

# Measurement Systems to Assess Individual- and Population-Level Change

**KAREEMAH ABDULLAH**

*Director of the National Coalition Institute*

*Vice President of Training Operations*

Institute of Medicine

November 5, 2014

# Who is CADCA? What are coalitions?

---

Explanation of CADCA, its key programs, and an overview of community coalitions.

# CADCA

- Founded in 1992 as a recommendation from the President's Drug Advisory Council.
- Today, CADCA supports a comprehensive, data-driven approach to prevent the use of illicit drugs, underage drinking, youth tobacco use, and the abuse of medicines.
- CADCA represents more than 5,000 community coalitions nationally and in 29 countries globally.

# Coalitions

A coalition is a formal arrangement for cooperation and collaboration between groups or sectors of the community, in which each group retains its identity but all agree to work together towards a common goal of building a safe, healthy and drug-free community.

# CADCA's Institute

The National Coalition Institute was established by Congress in 2001 by the *Drug Free Communities (DFC) Support Act*.

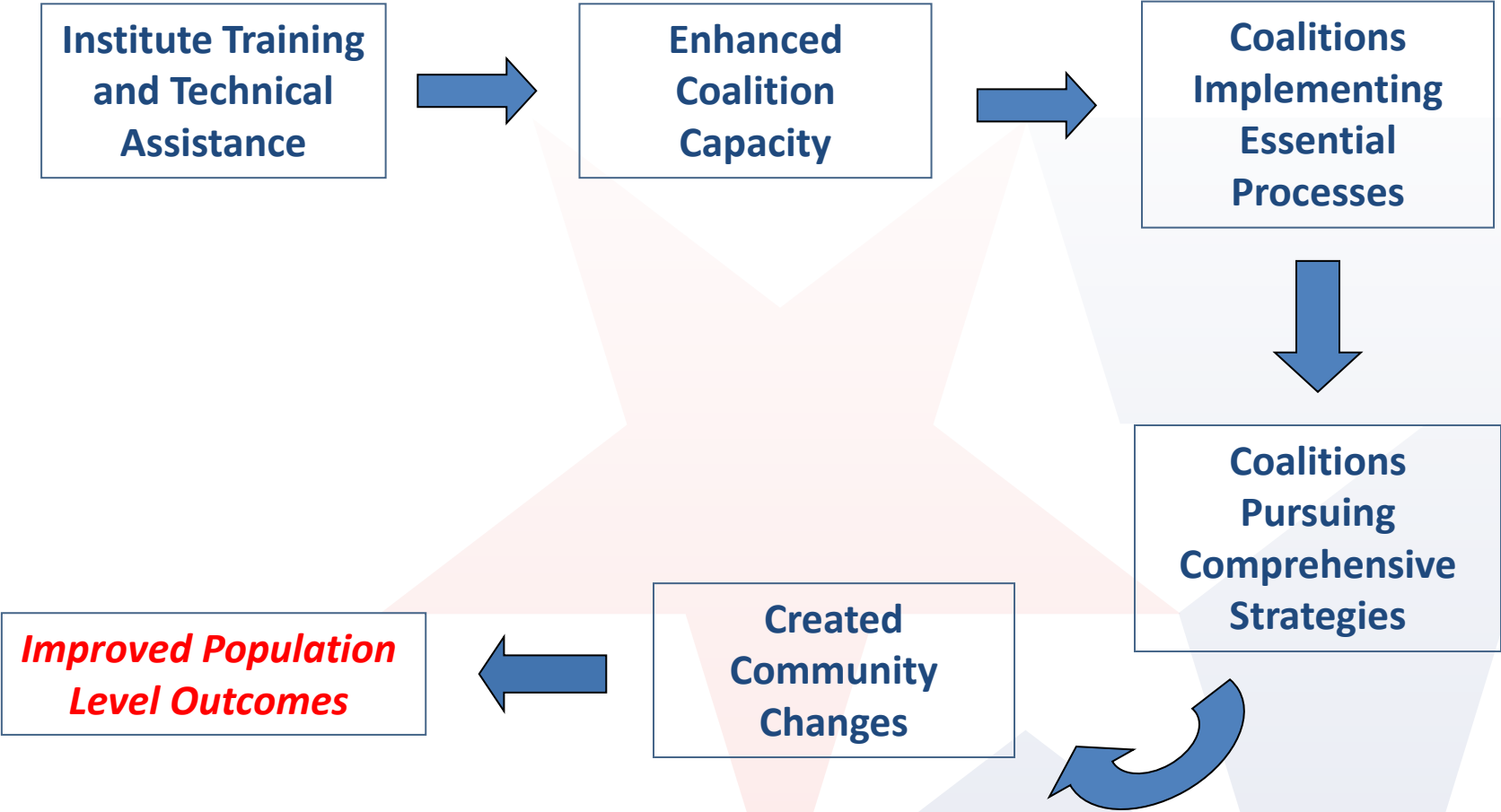
- The Institute is “a vehicle for coalition-specific substance abuse prevention, policy development and a center for coalition training, technical assistance, evaluation, research and capacity building.”
- The Institute is strategically aligned into four functional areas:
  - Grant Management & Operations
  - Training & Technical Assistance (T&A)
  - Innovation and Outreach (I&O)
  - Evaluation and Research (E&R)



# The Drug-Free Communities Support Program

- CADCA was the driving force behind the passage of the DFC program, and continues to play a key role in its successful reauthorization and growth.
- The US has invested a total of \$1.16 billion in the DFC program since its inception in 1998.
- Approximately 2,000 community anti-drug coalitions have been funded.
- CADCA is the primary training and technical assistance provider for the program.

# The Institute's Framework for Community Change





*Coalitions work at promoting health and wellness, and population-level change for our nation's youth.*

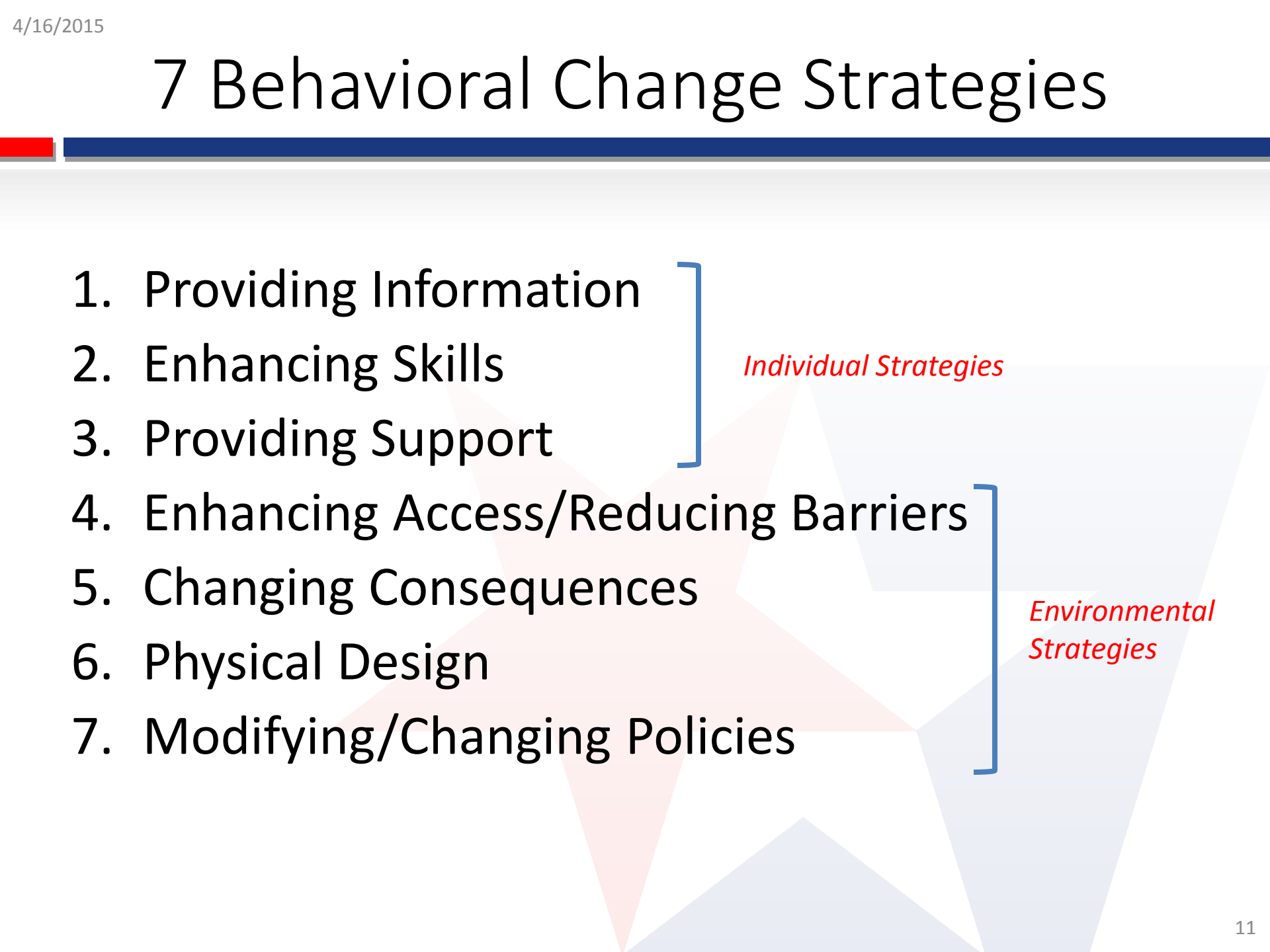
# Population-Level Outcomes

- CADCA's Community Problem-Solving Model equips coalitions to achieve population-level change.
- Realizing programs are necessary but not sufficient, coalitions focus on environmental strategies to achieve significant youth behavioral outcomes.

# Changing Local Conditions

Comprehensive intervention strategies aligned with local conditions are mapped, measured, and monitored to reduce causal factors and problem behavior among youth and adults.

# 7 Behavioral Change Strategies

- 
1. Providing Information
  2. Enhancing Skills
  3. Providing Support
  4. Enhancing Access/Reducing Barriers
  5. Changing Consequences
  6. Physical Design
  7. Modifying/Changing Policies

*Individual Strategies*

*Environmental Strategies*

# CADCA's Independent Evaluation

---

Longitudinal Evaluation of the Impact of CADCA's  
Institute's Training and Technical Assistance on  
Coalition Effectiveness

*Conducted by Pennie Foster-Fishman, Ph.D.  
Michigan State University and System exChange*

MICHIGAN STATE  
UNIVERSITY



*Building Safe, Healthy, and Drug Free Communities*



# Methodology for Longitudinal Study

## *Time Series Analyses*

- **Sample**
  - DFCs first funded in 2008-2009 Fiscal year
- **Protocol**
  - CADCA' s Annual Survey of Coalitions
- **Data Collection**
  - Wave 1 (Baseline) – Jan 2009
  - Wave 2 (3 Months)– March 2009
  - Wave 3 (6 Months) – June 2009
  - Wave 4 ( 1 Year) – December, 2009
  - Wave 5 (2 Years)– February, 2011
  - Wave 6 (3 Years)– February, 2012
  - Wave 7 (4 Years)– February, 2013



*Time Trend of  
Community Changes  
Reported by Coalitions*

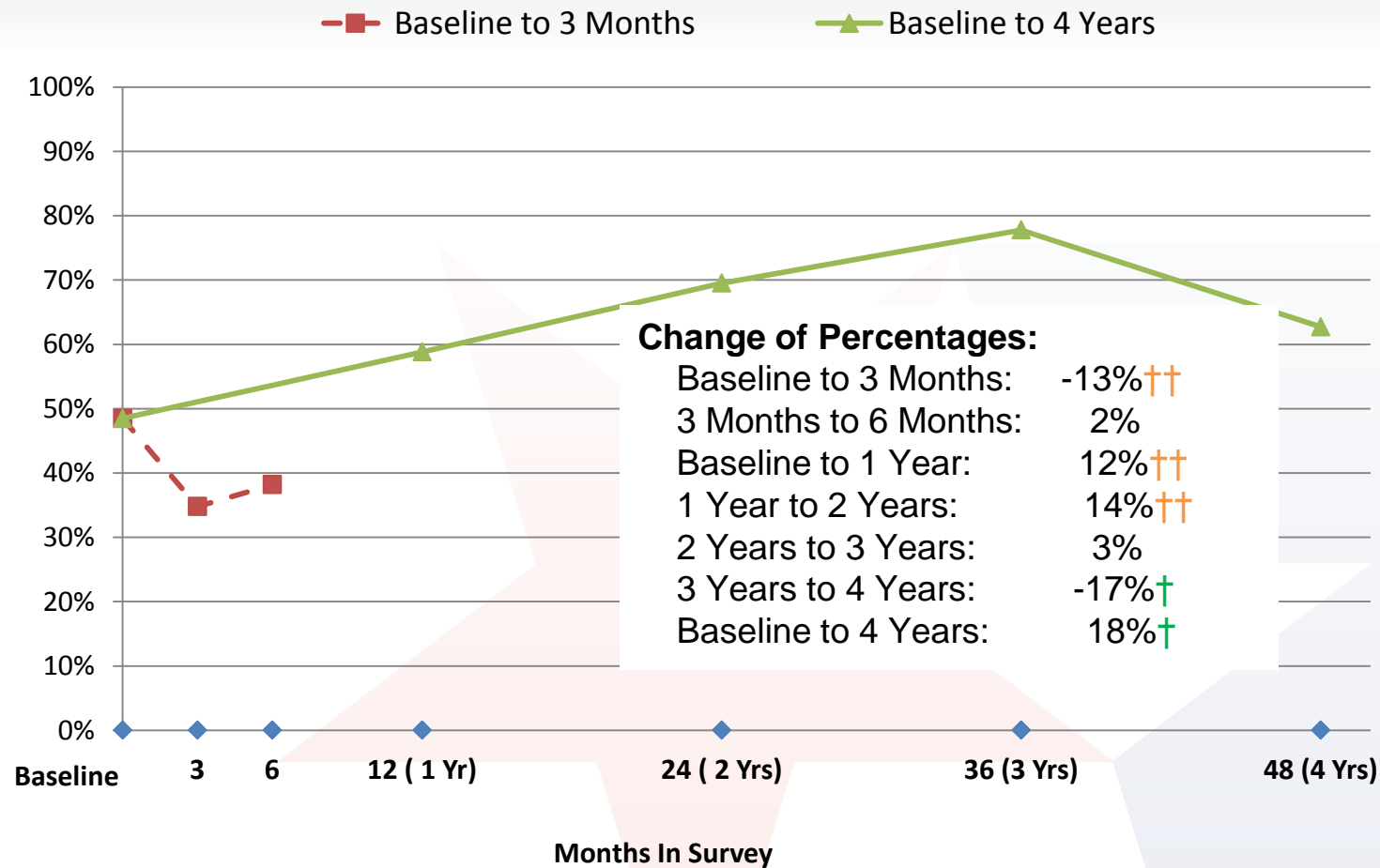
# Community Change Trends

Overall, the percent of coalitions engaged in creating **policy change** grew significantly between baseline and 3 years post CADCA's Coalition Academy training.

Significant increases in coalition involvement in policy change emerging within 12 months (59%) post the Academy training.

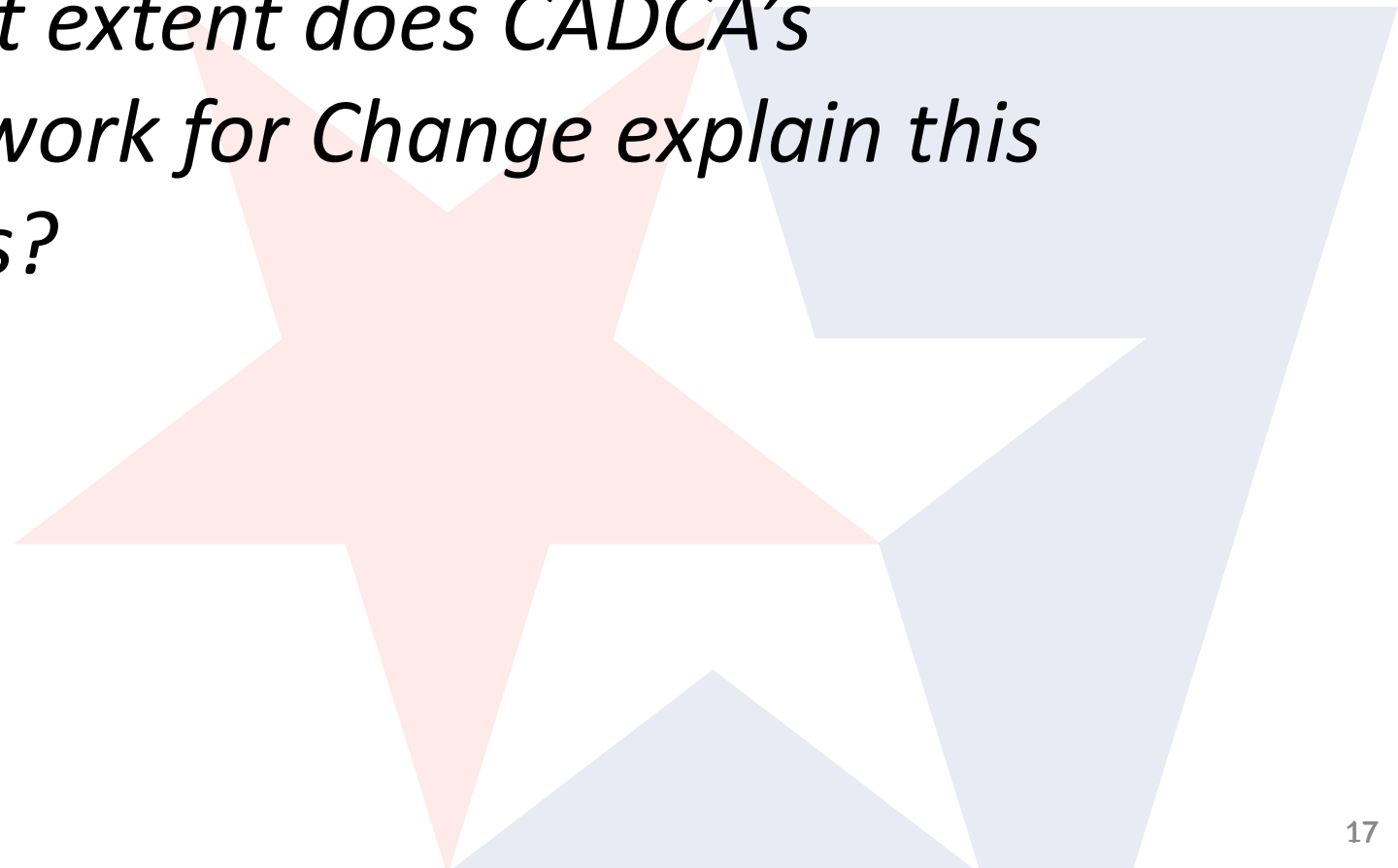
*Policy change is a major indicator for positive youth behavioral outcomes.*

# % of Coalitions Creating New / Modified Policy Over Time

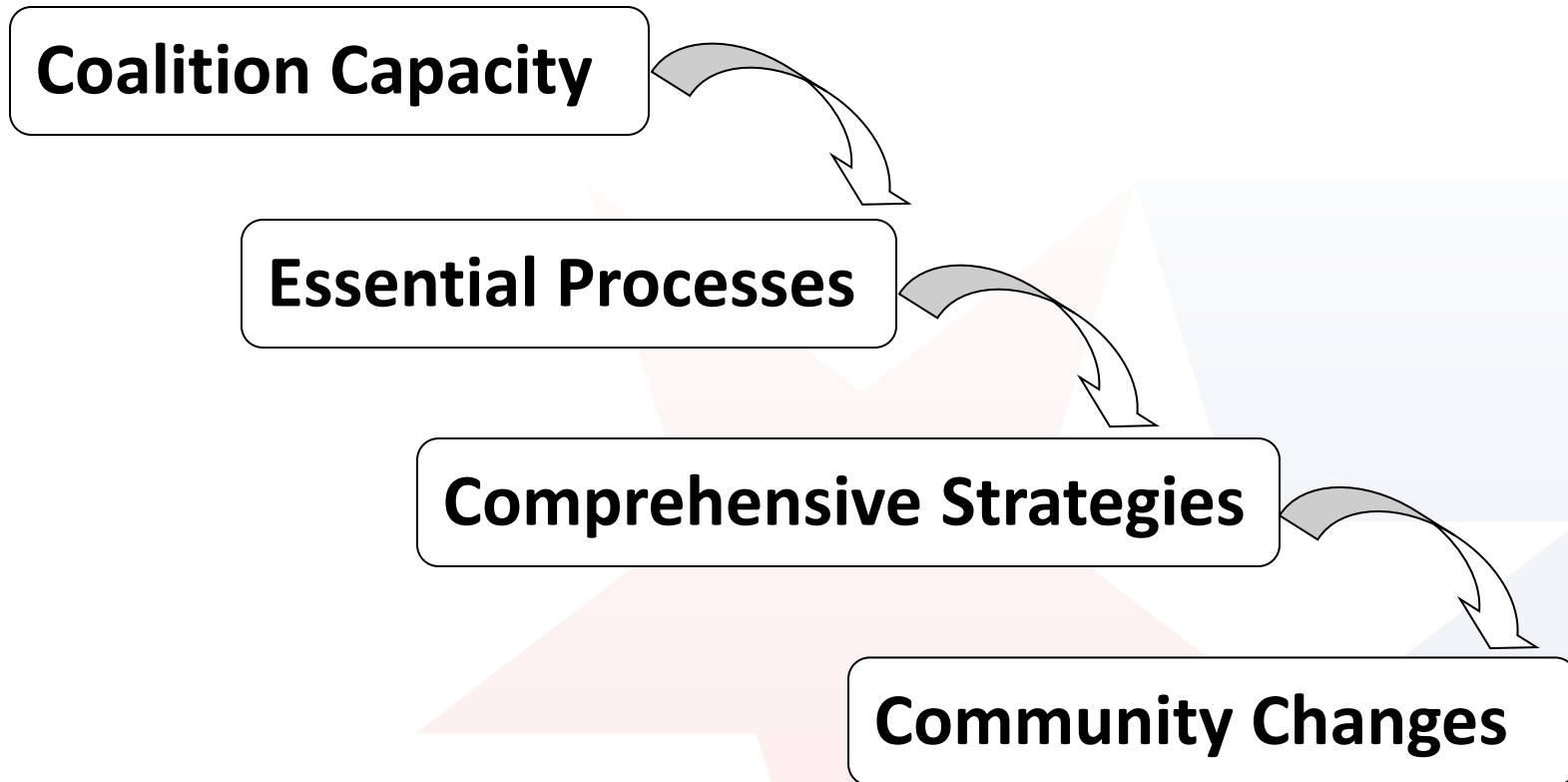


† Significant at  $p < 0.05$  level. †† Marginal Significant at  $p < 0.10$  level. Negative represents decreased %. Paired T-test based.

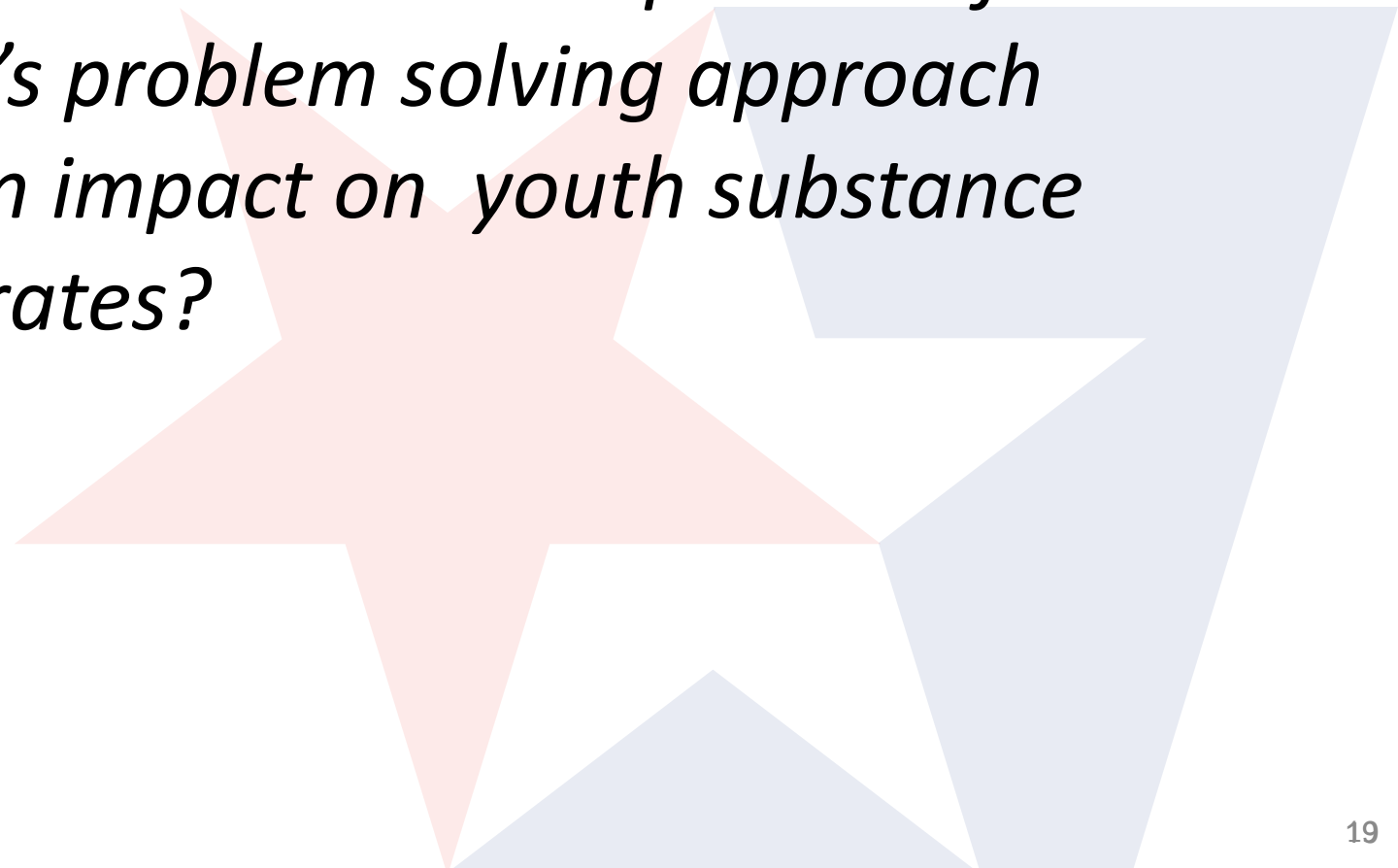
*To what extent does CADCA's  
Framework for Change explain this  
process?*

A large, semi-transparent red five-pointed star is centered on the slide. To its right, there are several overlapping light blue geometric shapes, including a large triangle and a smaller triangle, creating a modern, abstract background design.

# Overall Fit of the Full Logic Model



*To what extent does the pursuit of CADCA's problem solving approach have an impact on youth substance abuse rates?*

A large, semi-transparent red five-pointed star is centered in the background. To its right, there are several overlapping light blue geometric shapes, including a large triangle and a smaller triangle, creating a modern, abstract design.

# Methodology

- *Coalition Sample*

Coalitions who had at least two measurements of substance outcomes (middle school / high school) between 2009 to 2012.

- *Student Population*

Combined middle school and high school.

- *Outcomes:*

- Percentages for Perception of Parent Disapproval of Substances
- Percentages for Perception Risk of Substances
- Percentages for Past 30 Days Use of Substances on
  - - Alcohol
  - - Marijuana
  - - Tobacco

# Shared Outcome Measurements

The Drug-Free Communities Cross-Site Evaluation tracks four shared outcome indicators for alcohol, tobacco, marijuana and prescription drugs.

- Past 30-day Use
- Perception of Risk
- Perception of Parental Disapproval
- Perception of Peer Disapproval

*\*\*According to ICF International, communities with DFC coalitions show better youth behavioral outcomes than communities without DFC coalitions. \*\**

# Coalition Evaluation & Measurement

## Typical Coalition Outputs

- Community Changes – new or modified programs, policies and practices
- Services Provided
- Resources Generated
- Media Coverage

# Findings

- As the Community Problem Solving would suggest, the amount of program and policy changes (Community Changes) produced by the coalitions had the strongest impact on population outcomes than other elements in the Framework.
- The amount (intercept) of and degree of change in Community Change (slope) created by coalitions appear to have significant impacts on students' reported Past 30 days Use in Marijuana, perceptions of the risk of using this substance, and Parent Disapproval of Marijuana. Community change levels also influenced students' perceptions of parents' disapproval of tobacco use.
- Coalitions vary significantly in their pursuit of community changes over time; the sources and implications of this variability should be further examined.

# Measurement Systems for Coalitions

*Coalitions impact on youth behavioral outcomes require a community-based participatory research model documenting contribution versus attribution.*

*Due to the complex systems within communities inherent in coalition work, these three dynamics must be components of coalition measurement systems:*

- 1. Simple* – linear logic model
- 2. Complicated* – multiple coordinated pathways
- 3. Complex* – complexity based theories for action and change

Every day  
**4,000** 12-17 year olds use drugs for the first time

**21%** of high school students reported binge drinking in the past 30 days

The prevalence of youth substance use increases as their perception of harm from use decreases



## Drug-Free Communities



*The White House Office of Drug Control Policy (ONDCP)*

DFC Coalition  
Seven Strategies

Since its Inception DFC has Funded More Than...

**2,000** Community coalitions

DFC supports **4.4 million** middle school students (age 12-14) and **6.3 million** high school students (age 15-18)

Representing **36%** of all United States youth

### Coalition Strategies



### DFC Works!

Youth substance use has decreased among all grantees since program inception



Sources:  
SAMHSA-NSDUH 2013  
Monitoring the Future 2012  
2012 DFC National Evaluation Report  
YRHS 2013

# Contact Us



Kareemah Abdullah  
[kabdullah@cadca.org](mailto:kabdullah@cadca.org)  
1-800-54-CADCA ext. 283