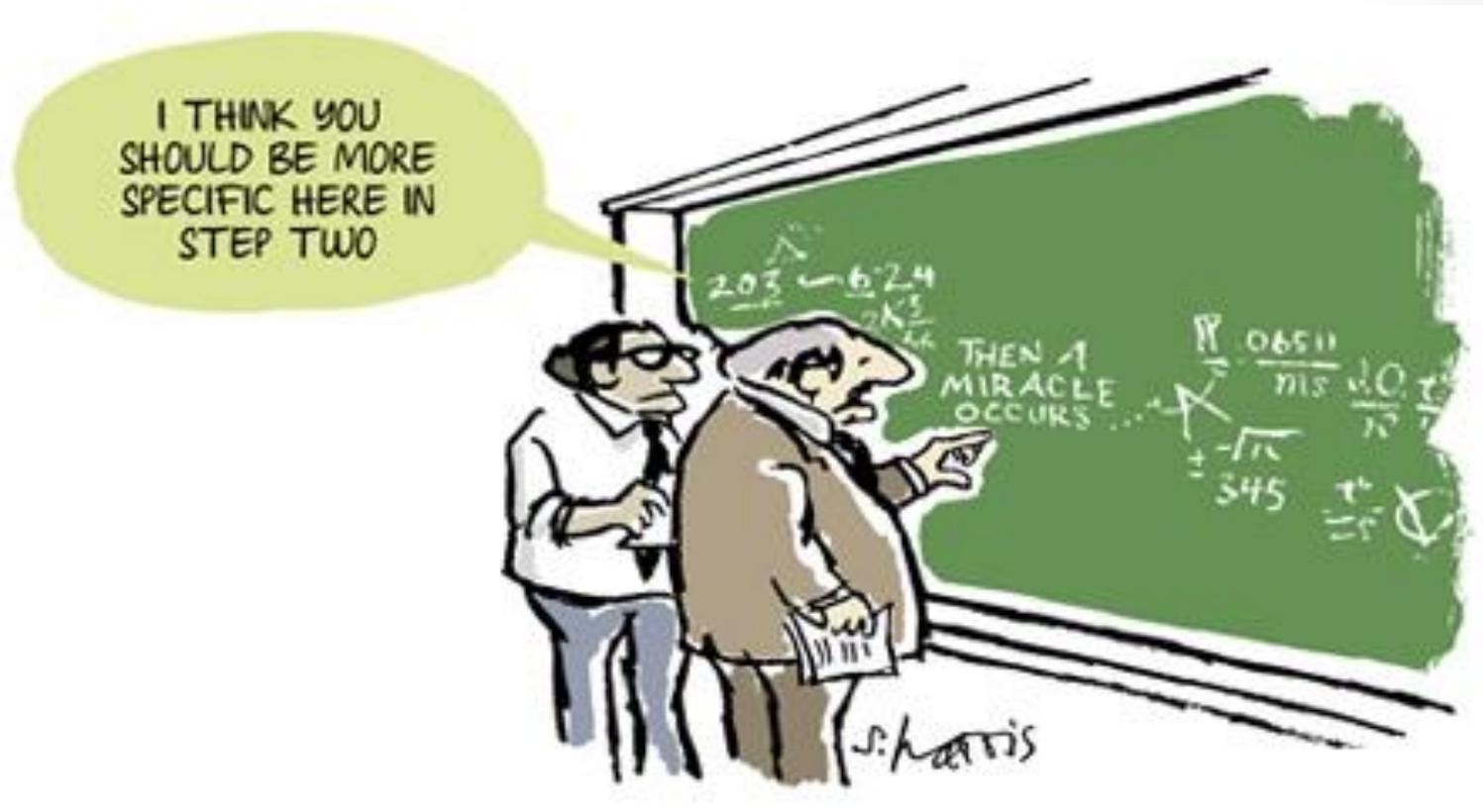
- Increase in the % of First year students attending Six Pack who will be able to list 4 of the 6 alcohol protective behaviors
- Increase in the % of student completing an Electronic Check-Up to Go will be able to explain their familial risk factors
- Increase in the % of students attending the Expectancy Challenge Alcohol Literacy Curriculum who can differentiate between pharmacological and expectancy effects of alcohol
- Increase in the % of students reporting drinking once a week or less
- Decrease in the average number of negative alcohol-related consequences experienced by incoming freshmen after taking the pre-matriculation on-line alcohol education program.

# Determining Outcome Indicators

- Important to determine outcome first
- Important to clearly write outcome
- Often how you write your outcome will determine indicator/assessment process you will use

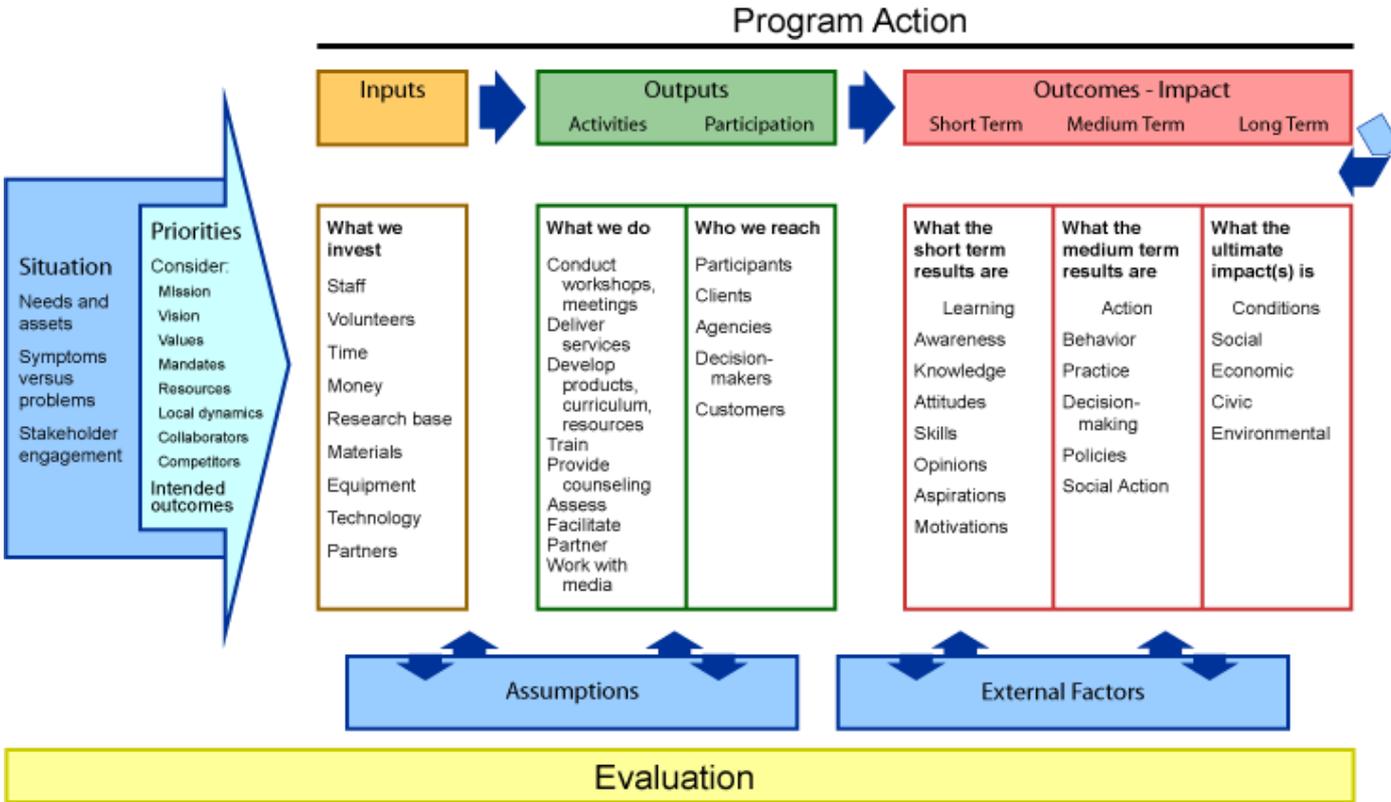
# Determining What We Do & Who We Reach

# Connecting outputs to outcomes is a challenge



*"I think you should be more explicit here in Step Two."*

**PLANNING: start with the end in mind**



**EVALUATION: check and verify**

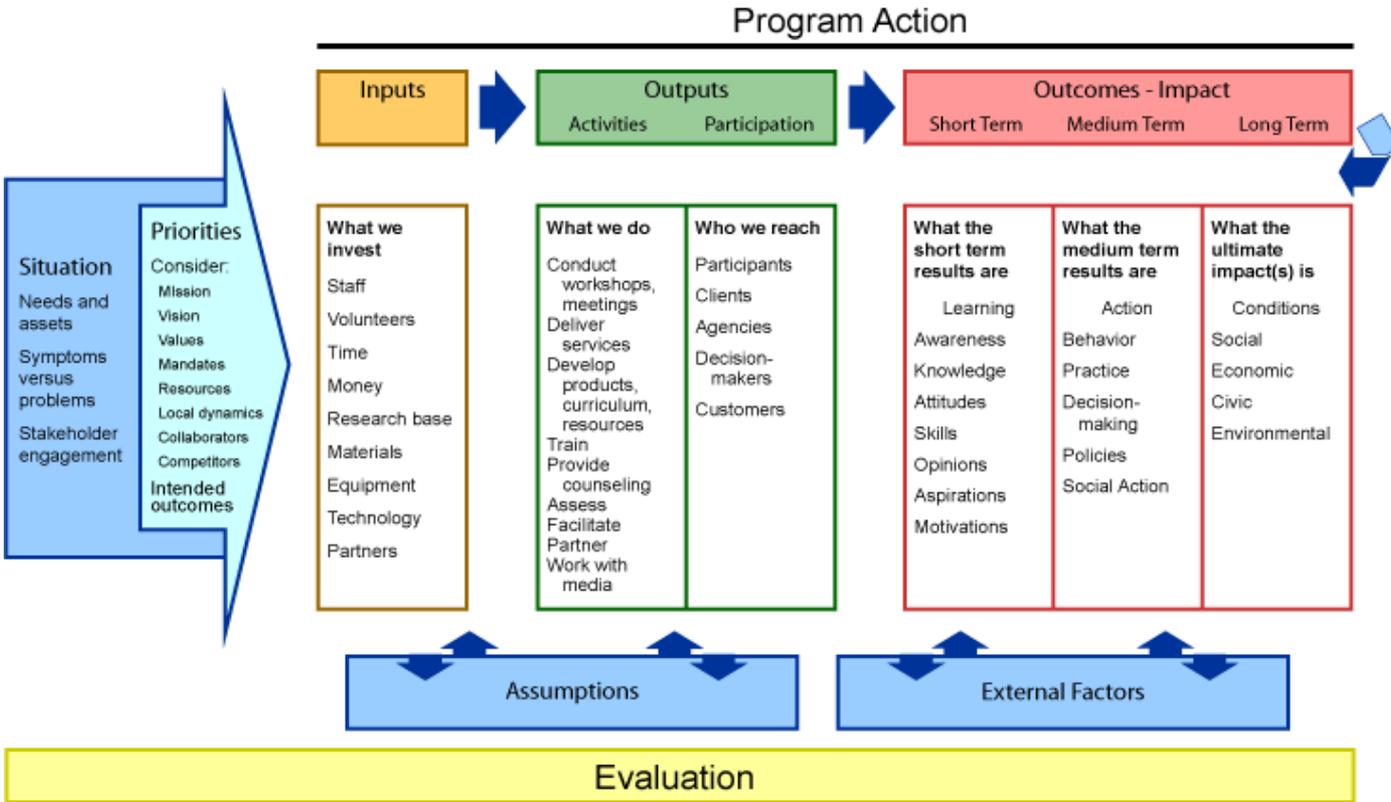
# Outputs - Participation

- Who We Target/Reach
- The “consumers” of a program
- Usually results of our processes that indicate quantity and quality
  - Quantity
    - # of programs
    - # of participants
    - # of brochures distributed
  - Quality
    - Satisfaction survey ratings/results
    - Reduction of wait time

# Activities – What We Do

- Actual programs and services provided
  - Providing one-on-ones
  - Delivering a social marketing campaign
  - Information tabling
  - Educational Presentations and Programs

**PLANNING: start with the end in mind**



**EVALUATION: check and verify**

# Inputs – What We Invest

- Resources used to support and carry out activities
  - Personnel
  - Budget
  - Facilities and equipment
  - Community/Institutional Assets
    - Collaborative relationships
    - Allies
  - Barriers
    - Local and institutional norms

# Prioritization of What is the Ideal vs. What is the Realistic

- What resources are actually available
- What staffing is actually available
- How does model actually fit with mission
- How does model fit with institutional/departmental priorities, goals
- Does model fit with desired outcomes of administration/funder

# Outcomes vs. Outputs

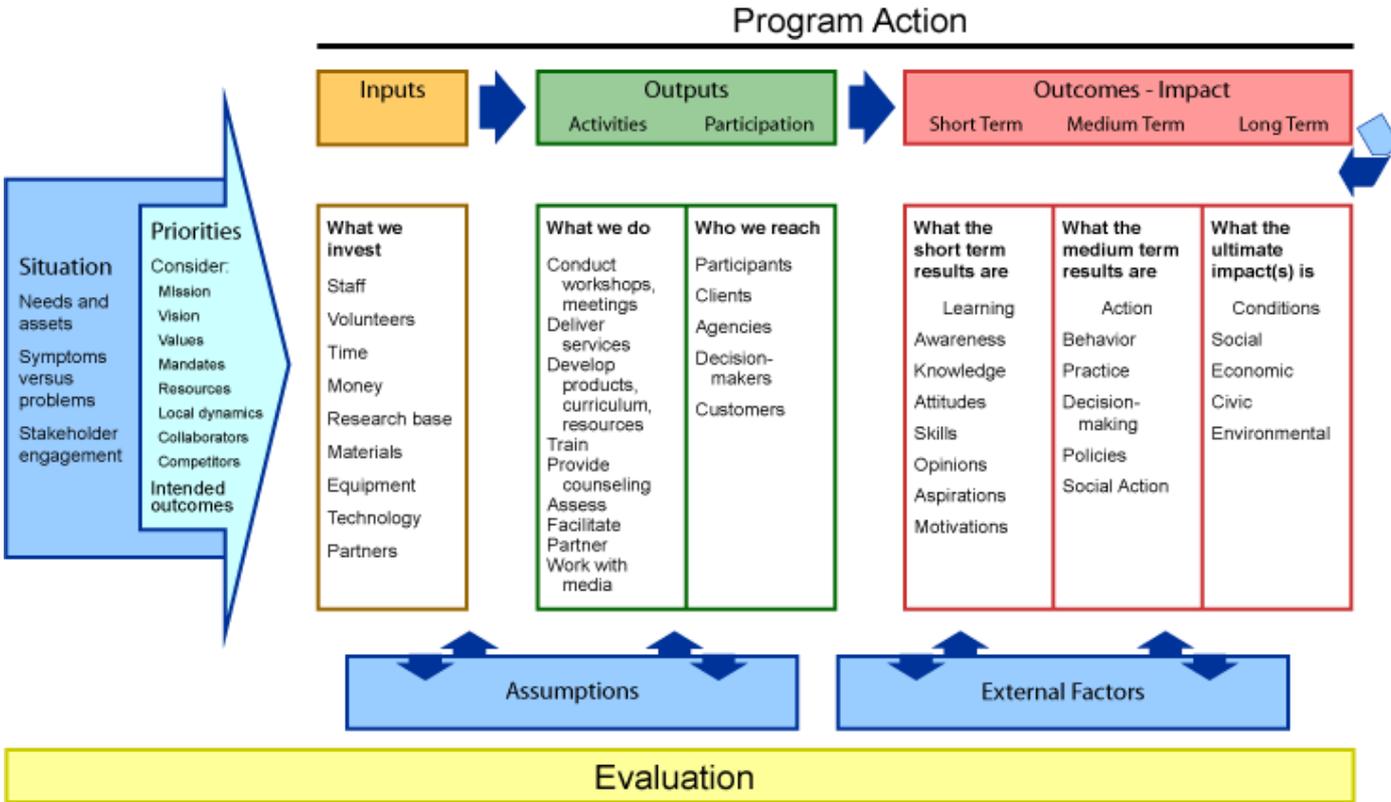
## Outcomes

- Increase in knowledge, attitudes and skills
- Reduction in negative behaviors
- Increased % of students who

## Outputs

- # of participants who attended
- # of sessions delivered
- Reasons for attending
- Demographic breakdowns
- Compared content planned vs. content actually delivered

**PLANNING: start with the end in mind**

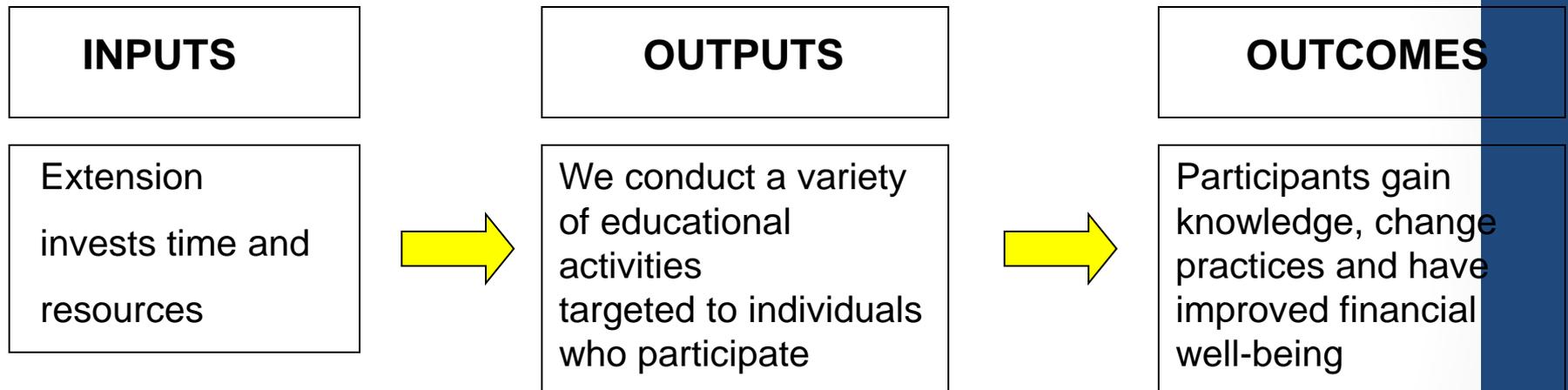


**EVALUATION: check and verify**

# EXAMPLE LOGIC MODELS

## Example: Financial management program

**Situation:** Individuals with limited knowledge and skills in basic financial management are unable to meet their financial goals and manage money to meet their needs.



**UW**  
*Extension*



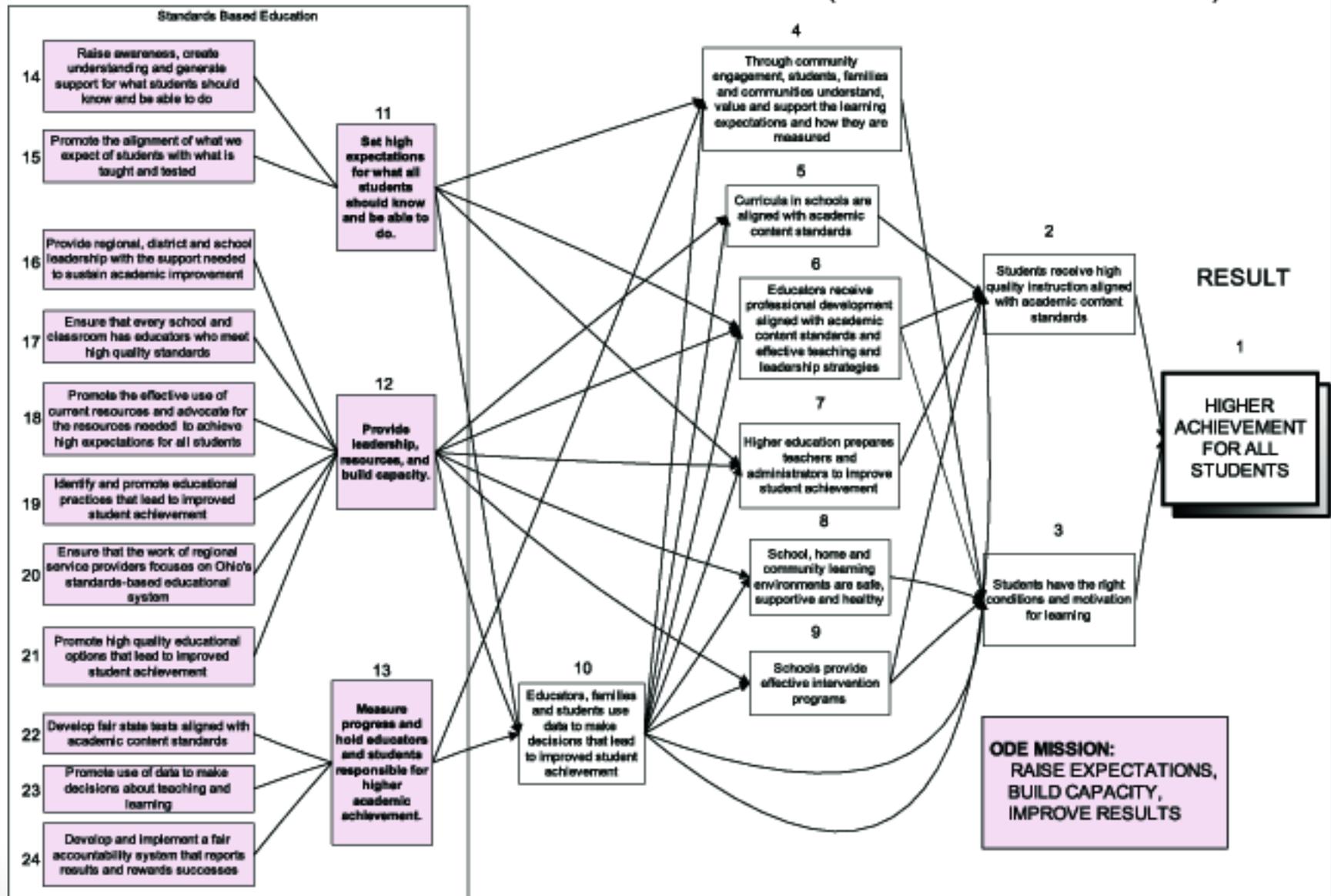
**WHAT WE INVEST**

**WHAT WE DO**

**WHAT RESULTS**

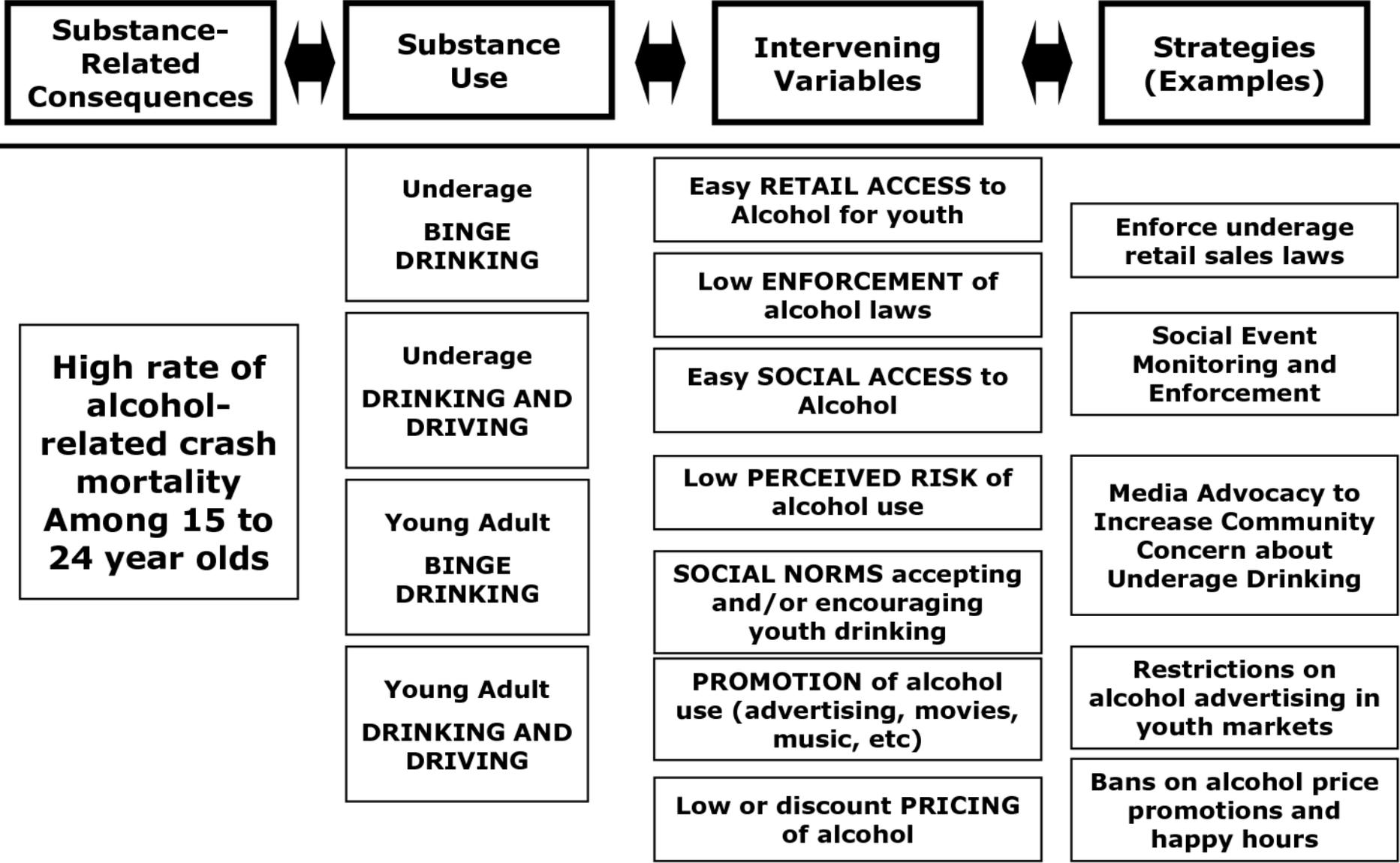
# ODE STRATEGIES

## Success Indicators (that Will Lead to the Ultimate Result)



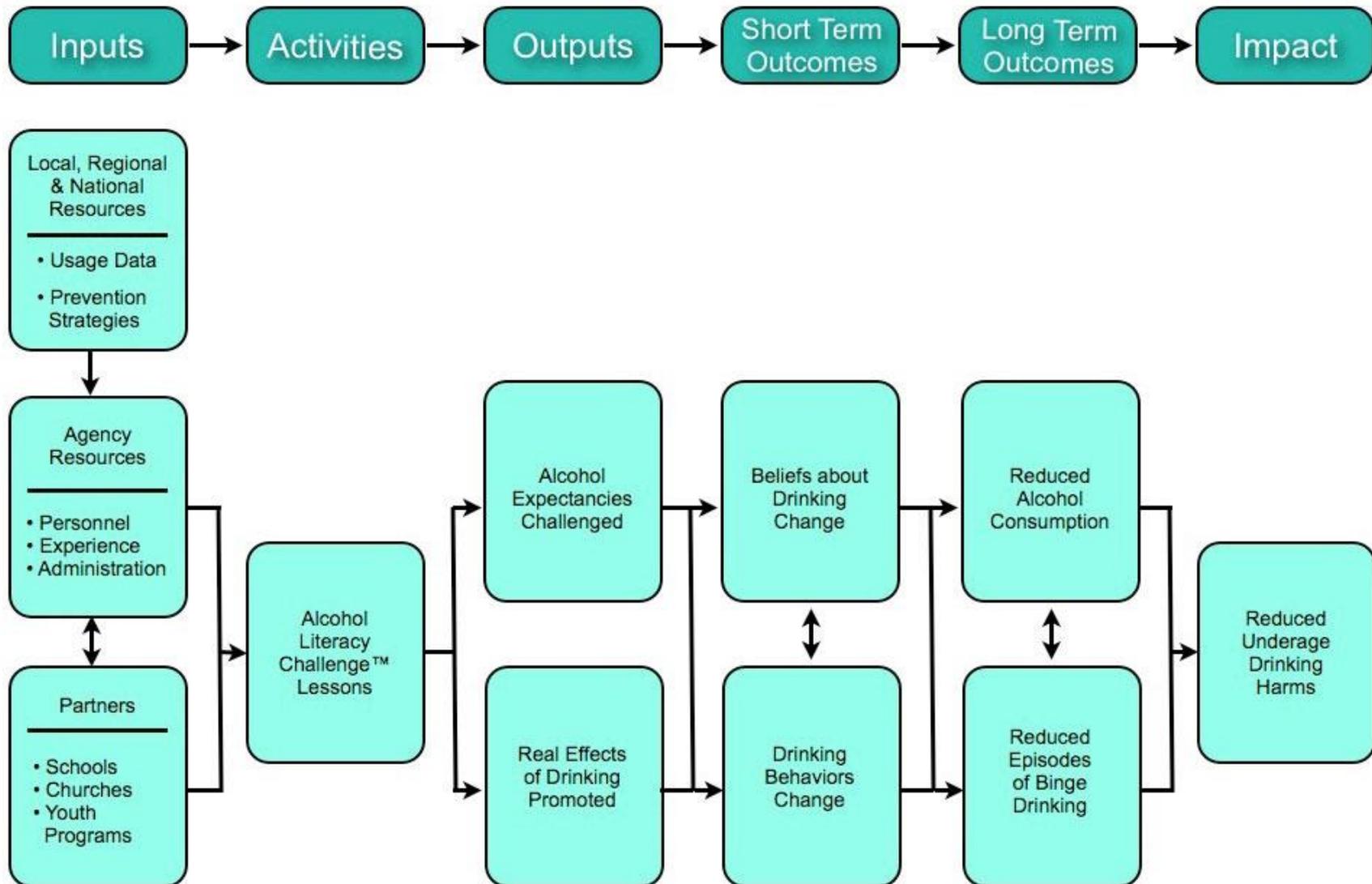
# SPF SIG New Mexico Community Logic Model

Reducing alcohol-related youth traffic fatalities



# Alcohol Literacy Challenge™

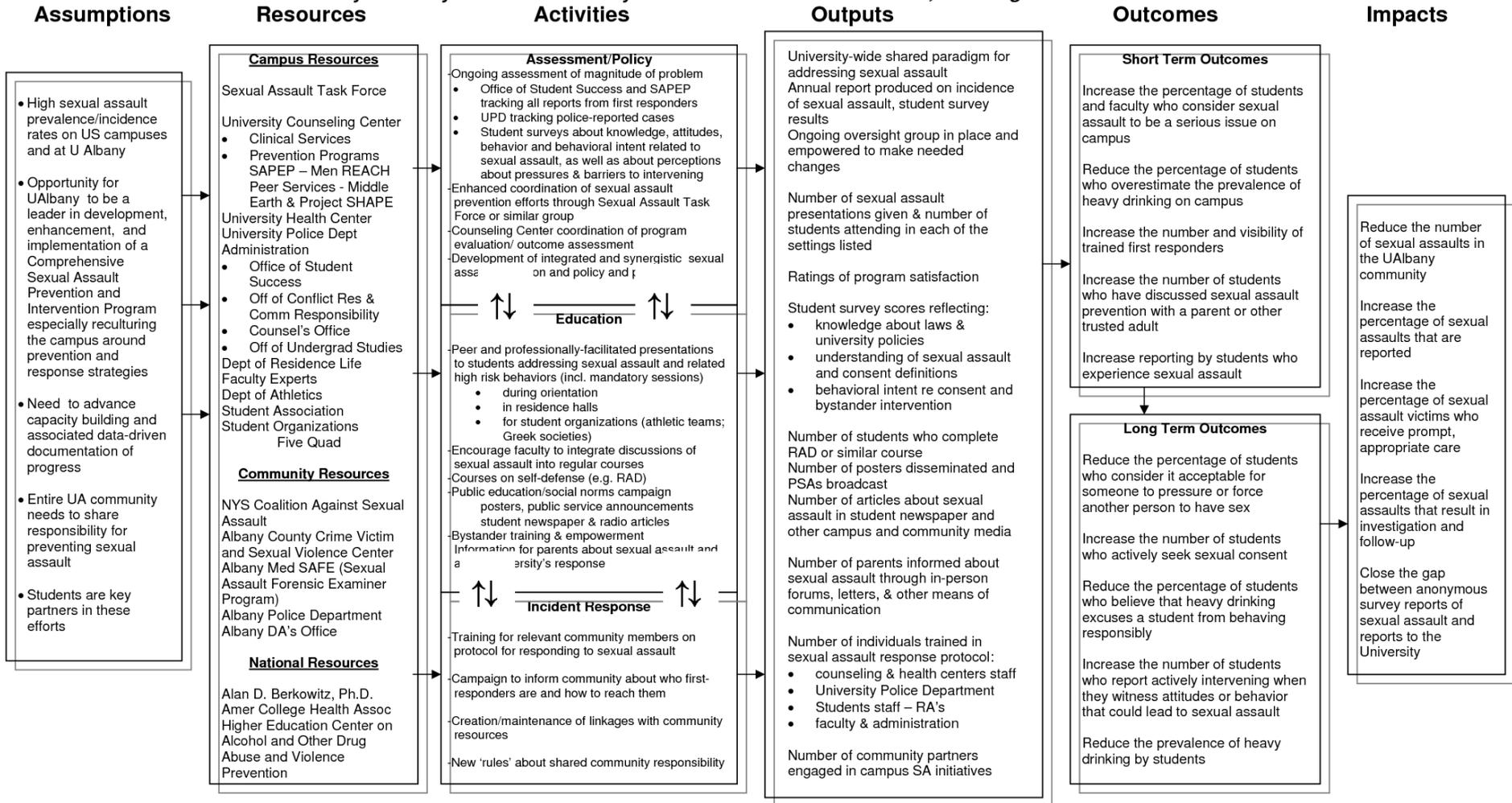
## Logic Model



# Logic Model – UAlbany Sexual Assault Prevention & Response

February 2007

**Goal: The University at Albany will be a community that is resistant to sexual assault, including all non-consensual sexual contact.**



**ATTACHMENT B**  
**Perinatal Oral Health Logic Model**

**Objectives**

**Assess/Monitor Perinatal Oral Health**

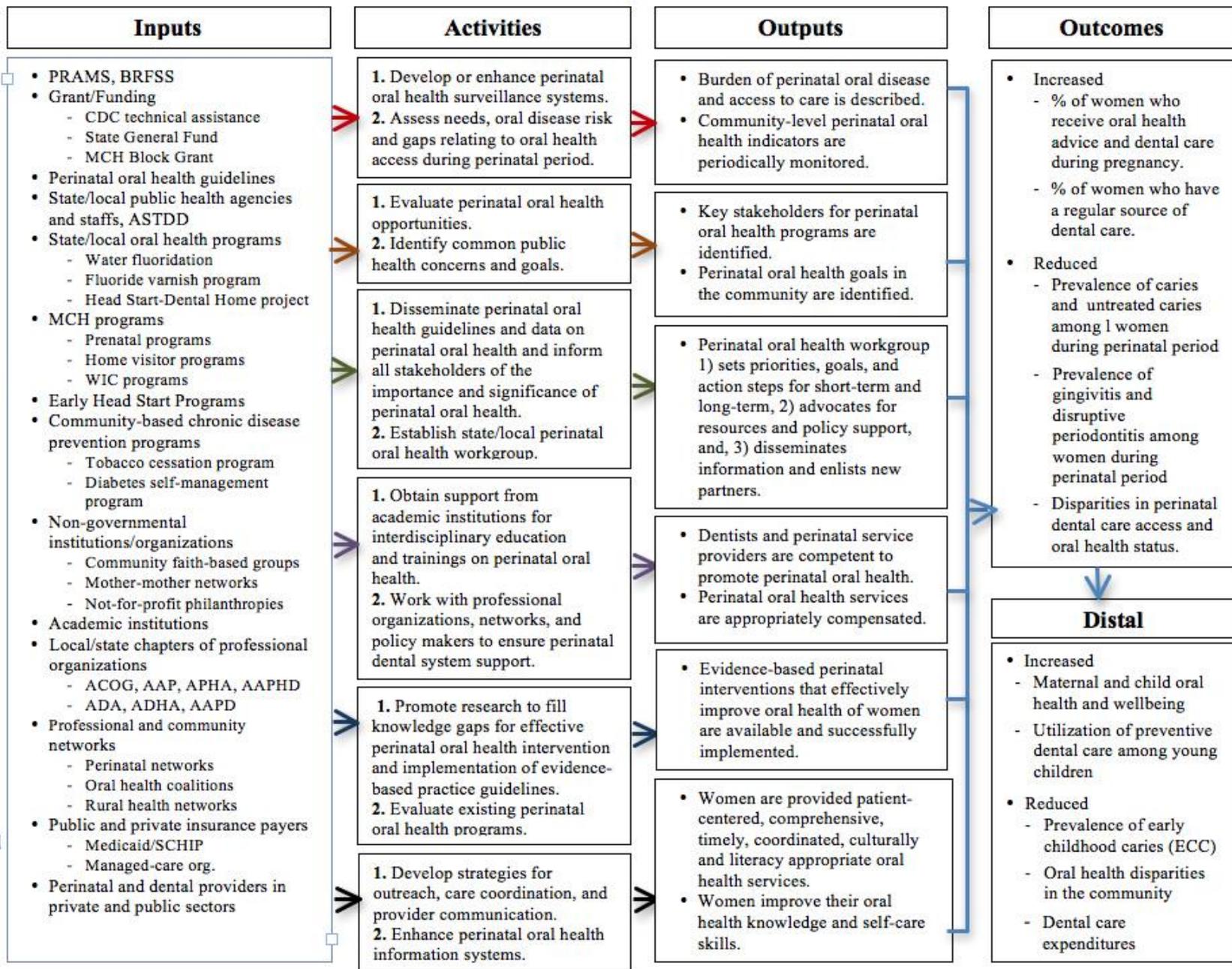
**Enhance Infrastructure & Build Partnerships**

**Inform, Empower Public & Mobilize Support**

**Ensure Workforce & Systems**

**Utilize Data/ Research**

**Integrate Oral Health Program into Patient-Centered Medical Home**



# Lets Practice & Build a Logic Model

# Contact Information

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