



# Using a Logic Model to Effectively Identify and Measure Outcomes to Ensure an Effective System Of Care

**Courtney Gaskins, Ph.D., Vice President of Programs  
Youth For Tomorrow**

# Training Description:

- The proposed workshop will provide participants with examples and take away materials in building and sustaining programs through the use of a logic model. The presenter will take participants through the process of creating a logic model; provide examples of logic models for services typically contracted through CSA; and finally show participants how to expand the logic models use in identifying outcomes and collecting and analyzing data that allow for clear results and/or continuous improvement of services. This workshop specifically addresses the conference theme of Building an Effective System of Care and touches on Data Informed Policy and Practice and Integrating Evidence-based Practices.

# Learning Objectives:

- Essential definitions related to service/program outcomes and evaluation.
- A basic introduction to what a logic model is and how it can be used as an action-oriented tool for service/program planning and evaluation.
- Exercises and examples that focus on the development of a simple service/program logic model to a more complex organizational logic model, including practical examples and a template for developing a logic model.
- Expanding on how a basic logic model can be used in effective program evaluation; collecting, analyzing, and providing data/results to share with stakeholders; and in learning to continually improve programs.

# Outcomes

- something that happens as a result of an activity or process

Synonyms: result, end result, consequence, net result, upshot, aftereffect, aftermath, conclusion, issue, end, end product

# Evaluation

- the making of a judgment about the amount, number, or value of something; assessment
- Synonyms: assessment, appraisal, judgment, gauging, rating, estimation, consideration

# Outcomes as it relates to Performance

- Performance management should be incorporated into all aspects of services, from initial intake to discharge
- Staff gather evaluative data both formatively, during the course of service, as well as, summatively, or at the conclusion of each month, quarter and year-end
- Should include both process evaluation and product evaluation



# Process Evaluation

Process Evaluation involves developing ongoing evaluations, especially during the implementation of major strategies through various programs to accept, refine, or correct the program design (i.e. evaluation of intake, recruitment, orientation, transition, and retention of staff).

The purpose is to provide decision makers with information necessary to determine if the program needs to be accepted, amended, or terminated.

The task typically involves:

- (1) identifying discrepancies between actual implementation and intended design
- (2) identifying defects in the design or implementation plan

The methods may involved a staff member serves as the evaluator, and who monitors and keeps data on setting conditions, program elements as they actually occurred. This person provide feedback on discrepancies and defects to the decision makers. Collected both formatively and summatively.

# Product Evaluation

Product Evaluation involves the evaluation of the outcome of the program to decide to accept, amend, or discontinue the program, using criteria directly related to the goals and objectives (i.e. put desired student outcomes into question form and survey pre- and post-).

The purpose is to decide to accept, amend, or terminate the program

The task includes developing the assessment(s) of the program.

The methods should include traditional research methods, multiple measures of objectives, and other methods. Collected both formatively and summatively.



# Process and/or Product

- Process Evaluation will include gathering information about how successful the service (program/project) is in meeting required planned services and to assess its impact on the targeted population

For example: 1) Site visits or administrative observations; 2) exit interviews; and, 3) professional development training completed

# Product Evaluation Examples

For example:

Pre- and post- tests that show improvements over time:

Grades

Life Skills

Level of Anxiety

2) Goals over time

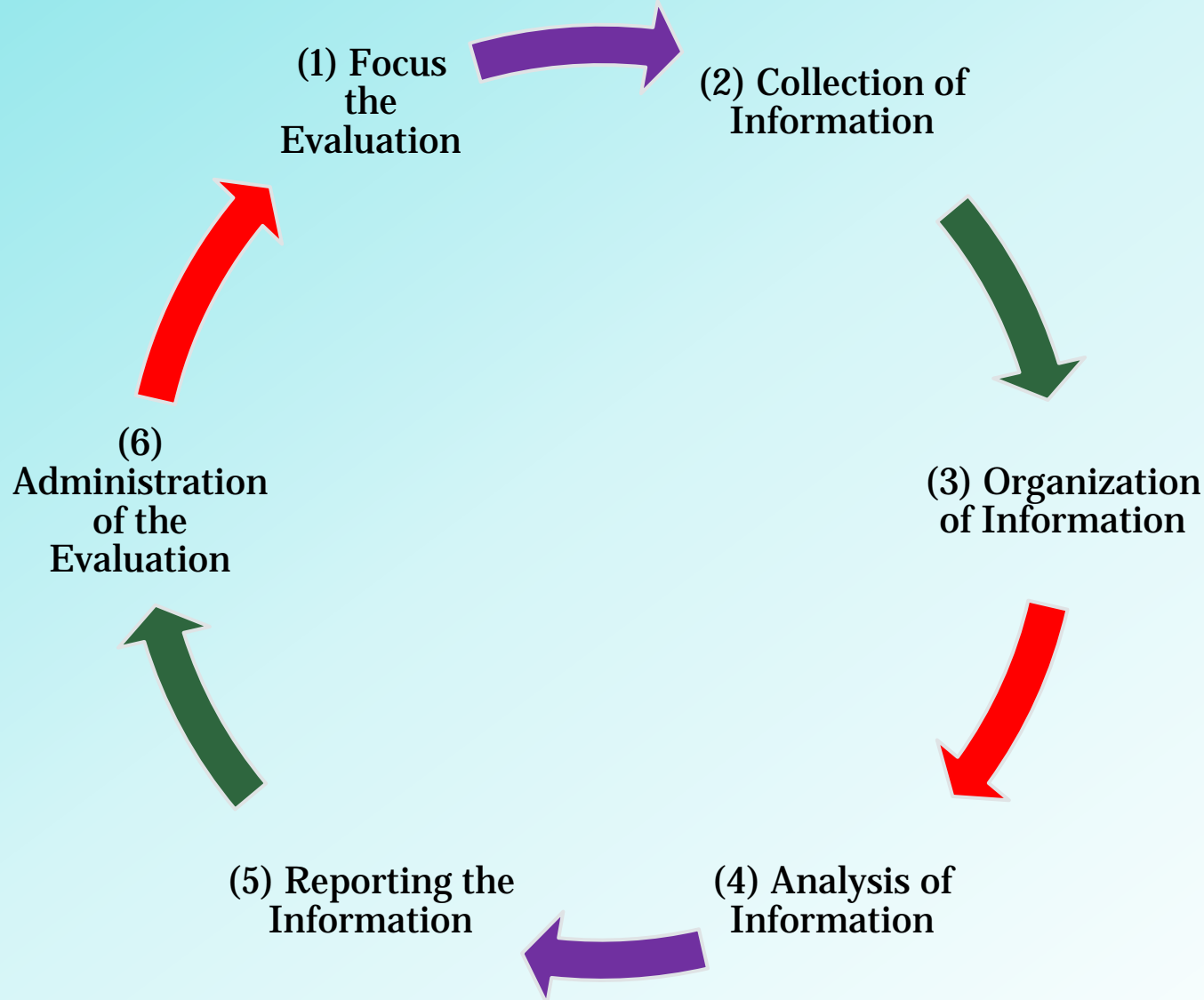
Positive changes in behavior

Number of Restraints over time

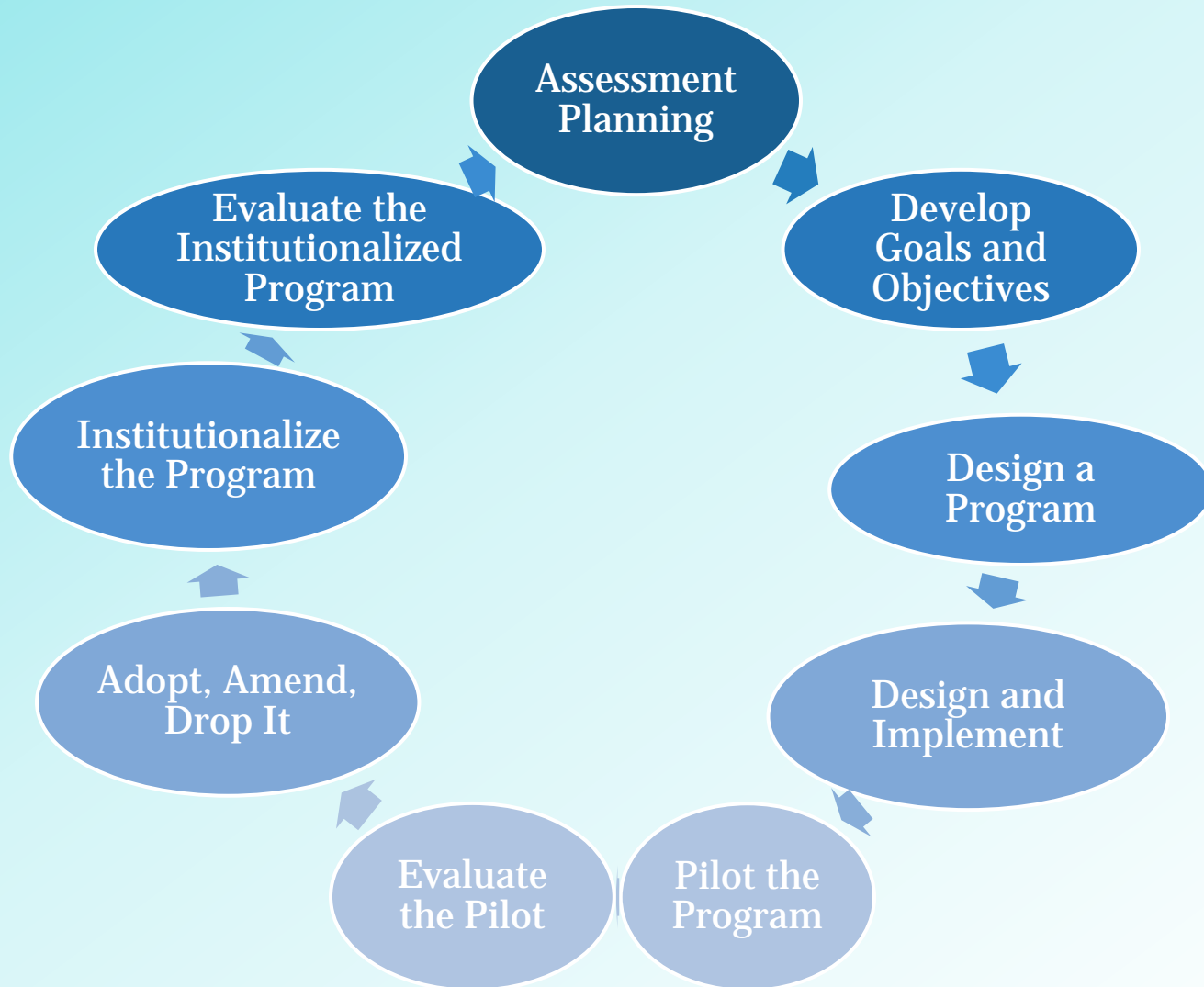
1) Benchmarks

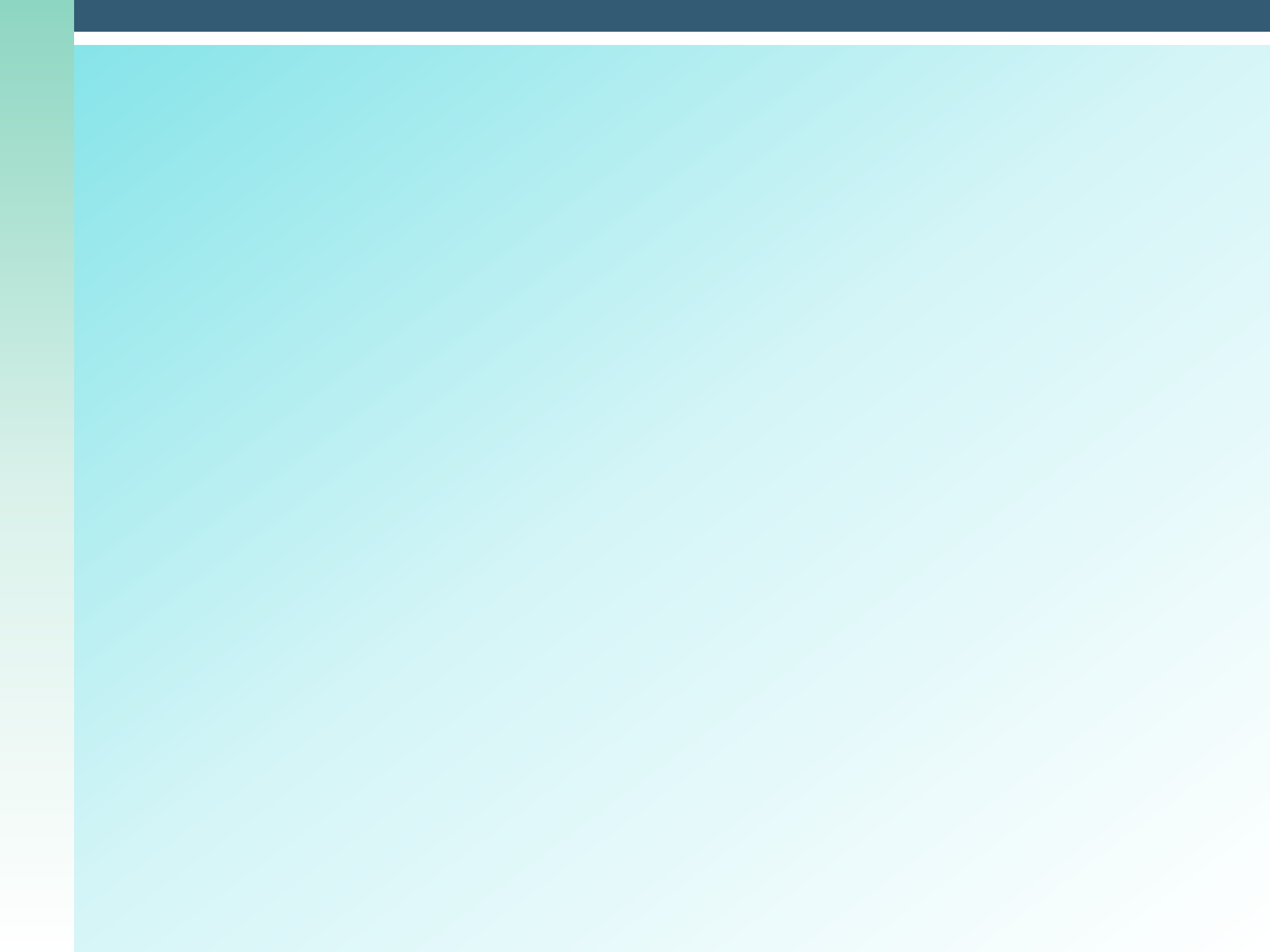
- The product performance measures focus on: and, 2) improvement in staff knowledge and qualifications. The following product data will be collected:

# Structuring the Evaluation



# Relationships Among Planning, Evaluation and Decision Making





# Evaluation Design

- Most evaluation designs include both process and product evaluation to:
  - (1) better determine the effectiveness of the services/ program on the targeted population;
  - (2) document that services/ program objectives were or are being achieved;
  - (3) provide information about service delivery that will be beneficial to program staff; and,
  - (4) enable staff to make changes that improve service/program effectiveness.



# Work Flow



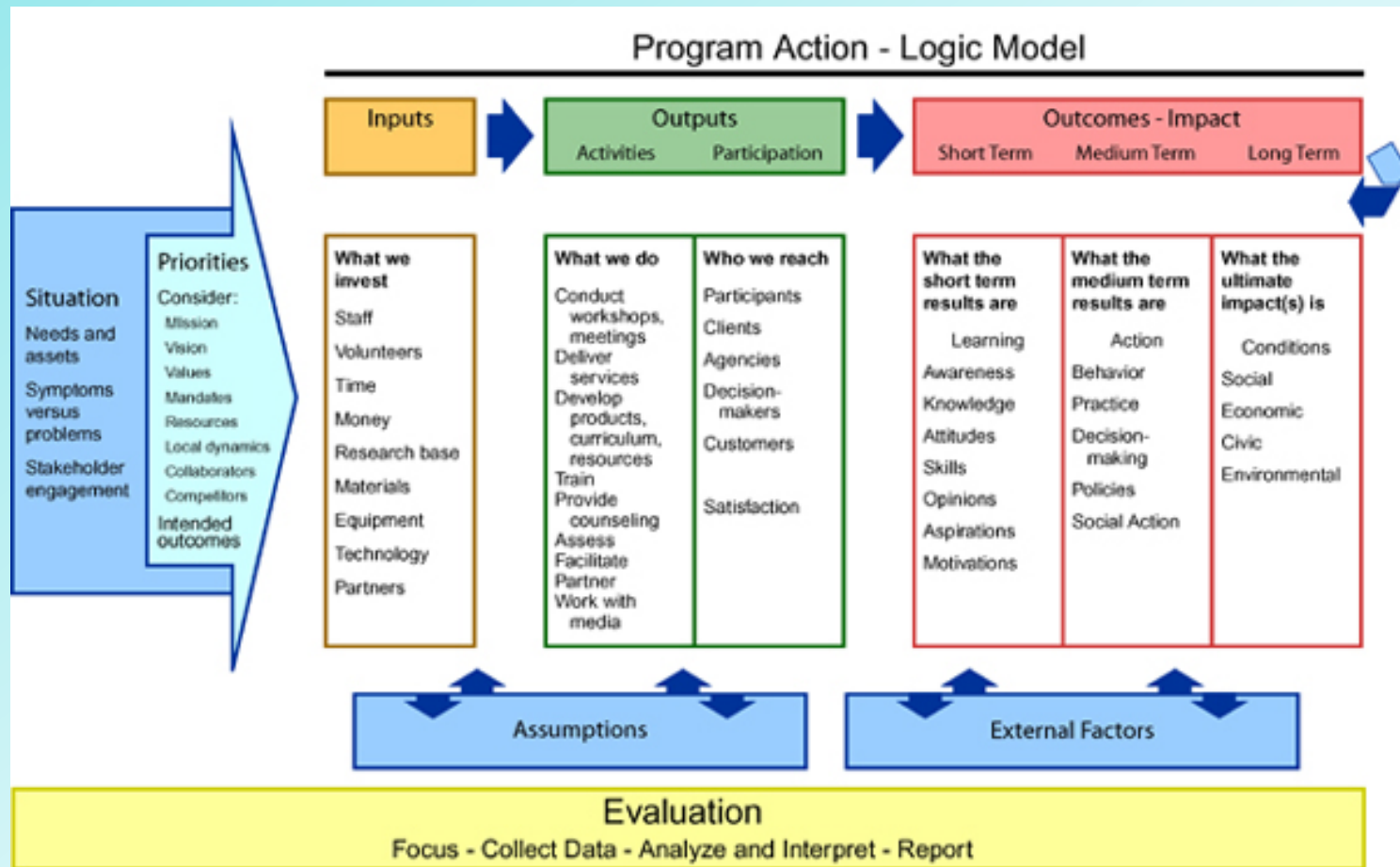
# Purpose and Objectives

During this workshop participants will learn how to develop and use a logic model to evaluate programs or services.

A logic model is a tool used by funders, managers, and evaluators of programs to evaluate the effectiveness of a program.

Logic models can be useful methods for identifying outcomes that show effective results. A logic model is a graphical depiction of the logical relationships between the resources, activities, outputs and outcomes of a program. Participants will learn how to create a logic model and expands its use towards effective program evaluation; collecting/analyzing data to provide results to stakeholders; and continually improve programs over time.

# Logic Model



# Measures: Outputs & Outcomes

## **Inputs**

- *DJJ intake requests bed*
- *YFT orients residents*
- *Conduct YASI*
- *Motivational Interviewing*
- *Identify strengths/triggers*
- *Prepare case file & individual service plan (ISP)*
- *Responsivity Practices Utilized*



## **Outputs**

- *Update and Submit Service Reports and ISP*
- *Discharge safety to the community*
- *Meet Program goals/measures*
- *If needed, coordinate after care services*

# Results



Youth Village –  
<http://www.youthvillages.org/how-we-succeed.aspx#sthash.VJ6UI93X.dpbs>

# Performance Management Tools

## **PERFORMANCE MANAGEMENT**

Performance management includes activities to ensure that goals are consistently being met in an effective and efficient manner.

**Performance management tools include logic models, performance measurement and program evaluation.**

### **Logic Model**

Tool / framework that helps identify the program / project resources, activities, outputs customers, and outcomes.

### **Performance Measurement**

Helps you understand **what** level of performance is achieved by the program/project.

### **Program Evaluation**

Helps you understand and explain **why** you're seeing the program/project results.



# What are Logic Models Used For?

- ▣ **Planning tool**
- ▣ **Communication tool**
- ▣ **Implementation tool**
- ▣ **Measurement design**
- ▣ **Evaluation design**

# What are the Benefits of Logic Models?

- Illustrates the logic or theory of the program or project.
- Focuses attention on the most important connections between actions and results.
- Builds a common understanding among staff and with stakeholders.
- Helps staff –manage for results|| and informs program design.
- Finds –gaps|| in the logic of a program and work to resolve them.

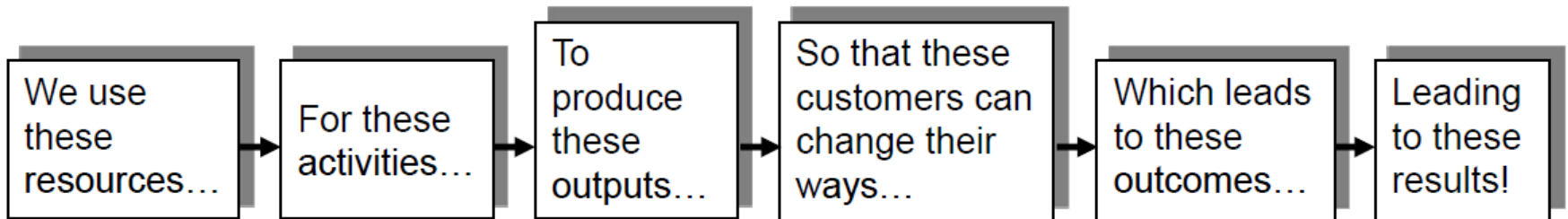
# How Do You Develop a Logic Model?

1. Clarify the program goal and define the elements of the program in a table.
2. Verify the logic table with stakeholders.
3. Develop a diagram and text describing logical relationships.
4. Verify the Logic Model with stakeholders.

*Then use the Logic Model to identify and confirm performance measures and in planning and evaluation.*

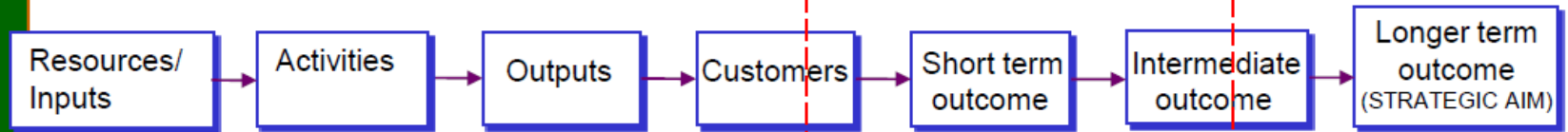
# What is a logic model?

*A picture of your program. Graphic and text that illustrates the **relationship** between your program's activities and its **intended** outcomes and results.*



HOW

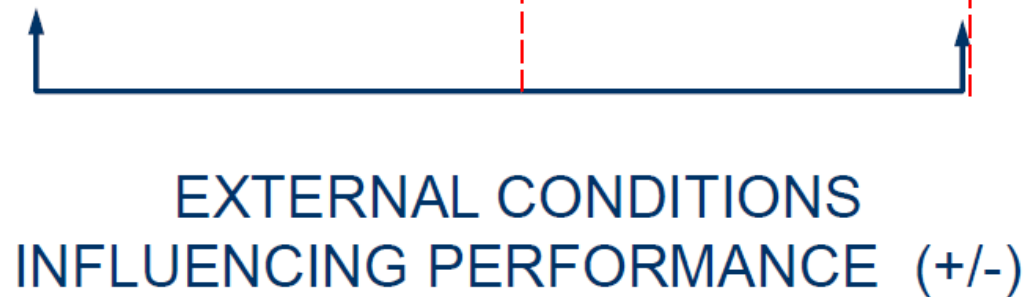
WHY



PROGRAM

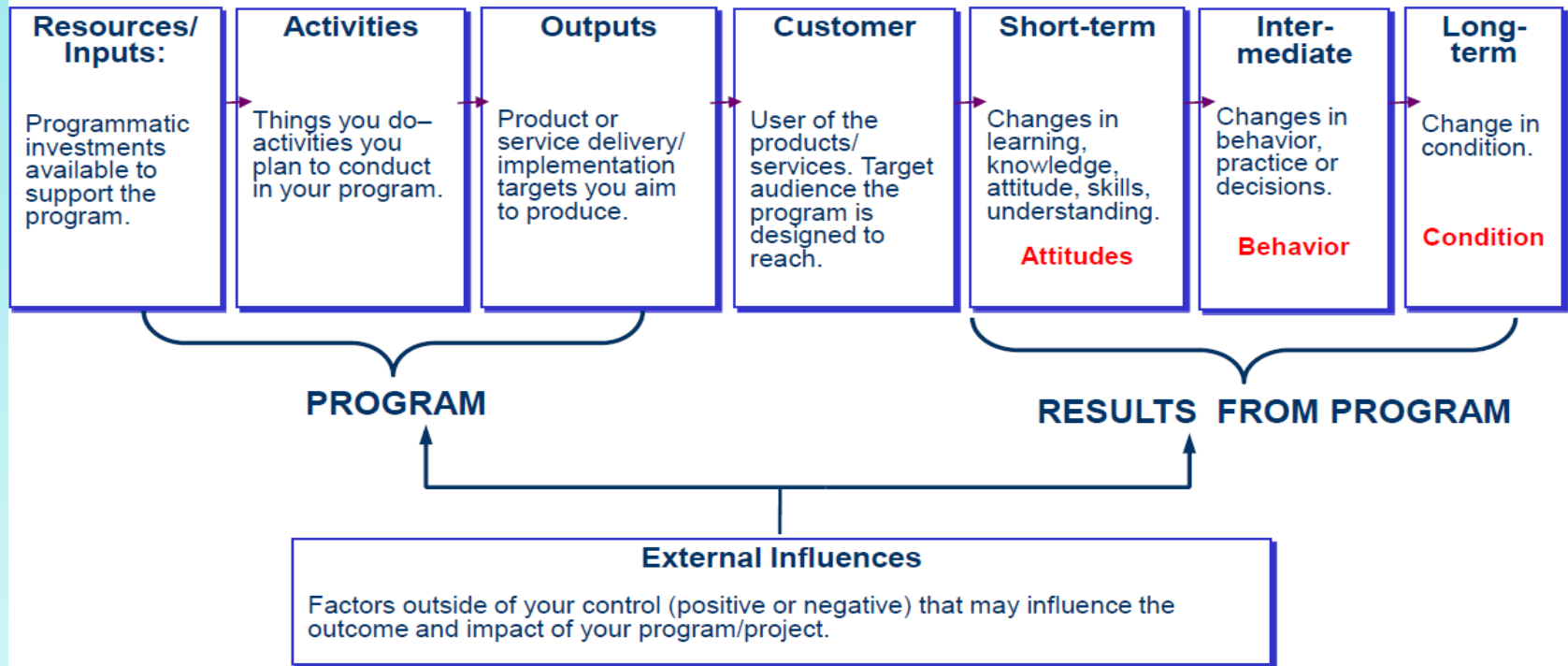


RESULTS FROM PROGRAM



# Elements of the Logic Model

HOW  $\longrightarrow$  WHY  
Outcomes





# Outputs and Outcomes

**Output:** Products and services provided as a direct result of program/proposal activities.

**Outcome:** Changes or benefits resulting from activities and outputs. Accomplishment of program goals and objectives.

- short-term (*Change in knowledge, skills, understanding, attitude*)
- intermediate outcomes (*Change in behavior*)
- long-term outcomes—impacts (*Change in the environment*)

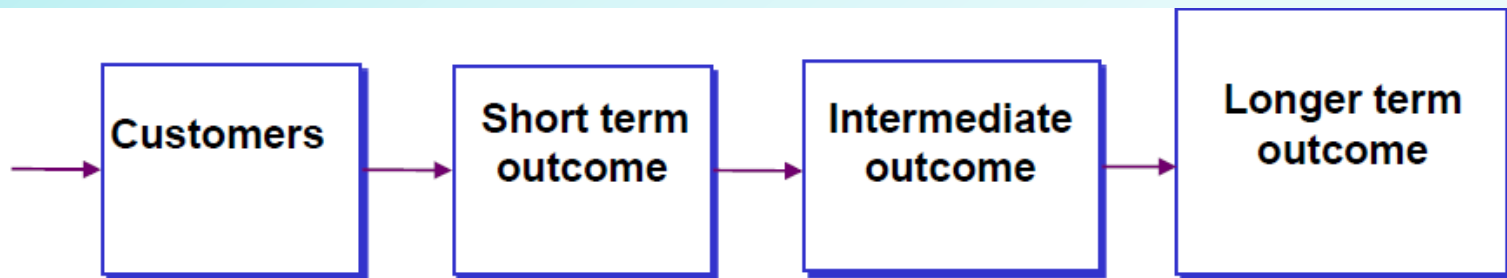
# Logic Models and Work Plan Development

## Mapping out Your Work Plan

- ❑ What is the problem or need you are addressing?
- ❑ What are your planned activities to address this need?
- ❑ What resources will you need to do these activities?
- ❑ What are your anticipated accomplishments/outputs of your activities?



- ❑ Who do you expect to act as a result?
- ❑ What do you expect them to do?
- ❑ What benefits (e.g., environmental, human health) do you expect to result from these actions?



# Identifying and Developing Performance Measures

# Performance Management Tools

## **PERFORMANCE MANAGEMENT**

Performance management includes activities to ensure that goals are consistently being met in an effective and efficient manner.

**Performance management tools include logic models, performance measurement and program evaluation.**

### **Logic Model**

Tool / framework that helps identify the program / project resources, activities, outputs customers, and outcomes.

### **Performance Measurement**

Helps you understand **what** level of performance is achieved by the program/project.

### **Program Evaluation**

Helps you understand and explain **why** you're seeing the program/project results.

# Definitions:

- **Performance Measurement:** The ongoing monitoring and reporting of program progress and accomplishments, using pre-selected performance measures.
- **Performance Measure:** A metric used to gauge program or project performance.
- **Indicators:** Measures, usually quantitative, that provide information on program performance and evidence of a change in the —state or condition|| in the system.

# Performance Measurement Questions

- What are they?
  - ▣ Questions designed to assess progress/ accomplishments of various aspects of a program/project.
  - ▣ Performance measurement questions ask/tell you *what* your program is doing.

# Performance Questions Across the Performance Spectrum

PROGRAM ELEMENTS:	Resources (We use these)	Activities/ Outputs (To do these things)	Target Customer (For these people)	Short term Outcome (To change them in these ways)	Intermediate Outcome (So they can do these things)	Long-Term Outcome (Which leads to these outcomes)
PERFORMANCE QUESTIONS:	<ul style="list-style-type: none"> <li>▪ Do we have enough,</li> <li>▪ The right,</li> <li>▪ The necessary level,</li> <li>▪ The consistency?</li> </ul>	<ul style="list-style-type: none"> <li>▪ Are we doing things the way we say we should?</li> <li>▪ Are we producing products and services at the levels anticipated?</li> <li>▪ According to anticipated quality indicators measures?</li> </ul>	<ul style="list-style-type: none"> <li>▪ Are we reaching the customers targeted?</li> <li>▪ Are we reaching the anticipated numbers?</li> <li>▪ Are they satisfied?</li> </ul>	<ul style="list-style-type: none"> <li>▪ Did the customer's attitude, knowledge, skills or understanding change?</li> </ul>	<ul style="list-style-type: none"> <li>▪ Are customers using the change as expected? With what results?</li> <li>▪ Are customers served changing in the expected direction and level?</li> <li>▪ If so, what did we (others) do to cause the change?</li> </ul>	<ul style="list-style-type: none"> <li>▪ What changes in condition have occurred?</li> <li>▪ Did the program achieve its goals and objectives?</li> </ul>
EXTERNAL INFLUENCES:	What factors might influence my program's success?					



# Measures Across the Logic Model Spectrum

Element	Definition	Example Measure
Resources/ Inputs	Measure of resources consumed by the organization.	Amount of funds, # of FTE, materials, equipment, supplies (etc.).
Activities	Measure of work performed that directly produces the core products and services.	# of training classes offered as designed; Hours of technical assistance training for staff.
Outputs	Measure of products and services provided as a direct result of program activities.	# of technical assistance requests responded to; # of compliance workbooks developed/delivered.
Customer Reached	Measure of target population receiving outputs.	% of target population trained; # of target population receiving technical assistance.
Customer Satisfaction	Measure of satisfaction with outputs.	% of customers dissatisfied with training; % of customers "very satisfied" with assistance received.
Outcomes	Accomplishment of program goals and objectives ( <b>short-term and intermediate outcomes, long-term outcomes--impacts</b> ).	% increase in industry's understanding of regulatory recycling exclusion; # of sectors that adopt regulatory recycling exclusion; % increase in materials recycled.

# Work Load/Quality Measures

<b>Category</b>	<b>Definition</b>	<b>Examples</b>
Efficiency	Measure that relates outputs to costs.	Cost per workbook produced; cost per inspection conducted.
Productivity	Measure of the rate of production per some specific unit of resource (e.g., staff or employee). The focus is on labor productivity.	Number of enforcement cases investigated per inspector.
Cost Effectiveness	Measure that relates outcomes to costs.	Cost per pounds of pollutants reduced; cost per mile of beach cleaned.
Service Quality	Measure of the quality of products and services produced.	Percent of technical assistance requests responded to within one week.

# Steps for Developing Measures

**Step 1: Identify Potential Measures**

**Step 2: Assess Each Measure**

**Step 3: Choose the Best Measures**

**Step 4: Identify Baseline, Target,  
Timeline and Reporting Schedule**

# Key Steps in Identifying Potential Measures

## STEP 1: Identify the information needed and the audience

- ▣ Identify measures in existing documents
- ▣ Review the logic model and select the appropriate logic model element
- ▣ Express the logic model element as a performance measure
- ▣ Determine if the measure clearly relates to the program/project goal or objective

# STEP 1: Identify the information needed and the audience

Review the performance measurement questions developed earlier

- Consider what information is needed to assess whether your program/project is meeting its goals and objectives.

Ask yourself:

- Who needs to know what about the program, why, and in what format?

# Identify Measures in Existing Documents

**Review measures specified in:**

- ▣ **Program/Project Mission, Goals, Objectives, Service standards**
- ▣ **Legislation, Strategic plans**
- ▣ **Previous evaluations and research reports**
- ▣ **Consider other sources**

# Review the Logic Model

Review the logic model –

- Identify the aspects of performance that are most important to measure (resources, activities, outputs, outcomes)
- Identify contextual factors that could influence the program either positively or negatively and generate measures for them as appropriate

# Express the Logic Model element as a performance measure

Consider how to express the measure in terms of:

- Data:
  - Raw Numbers
  - Averages
  - Percentages
  - Ratios
  - Rates
  
- Unit of Measure:
- –Is it appropriate to the measure?



# Determine whether the measures clearly relate to the mission/goal

- Review the program/project mission and or goal
  - What key activities, outputs or outcomes are specified in the mission or goal?
  
- Review the list of potential measures developed
  - Will the data collected from the measures developed clearly demonstrate that the mission and or goal was accomplished?

# Determine whether the measures clearly relate to the mission/goal

The mission of Youth For Tomorrow is to provide children and families with the opportunity to focus their lives and develop the confidence, skills, intellectual ability, spiritual insight and moral integrity, based on Godly principles, resulting in positive changes to the benefit of the child, the family, the community, and the nation.

## **Performance Measures:**

- Number of staff**
- Total dollars invested**
- Benchmarks/Utilization**
- Number of program**
- Number of clients reached**
- Customer Satisfaction**
- Number and percent with increased awareness of program**
- Number of clients who recover /complete program**

# Step 2: Assess the Measures

- Assess the value of the measures in relation to goals and objectives
- Assess the feasibility of the measure in terms of:
  - Data collection (availability, implementation cost, baselining)
  - Data quality (reliability, validity, objectivity)
  - Analysis
  - Reporting (how to report, to whom to report, frequency of reporting, meaningfulness to audiences)

## Step 3: Choose the Best Measures

- Assess the value of the measures in relation to the goals and objectives of the program.
  - Required
  - Important
  - Interesting
- Select final list of measures –you won't be able to collect data for all measures.
- Check in with managers and stakeholders.
- Identify a priority list of measures

# Step 4: Identify a Standard

For each performance measure develop a:

1. Baseline –current state

2. Target –desired level of performance

3. Timeline –date when performance will be achieved

# Tips for Choosing the Best Measures

For each measure ask...

- Does the measure clearly relate to the project goal and objective?
- Is the measure important to management and stakeholders?
- Is it possible to collect accurate and reliable data for the measure?
- Taken together, do the measures accurately reflect the key results of the program, activity or service?
- Is there more than one measure for each goal or objective?
- Are your measures primarily outcome, efficiency, or quality measures?

# **Application of Performance Measure Development - Developing Your Own Measures**