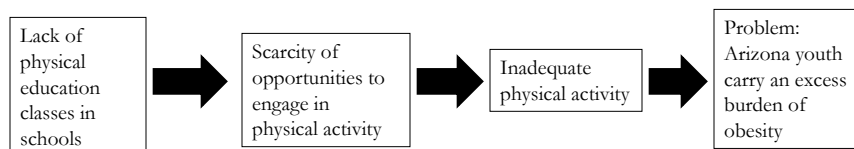# Post-hoc Program Theory Construction using Source Documentation

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What is a program theory?

- A way of looking at the problem a program addressing

Lack of physical education classes in schools	→	Scarcity of opportunities to engage in physical activity	→	Inadequate physical activity	→	Problem: Arizona youth carry an excess burden of obesity

Why is a program theory important?

- Helps evaluators know
  - where to look for change
  - What should be measured
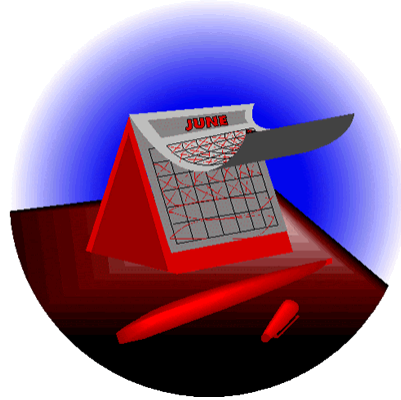- Important for impact/outcome evaluation

How do we typically build a program theory?

- Interviews with stakeholders, content experts
- Group exercises
- Model from past programs
- Research literature

When is the best time to produce a program theory?

- Up front
  - Before the program begins its implementation phase

In practice, when, if at all, are most program theories developed?

- During implementation phase or later
- What are the consequences?
  - Limited access to stakeholders, content experts
  - Limited resources
  - Limited time

Stress Reduction Kit

Bang
Head
Here

Directions:
1. Place kit on FIRM surface.
2. Follow directions in circle of kit.
3. Repeat step 2 as necessary, or until unconscious.
4. If unconscious, cease stress reduction activity.

So what do we do?

- Post-hoc program theory construction using source documentation
  - Assuming source documentation exists

Step 1: Gather source documentation

- May include:
  - Original grant proposal
  - Mission statement
  - Program manuals
  - Activity descriptions
  - Newsletters
  - Lesson plans
  - Meeting minutes

Step 2: Identify underlying conditions

- Using source documentation extrapolate underlying conditions

Source document	Written description
Mission statement	Problem: Arizona youth carry an excess burden of obesity
Parent newsletter	Nutrition not consistently taught in schools
Informational brochure	Youth have poor diets
Lesson plans	Lack of nutrition knowledge

Step 2 continued

Underlying Conditions

Problem Arizona youth carry an excess burden of obesity

Nutrition not consistently taught in schools

Youth have poor diets

Lack of nutrition knowledge

Source Documentation

Mission statement:

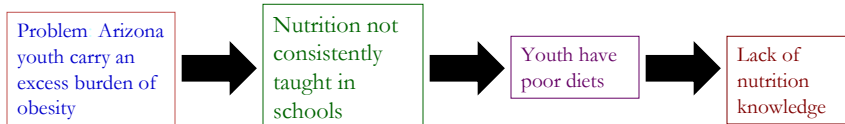Find ways to prevent obesity and complications of obesity among youth in Arizona.

Newsletter article:

Letter from program director detailing unpredictable funding of nutrition education in public schools.

Brochure excerpt:

"Poor diet in childhood can damage health in the long-term."

Lesson plans excerpt:

"At the end of the lesson, students will be able to identify nutrients found in green vegetables."

Step 2 continued

Underlying Conditions

Problem Arizona youth carry an excess burden of obesity	→	Nutrition not consistently taught in schools	→	Youth have poor diets	→	Lack of nutrition knowledge

Source Documentation

Mission statement:

Find ways to prevent obesity and complications of obesity among youth in Arizona.

Newsletter article:

Letter from program director detailing unpredictable funding of nutrition education in public schools.
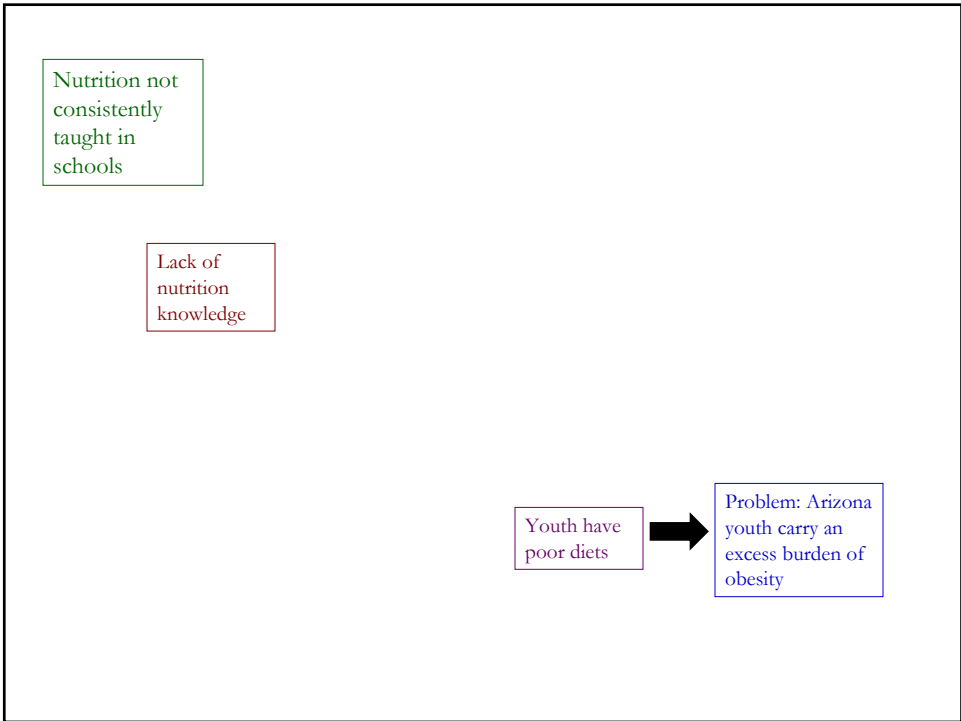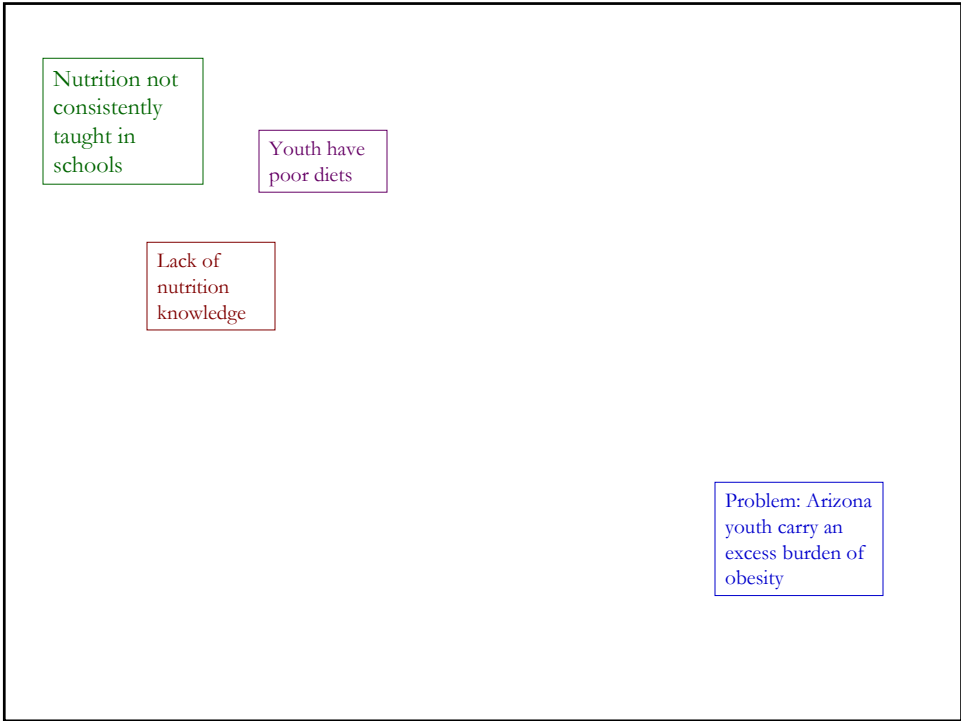
Brochure excerpt:

"Poor diet in childhood can damage health in the long-term."

Lesson plans excerpt:

"At the end of the lesson, students will be able to identify nutrients found in green vegetables."

Step 3: Sequencing underlying conditions

- Determine relationships between underlying conditions
  - Check with if-then methodology
  - Intuition & reasoning

Nutrition not consistently taught in schools

Youth have poor diets

Lack of nutrition knowledge

Problem: Arizona youth carry an excess burden of obesity

Nutrition not consistently taught in schools

Lack of nutrition knowledge

Youth have poor diets → Problem: Arizona youth carry an excess burden of obesity

Slide 1:

Nutrition not consistently taught in schools

Lack of nutrition knowledge → Youth have poor diets → Problem: Arizona youth carry an excess burden of obesity

Slide 2:

Nutrition not consistently taught in schools → Lack of nutrition knowledge → Youth have poor diets → Problem: Arizona youth carry an excess burden of obesity
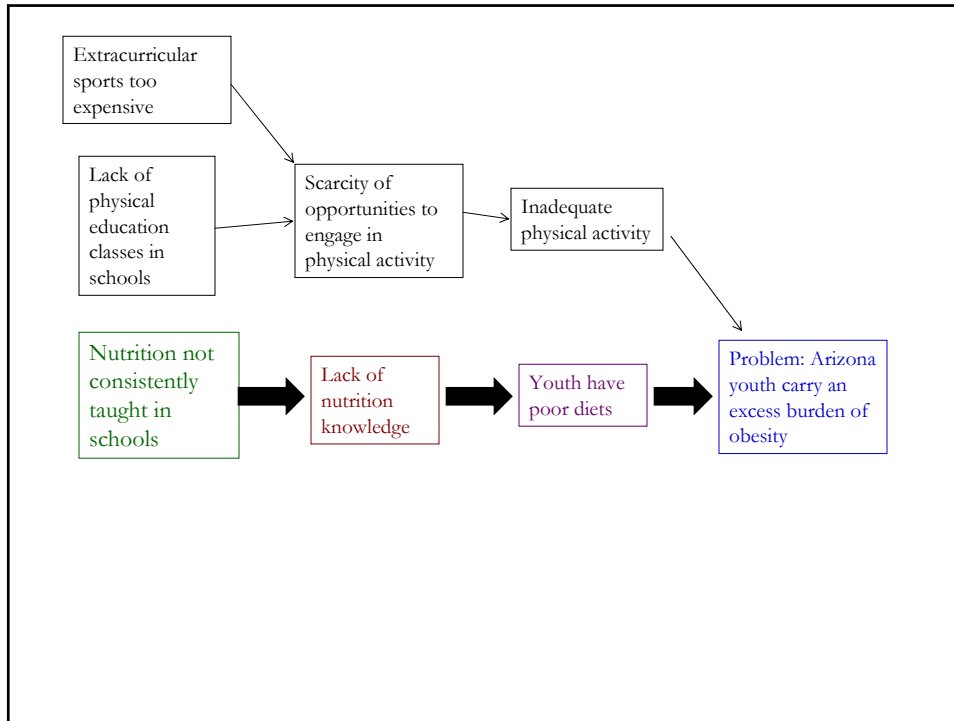
Step 4: Verify with stakeholders

- Confirms logic with content experts
- Obtains buy-in
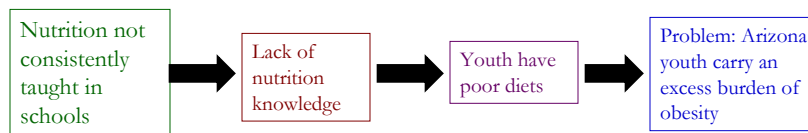- Requires less time than a priori interviews

Limitations

- Only reflects what the program is already doing
  - Important underlying conditions may not have been previously identified
  - Targeted underlying conditions may not be the most critical
- Process may illuminate there is not a logical connection between underlying conditions & problem

Slide 1

Extracurricular sports too expensive

Lack of physical education classes in schools

Scarcity of opportunities to engage in physical activity

Inadequate physical activity

Nutrition not consistently taught in schools → Lack of nutrition knowledge → Youth have poor diets → Problem: Arizona youth carry an excess burden of obesity

Slide 2

Step 5: Create logic model based on program theory

Nutrition not consistently taught in schools → Lack of nutrition knowledge → Youth have poor diets → Problem: Arizona youth carry an excess burden of obesity

Programmatic Assumptions	Inputs	Activities/ Strategies	Outputs	Immediate Outcomes	Intermediate Outcomes	Long-term Outcomes
•Youth need to understand risk factors for obesity •Barriers prevent youth from understanding obesity risk factors & leading healthy lifestyles	•State funding •Private grant funding	• Offer supplemental nutrition classes in schools •Raise parent awareness	•Number of classes taught •Number of articles in parent newsletters	•Increase number of children & parents who receive nutrition education	•Improve/ encourage balanced diet among youth	•Decrease Arizona's obesity burden among youth

Conclusions

- Post-hoc program theory construction offers a methodology under the realistic, but not ideal, situation of creating a program theory with limited:
  - Time
  - Resources
  - Access to content expert, stakeholders

Thank You!

Questions?