

Field Guide to Living a Data-Rich Life

Webinar 2: Logic Models and the Theory of Change



Hosted by Durham's Partnership for Children, with
support from the North Carolina Partnership for
Children

Presented by Compass Evaluation and Research



Welcome

- Webinar 2 in our year long data quality series
- Last time (webinar 1), we discussed data and how to collect high quality data
- Today, we'll start discussing in more detail how to plan to collect high quality data
 - Using a Logic Model and Theory of Change to
 - Outline and understand programs
 - Plan evaluations



Introduction

- What if you have to convey all of the most critical elements about your project in a table or diagram?
- What elements would you include?
- How would you present the information?



Smart Start Logic Model Template

Partnership: *INSERT NAME*

Activity Name: Assuring Better Child Health and Development (ABCD)

PBIS ID: H10

PSC: 5410

<i>If this condition exists</i>	<i>For this population</i>	<i>And we implement these strategies</i>	<i>This many times, for these individuals</i>	<i>We expect this short-term change</i>
Need Statement Why?	Target Population Who?	Program or Activity Elements What?	Outputs How Many?	Outcomes So What?
<p>Nationally, about 16% of children have developmental delays or disabilities, or emotional /behavioral issues. Of those children, about 70% enter school with undetected delays or disabilities.¹</p> <p>The American Academy of Pediatrics strongly recommends – and Medicaid requires – that birth - 5 children receive validated standardized developmental screening. In NC it is required at 6 months, 12 months, 18 or 24 months, and at 3, 4, and 5 years of age (NC Medicaid, July 2012) and autism-specific screening at 18 and 24 months (AAP, Feb 2010 and NC Medicaid, 2012).²</p>	<p>This activity will target ____ (#) primary care practices/medical homes and children ages birth to 5. The practices will receive three levels of service.</p> <p>Level 1 – Basic ABCD Implementation - up to 6 months. Requires minimum of monthly visits to practice.</p> <p>Level 2 – Intensive Services – up to 12 months. Requires monthly visits plus calls, emails, etc.</p> <p>Level 3 – Maintenance Services – 18 months and beyond. Contact periodic/upon request.</p>	<p>ABCD Coordinators will provide training, technical assistance, and materials to participating primary care practices.</p> <p>ABCD coordinators will work as part of a team that includes CHIPRA, CC4C, Nurse Care Management, and other CCNC staff, as applicable.</p> <p>Level 1 – Basic ABCD Implementation</p> <ul style="list-style-type: none"> ▪ Develop working relationships between local Smart Start contractor/staff and appropriate pediatric CCNC staff to decide on highest need practices ▪ Enroll primary health care practices that serve children age birth-5 to participate in ABCD. 	<p>1. ____ (#) of community meetings and presentations (e.g. LICC meetings) to promote the ABCD program, help establish and maintain communication between physicians & EI agencies, and support established referral procedures.</p> <p>2. ____ (#) primary care practices will participate in this activity</p> <p>3. ____ (#) health care providers will participate</p> <p>4. ____ (#) total children age birth-5 (estimated) are served in participating practices</p>	<p>5% of the total birth through age 2 population will have been identified and will have received early intervention services</p> <p style="text-align: center;">AND</p> <p>5% of the total three to five year old population will have been identified and will have received special education</p> <p style="text-align: right;">Source: Performance-Based Incentive System (PBIS) Criteria and Standards, NCPC Board Approved March 2009, PBIS ID H10</p>



Logic Models

- Concise, visual representations of program theory
- No one “correct” model or approach
- Organize critical program elements
 - Document the Theory of Change that is expected
- Help explain the relation of program elements to
 - Underlying needs
 - Desired outcomes

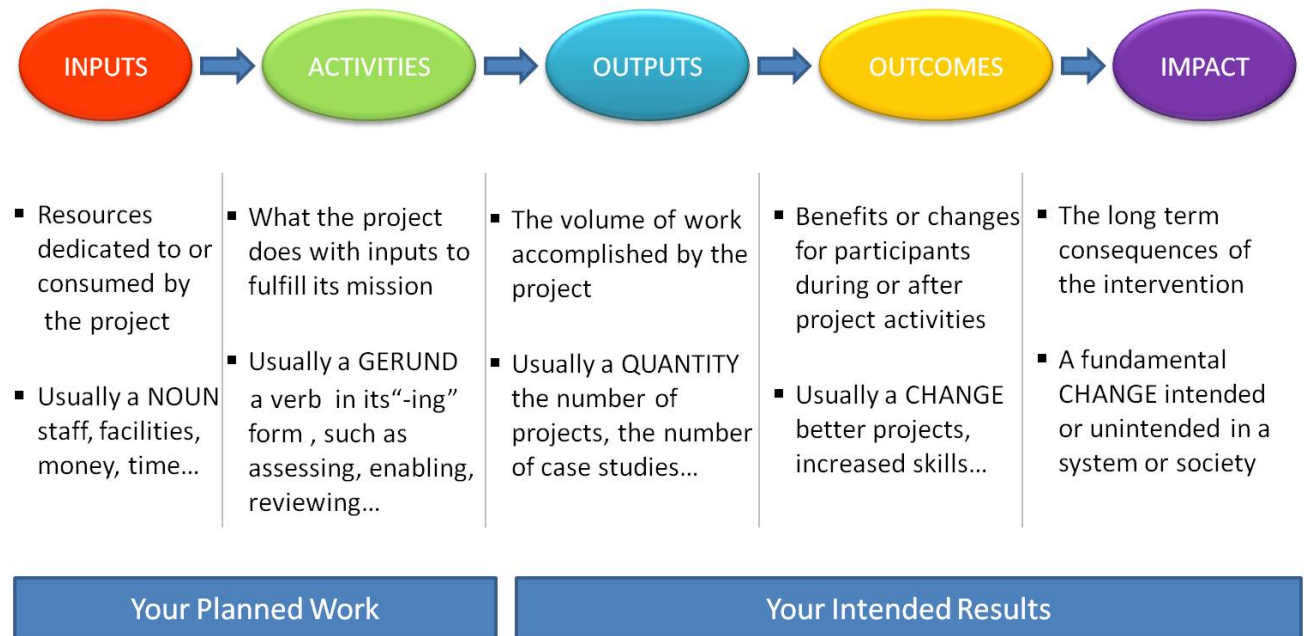


Common Elements across Models

- Needs
- Inputs
- Strategies or activities
- Outputs
- Outcomes
 - Short-term
 - Intermediate
 - Long-term

What are Inputs, Outputs, Outcomes and Impact?

The Logic Model Approach



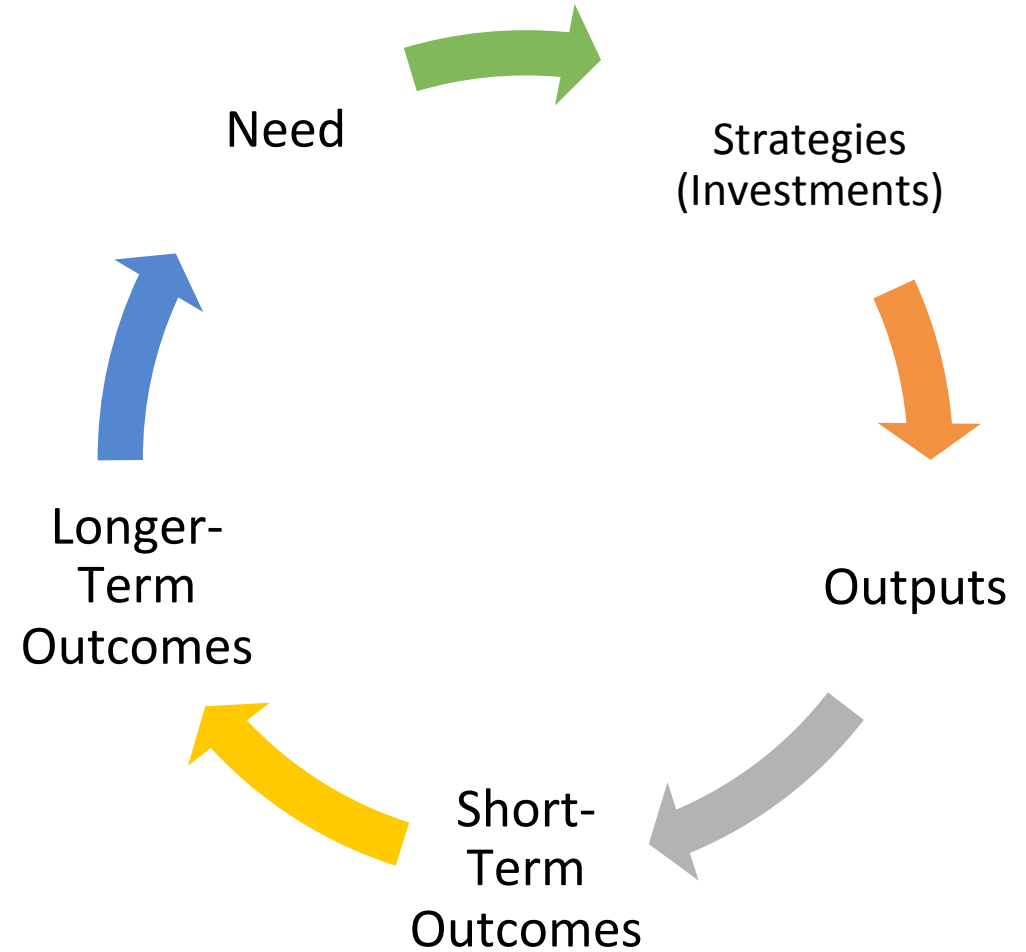
Nixor Ltd

Derived from the Kellogg Logic model



Common Elements

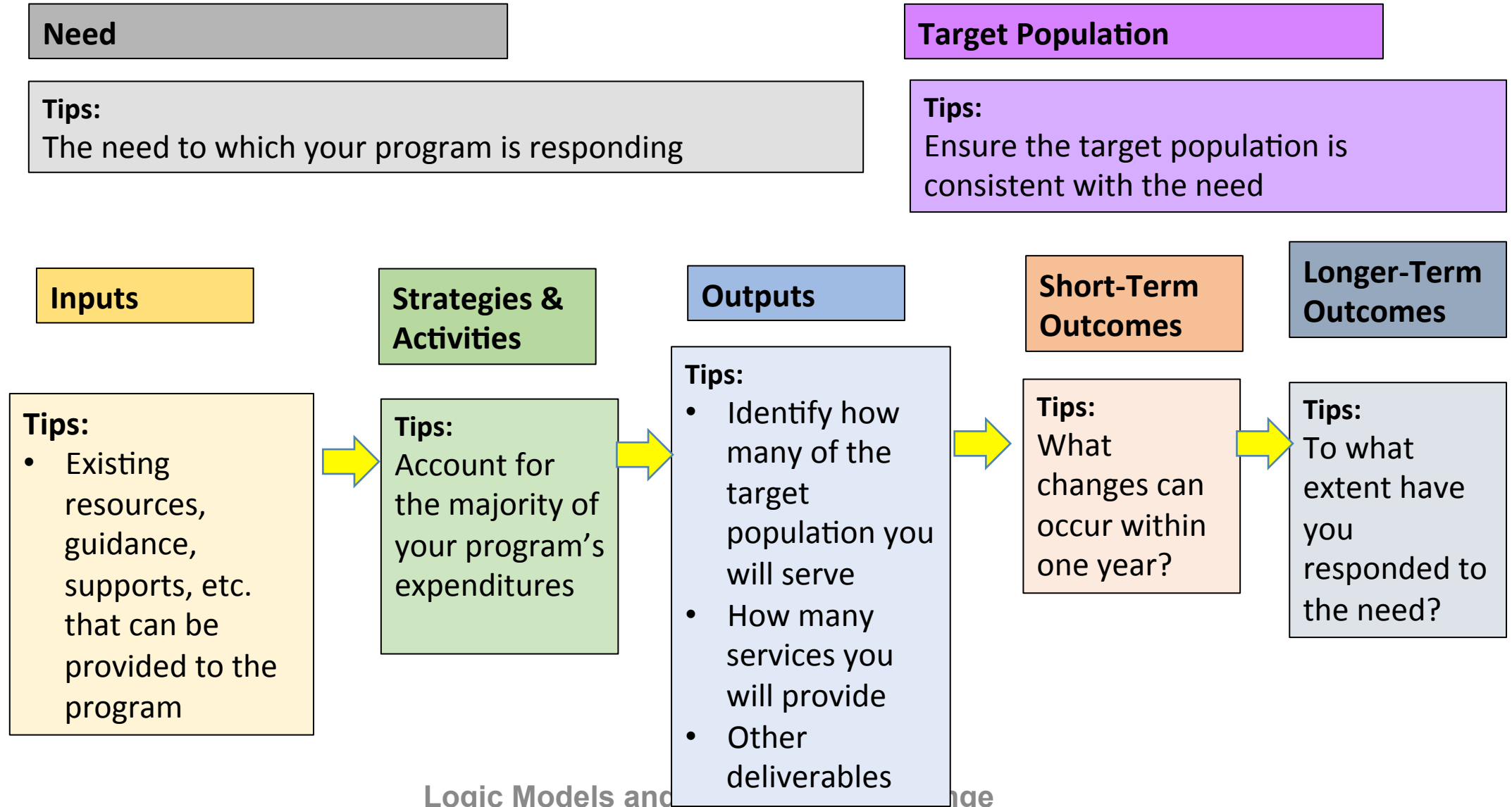
- Logic models help to visualize the connection between **NEEDS, INVESTMENTS, and PROGRAM RESULTS**





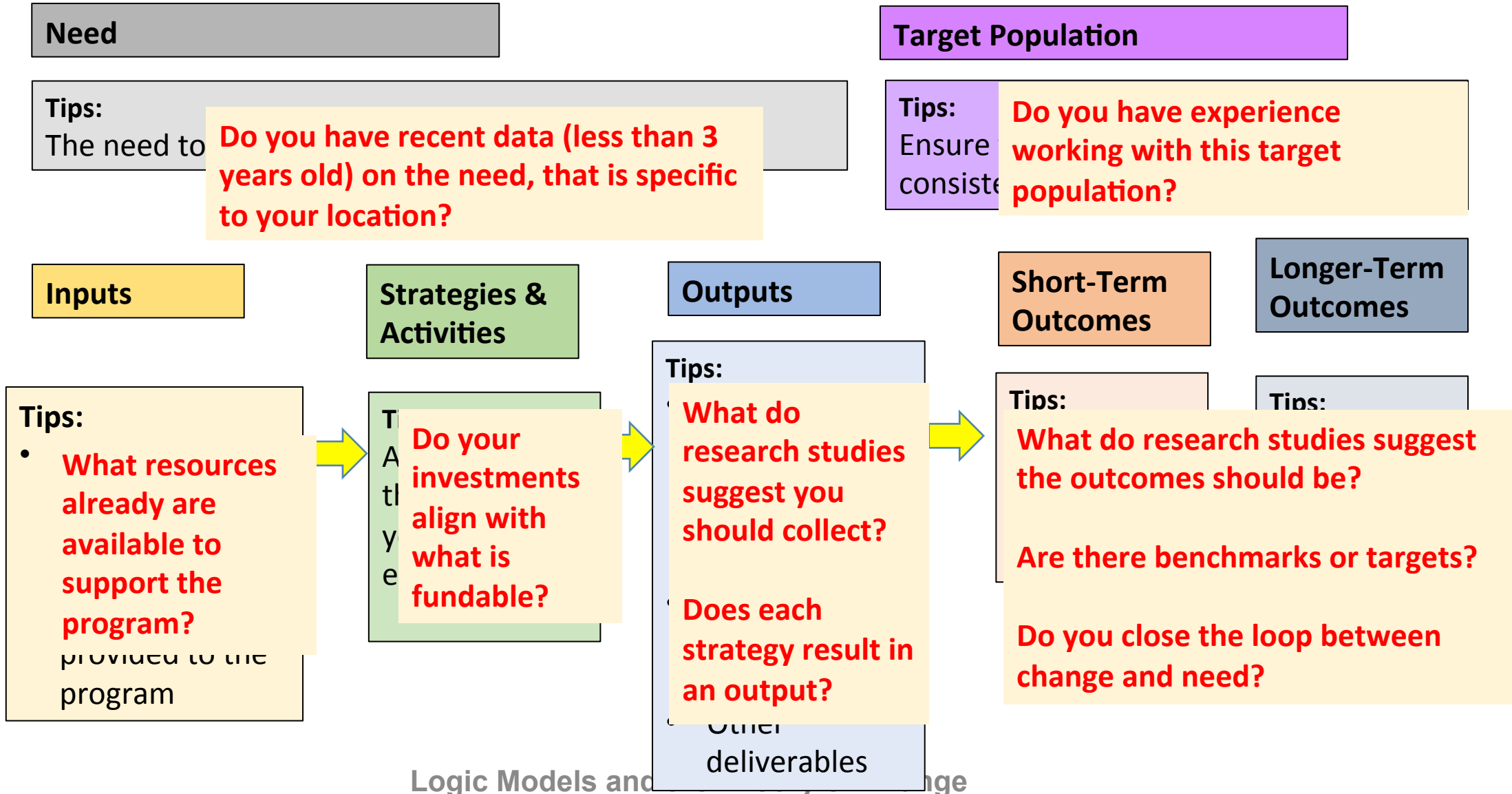
- Logic models establish that, by investing **\$XX** amount in strategy **BB**, we are hoping to produce outputs **MM** and outcomes **ZZ**.
- Many funders require programs to be grounded in proven pathways
 - There has to be evidence (research, past evaluations) that a “causal” pathway exists between program strategies and program outcomes
 - Evidence-based programs have data that prove a pathway
- If it’s important enough to be in the logic model, its important enough to be measured in your evaluation

Sample Logic Model Template





Logic Model Self-Check

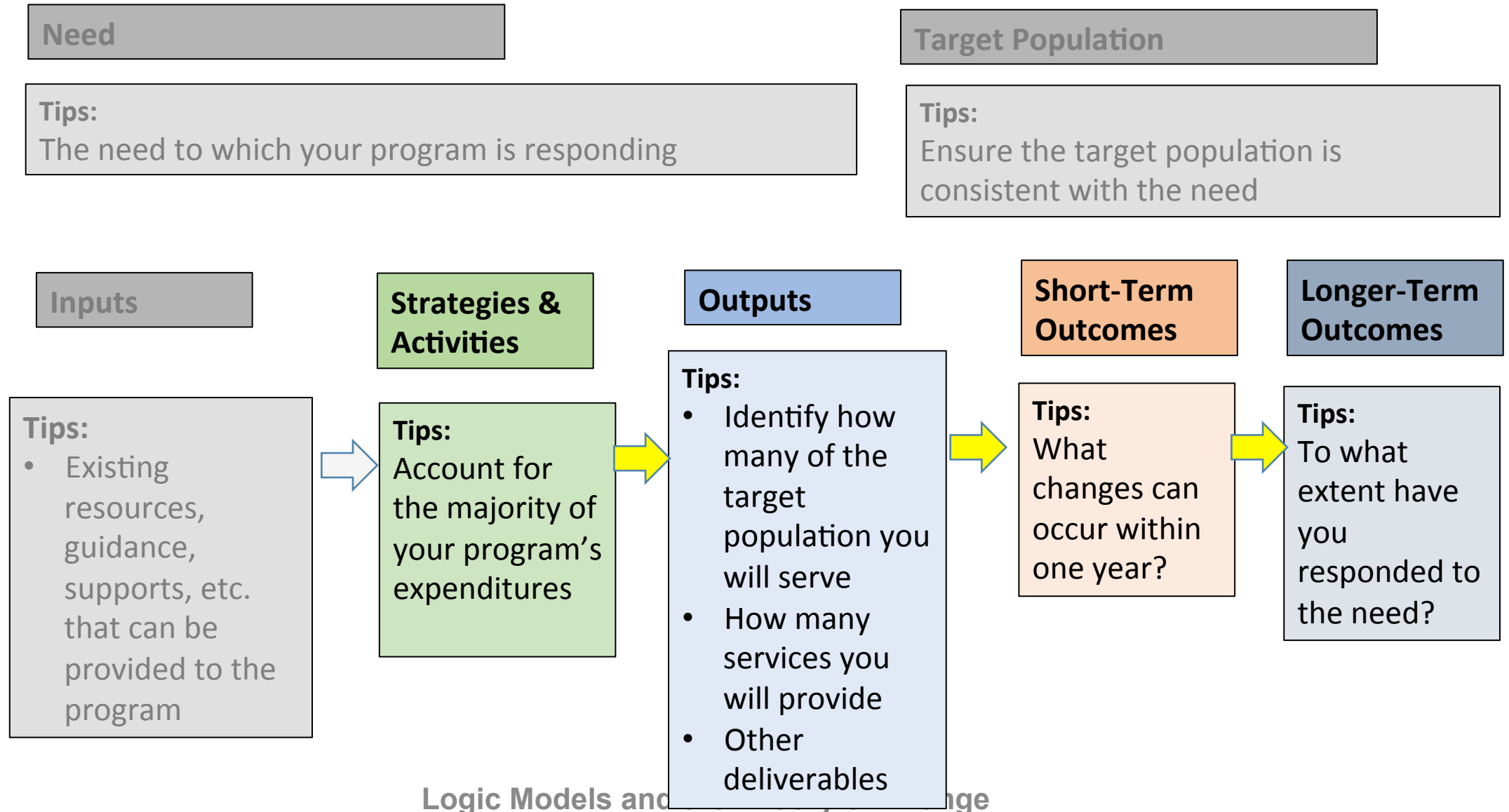




Theory of Change

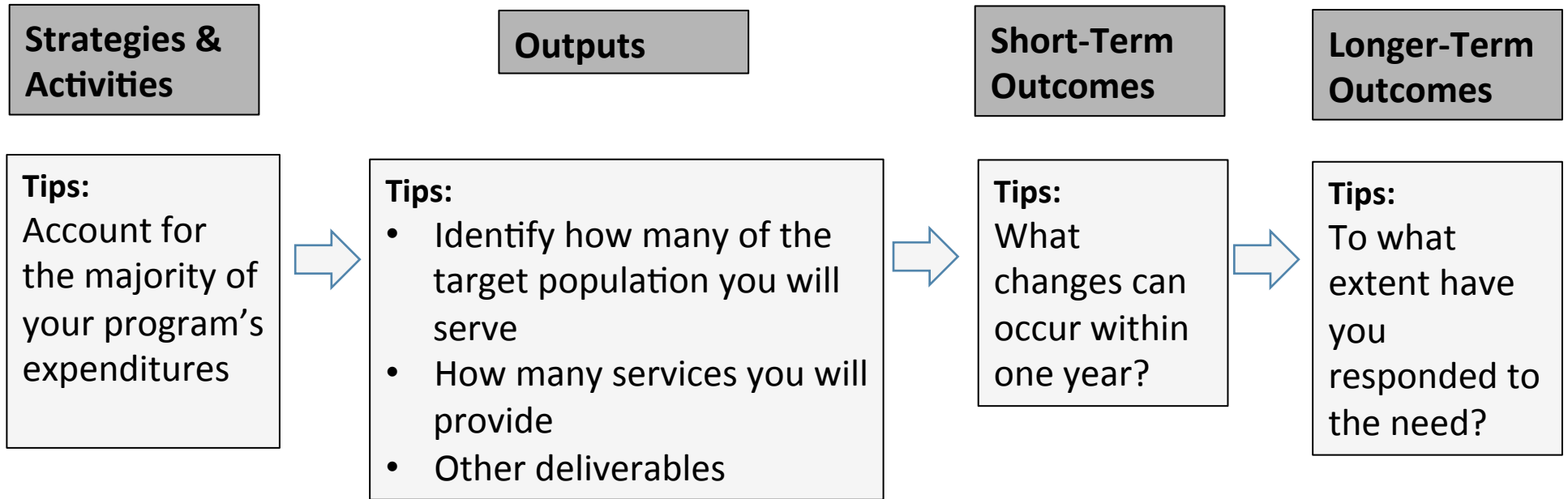
- Logic Models often contain or embed a Theory of Change
- A Theory of Change captures how the program is designed to influence a desired change
 - Doesn't have to be linear—can include feedback loops
- Theory of Change explains the “causal” pathway
 - What is the context for change?
- Theory of Change accounts for:
 - Factors that affect how well a program can be implemented
 - Factors that affect how well clients can receive the program

Core Theory of Change Elements



Expanded Theory of Change Elements

Implementation Context: what factors affect how well the program can be implemented?



Participation Context: what factors affect how well the program can be received by clients?

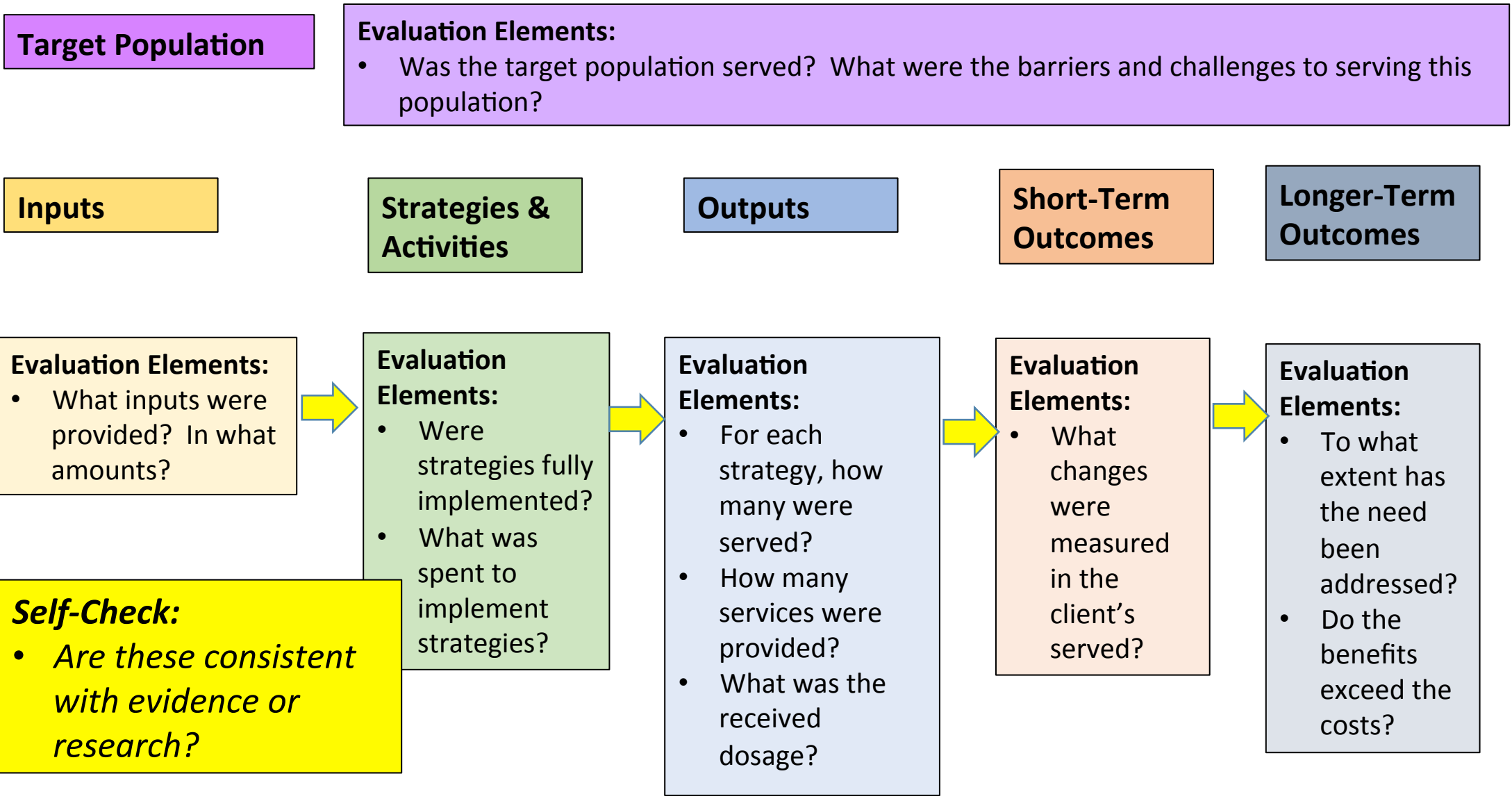
Change Context: what other programs or factors may help explain how and why change is (or is not) occurring?



Questions so far?



Moving from the Logic Model to the Evaluation Plan





Planning to Collect High Quality Data

TARGET POPULATION Evaluation Elements:

- Was the target population served? What were the barriers and challenges to serving this population?

INPUTS Evaluation Elements:

- What inputs were provided? In what amounts?

STRATEGIES Evaluation Elements:

- Were strategies fully implemented?
- What was spent to implement strategies?

OUTPUTS Evaluation Elements:

- For each strategy, how many were served?
- How many services were provided?
- What was the received dosage?

SHORT-TERM OUTCOMES Evaluation Elements:

- What changes were measured in the client's served?

LONGER-TERM OUTCOMES Evaluation Elements:

- To what extent has the need been addressed?
- Do the benefits exceed the costs?

Data Collection Techniques:

- Intake forms; sign-in sheets; feedback and satisfaction surveys

Data Collection Techniques:

- Project management; track what guidance, administrative support, or other support is provided to the program

Data Collection Techniques:

- Performance measures; project management data; program expenditures

Data Collection Techniques:

- Sign-in sheets; timesheets; case management data

Data Collection Techniques:

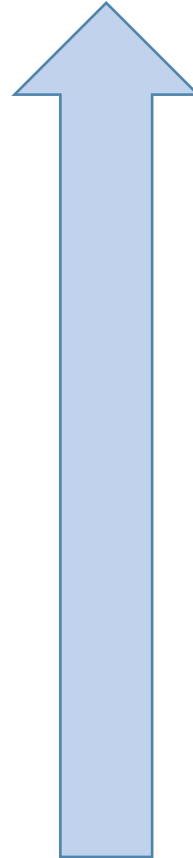
- Pre-post assessments; "criterion"-referenced assessments; surveys; focus groups; observations
- Population-level or comparison data



Creating a Plan for High Quality Outcome Data

- Data are not equally convincing

MORE CONVINCING



LESS CONVINCING

Experimental Research and High Quality Quasi-Experimental Research (*randomized, control group trial*)

Quasi-Experimental Research (*post hoc control or comparison group*)

**Pre-Post measurement without a control or comparison group/
External Observation of change** (ERS, CLASS, KIPS)

Client report of change

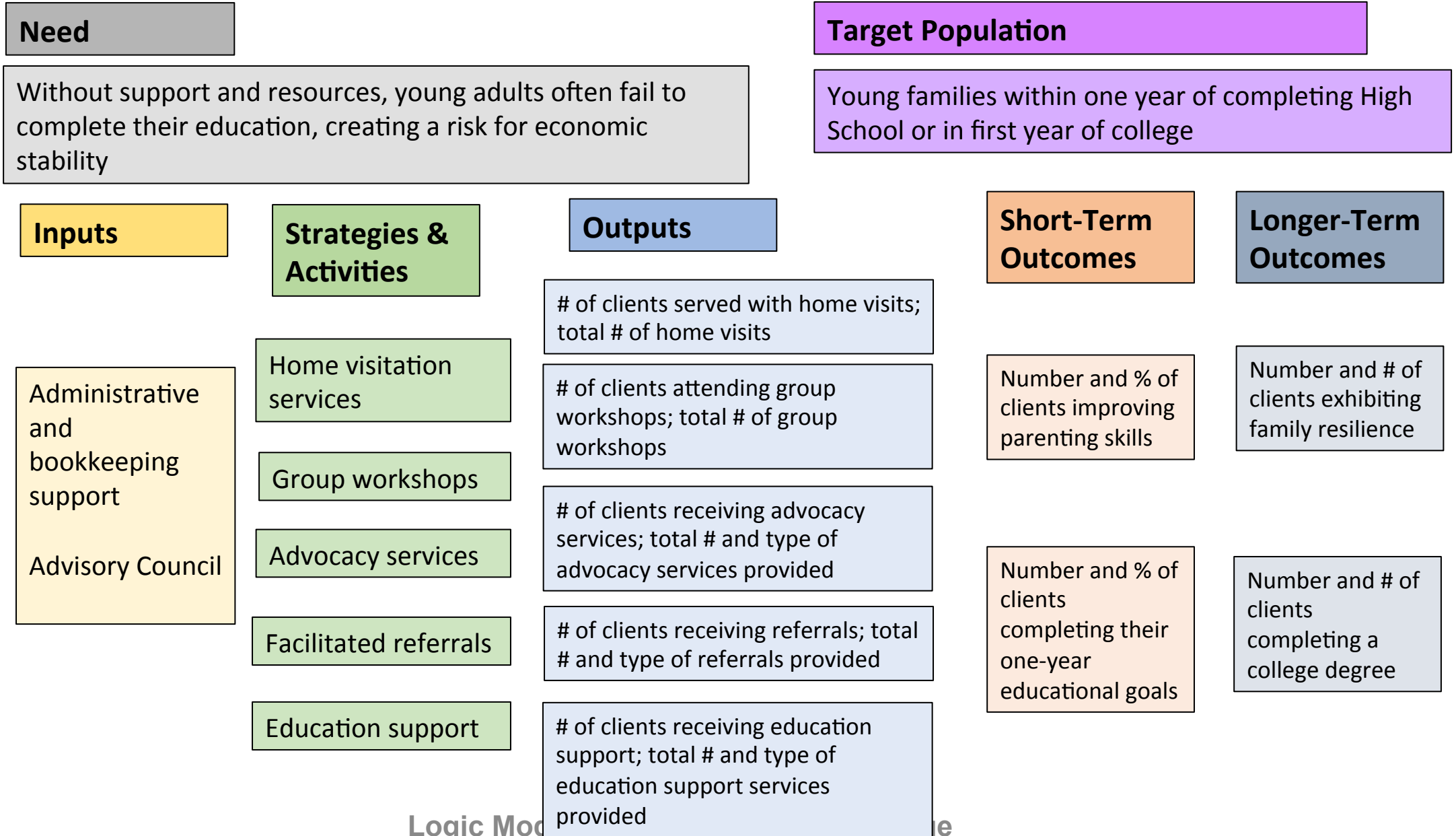
Client satisfaction



Let's Look at an Example

- Evidence-informed parenting support program
- Designed for and researched with young families where adults are within one year of completing high school or within their first year of college
- Provides home visits, group workshops, advocacy services, facilitated referrals, and H.S./college completion support
- Designed to work in collaboration with community services:
 - Comprehensive medical services for children and families
 - Job skills training and support
 - Peer mentoring
 - Literacy education
 - ESL services
- Intensive program calling for 9 to 12 months of services with ongoing contact available

Sample Logic Model: How will the program operate?





Outcomes	Data Sources	Data Collection Tool	When will data be collected?	Can you make comparisons?	What, specifically, will be reported?
To what extent questions	Who or what will you collect data from?	What will you use to collect data?	Pre: Post: Observation:	Existing data (research studies) Extant data on a comparison group (test scores)	XX% of clients demonstrated... The average change was +XX points.
<u>Example:</u> To what extent have parents improved capacity?	<u>Example:</u> Parents who complete at least 75% of project services.	<u>Example:</u> Keys to Interactive Parenting Scale	<u>Example:</u> Pre: August Post: May	<u>Example:</u> Published evaluations and research studies	<u>Example:</u> At least 80% of parents (X of Y) will demonstrate positive changes in each of the three sub-scales



Advanced Evaluation Planning

- The more advanced your Theory of Change, the more advanced your evaluation plan can be
- What elements can the expanded Theory of Change add to the plan?
 - Track and account for other programs or services clients are receiving
 - Track and understand client barriers or challenges to receiving services
 - Track and understand important factors for providing services
 - Understand how outcomes reinforce and contribute to each other



Review

- **Logic Models**
 - Organizational model
 - Contains information on needs, inputs, strategies, outputs, and outcomes
- **Theory of Change**
 - Can be embedded into the Logic Model
 - Can include factors that affect implementation, participation, and outcome achievement
- **Elements within the Logic Model/Theory of Change inform effective evaluation planning, data collection, and analysis**



Next Steps

The webinar series is designed to help you create a plan to capture, manage, analyze, and use high quality data:

- **March 30, 2016:** Negotiating Bias: Top-down and Bottom-up Approaches to Designing Outcomes.
- **April 26, 2016:** Integrating Quantitative and Qualitative Data into your Evaluation.
- **May 25, 2016:** Designing or Choosing Instruments: *Surveys*.
- **June 28, 2016:** Designing or Choosing Instruments: *Observations*.
- **July 12, 2016:** Designing or Choosing Instruments: *Standardized Assessments*.
- **July 27, 2016:** Choosing and Using Sampling in Your Evaluation.
- **August 30, 2016:** Best Practices in Data Collection and Management.
- **September 28, 2016:** Finding the Value in Evaluation: *Cultural Relativity and Bias*.
- **October 25, 2016:** Using Data: *Effective Reporting and Grant Writing*.
- **November 30, 2016:** Thinking Beyond Your Program: *Evaluating Systems and Collaborations*.



Additional questions?

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Smart Start partnerships across the state:

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Additional questions?

Feel free to contact me, too!

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