

# Matrices: Using Formative Research and Theory

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Planning Health Promotion Programs: An Intervention Mapping Approach



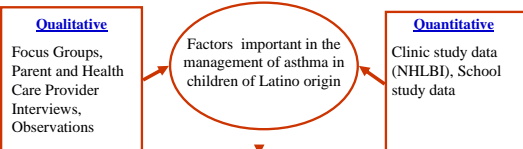
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## Example 1: School-Based Asthma Management for Latino Children and Families: *FAMILIAS*

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## NEEDS ASSEMENT



**Qualitative**  
 Focus Groups, Parent and Health Care Provider Interviews, Observations

Factors important in the management of asthma in children of Latino origin

**Quantitative**  
 Clinic study data (NHLBI), School study data

**Research Question** : *What factors influence asthma identification and self-management?*

**Issues for Exploration**: *Interaction with health care system; talking about health, asthma, treatments, chronic disease; managing asthma*

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## METHODS

**Focus groups with parents of school-age children**  
 General health issues  
 Breathing problems

**One-on-One interviews**  
 Breathing problem and self-management practices

**Observation of clinical asthma encounters**

**Interviews with providers**  
 Parent-provider interaction  
 Asthma management practices

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## Data collection and analysis

**PHASE I** Initial issue exploration of health behavior, health care access and health concerns including asthma

- Data Analysis
- Generation of new questions

**PHASE II** Exploration of Asthma Data analysis

- Theme Proposal and Verification
- Additional Questions

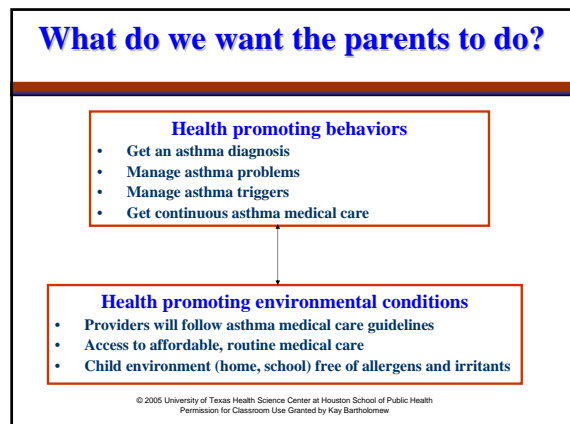
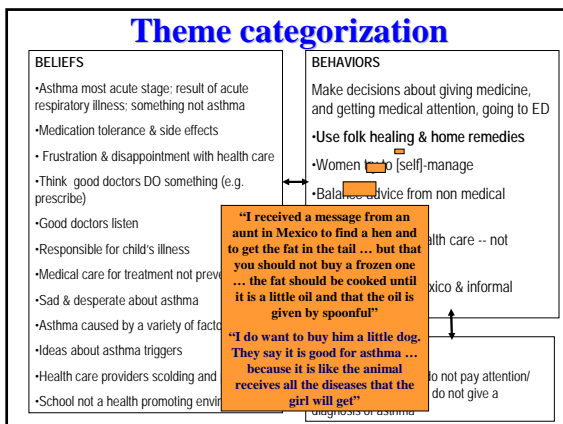
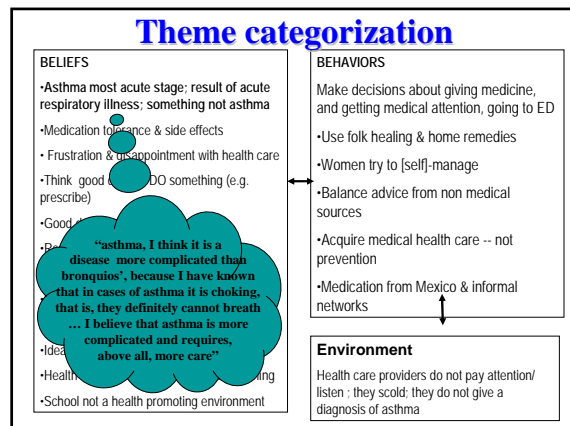
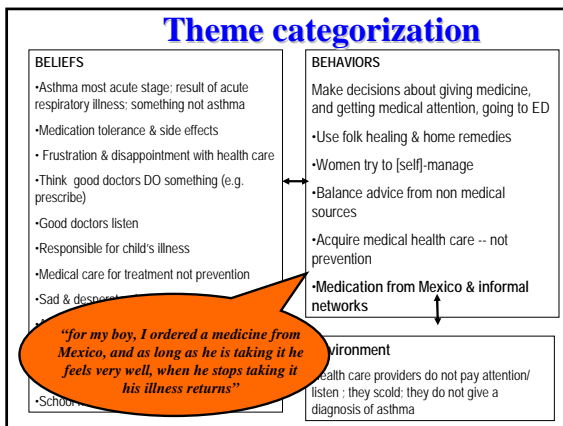
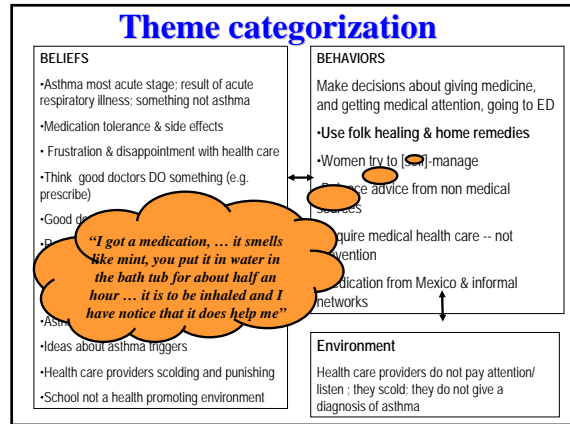
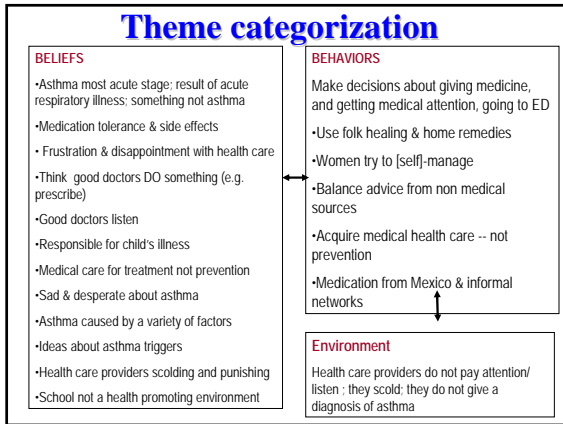
**PHASE III** Additional focus groups, observations and interviews

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## Characteristics of focus group participants

Characteristic	
Total Participants	69
Age (mean)	34 years
Hispanic	95.7 %
Female	97.1 %
Education Grade Level (mean) (n=59)	10 years
Number of children (mean)	2.7
Years in the US (median) (n=47)	9.00
Employed outside of the home	23%

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## Creating a matrix

	Determinant 1	Determinant 2
Performance objective 1	change objective	change objective
Performance objective 2	change objective	change objective

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## Performance objectives for get a diagnosis

### Watch & Discover (Problem Identification)

- PO1. Observe child for pattern or details of symptoms
- PO2. Discover that symptoms are recurrent
- PO3. Discover conditions under which child has these symptoms
- PO4. Question whether these symptoms are asthma

### Think (Solution Generation)

- PO5. Identify current/low cost provider who gives good asthma care
- PO6. Identify possible health insurance or benefits

### Act (Action to Solve Problem)

- PO7. Make appointment with provider
- PO8. Tell doctor about symptoms
- PO9. Ask doctor about the possibility of asthma
- PO10. Ask the doctor to define the severity

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## Performance objectives for manage the asthma problem

### Watch & Discover (Problem Identification)

- PO1. Identify asthma symptoms
- PO2. Observe child for specific symptoms
- PO3. Record when and how often asthma symptoms and episodes occur

### Think (Solution Generation)

- PO4. Identify medication/treatments for asthma symptoms

### Act (Action to Solve Problem)

- PO5. Give appropriate prescribed medicines
- PO6. Get and discuss action plan from provider
- PO7. Take child to doctor for follow up visits
- PO8. Follow action plan

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## Determinants

### Needs Assessment Themes

Prefer to go to the emergency room rather than increase medication themselves

Perceive asthma only at the most acute stage

Uses home remedies

Performance Objective	Behavioral Capability	Self-efficacy and Skills	Outcome expectations
<b>PO5</b> Give appropriate prescribed medicines (control and rescue)	Describes asthma as a chronic disease in need of prescribed medicines for control  Explain how to administer prescribed medicines  Describe the importance of prescribed medicines even if folk remedies are being used	Express confidence in administering medicines  Demonstrate administering medicines correctly	Discuss how the child will get better when using the doctor prescribed medications [along with the home remedies]

## Example 2: Safer Sex with HIV+ MSM

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## Previous model for condom use performance objectives

1. Make an adequate decision on future condom use to prevent HIV infection
2. Buy condoms
3. Carry condoms regularly
4. Communicate about condom use with potential sex partners within the context of both one-night stands and regular dates
5. Use condoms correctly and consistently
6. Maintain condom use in teenage years
7. Use condoms in relations that are perceived as steady

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### Self-regulatory model for safer sex performance objectives

1. HIV+ MSM self-observe sexual behavior and compare sexual behavior to standard of safer sex
2. HIV+ MSM identify when a problem exist
3. HIV+ MSM implement solutions:
  - 3.a. Decide to use non-penetrative sexual techniques, or
  - 3.b. Decide to use condoms for anal sex
  - 3.c. Purchase condoms
  - 3.d. Carry condoms or have condoms easy available
  - 3.e. Negotiate condoms for anal sex
  - 3.f. Use condoms correctly and consistently
  - 3.g. Maintain use over time
4. HIV+ MSM implement selected coping strategies
5. Evaluate actions and return to monitoring

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### Matrix – selected cells

Performance Objectives	Behavioral Capability	Attitudes and cognitions about sexuality	Self-efficacy and Skills	Reinforcement
1.HIV+ MSM self-observe sexual function and compare to personal best				
3.HIV+ MSM generate multiple adaptive coping strategies				

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