

# Serving Vulnerable Populations: Does Organizational Type, Ownership, & Funding Diversity Matter in Prenatal Case Management (PCM) Programs?

Amy Rourke, BS; Jaime Slaughter, MPH;  
Jeremy Vann; L. Michele Issel, PhD, RN

University of Illinois at Chicago  
School of Public Health  
Chicago, IL  
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# What is PCM?



- Prenatal case management (PCM) is a community-based, health-related service for high risk pregnant women
  - Increase utilization of health and social services
  - Goal is to improve birth and early infancy outcomes
- Research on effectiveness exists
  - Nurse-Family Partnership<sup>1</sup> - home visiting by RNs
- Limited, anecdotal evidence of inconsistencies across PCM programs<sup>2</sup>

1. Olds, et al. (1997). Long-term effects of home visitation on maternal life course and child abuse and neglect. *JAMA*, 278, 637-643.
2. Foxcroft, et al. (2004). Organisational infrastructures to promote evidence based nursing. *The Cochrane Database of Systemic Reviews*, 1.



# Background

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- Vulnerable populations
  - Those at high risk for health problems
  - Those with limited or no health insurance
- Research on vulnerable populations receiving different levels of care exists
  - From different types of health care organizations
  - Resulting in different health outcomes



# Research Questions:

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Primary study: Using Evidence for PCM Structure

This secondary data analysis sought to answer the following question...

Do characteristics of PCM clients differ by

1. Organizational characteristics,
2. Program funding source, or
3. Program policies and procedures?

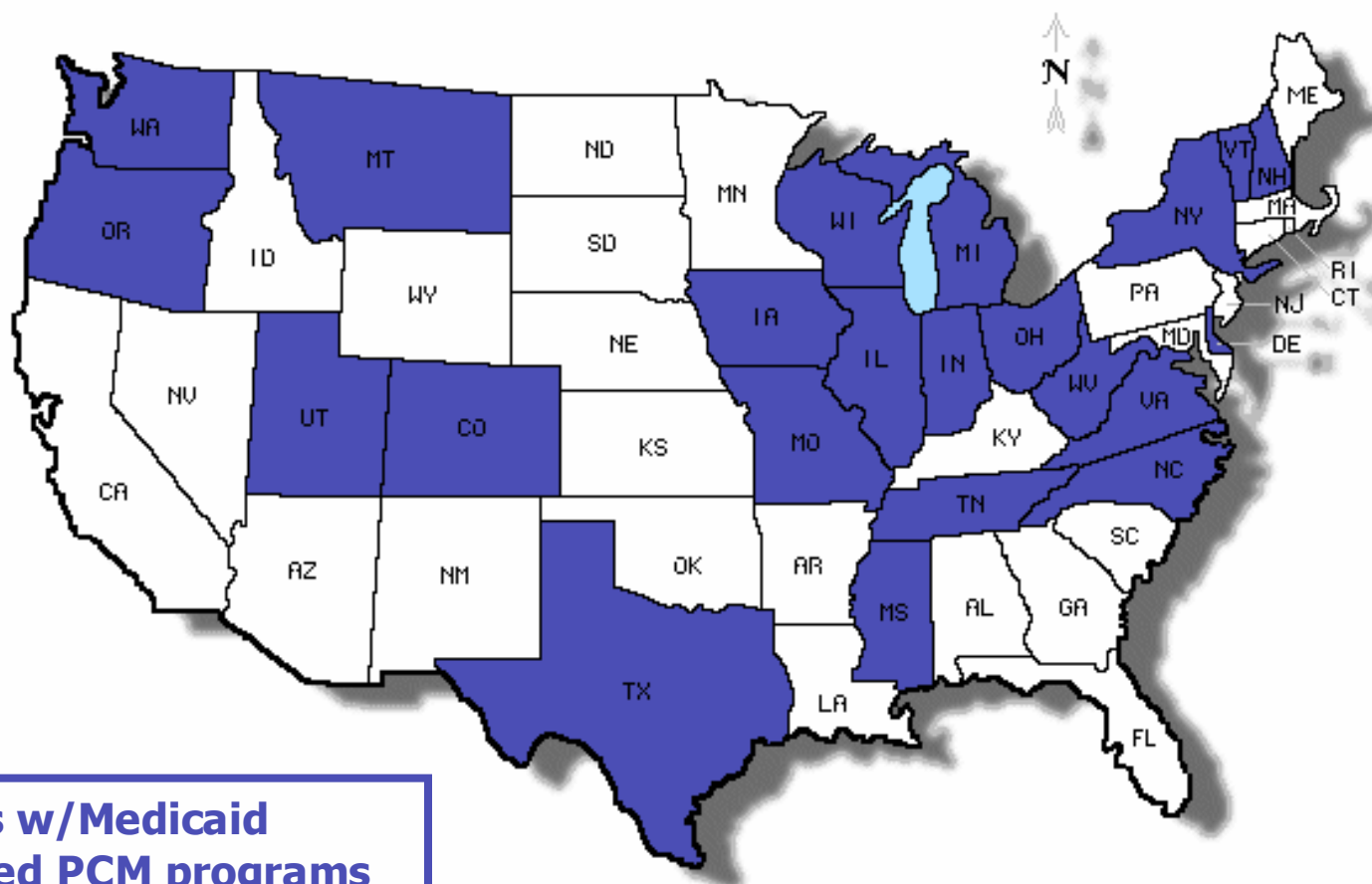
# Methods

## Sampling and Data Collection



- 32 states provide Medicaid-reimbursed PCM
- 30 states shared provider lists
- Constructed frame of programs
  - Eliminated duplicate names and addresses
  - Verified some (but not all) program eligibility
- Invited all presumably eligible programs to participate (N=1029)
- 35% response rate, after excluding additional ineligible programs identified during follow-up

# National Distribution of Program Respondents (n=114)



**22 States w/Medicaid reimbursed PCM programs represented in the sample.**

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# Questionnaire: Variables

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SAQ – Paper version only for this analysis

- Organization Environment
  - Type
    - Government (State or Local Health Department)
    - Community Based Organization (CBO)
    - Health Systems
  - Ownership
    - Government, For-Profit, Not-For-Profit
- Program Internal Environment
  - Funding Sources for PCM program
  - Formalization (written policies and/or guidelines)



# Program Director Characteristics (n=114)

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## **Program Director Education (Highest Degree)**

31% Less than Baccalaureate  
49% Baccalaureate  
20% Master's or higher

## **Program Director Discipline**

98% Female; 73% RNs  
17% with national certification  
Mean time in current position: 7.8 years

## **Program Director Ethnicity**

87% White  
9% African American  
3% Hispanic  
1% Native American



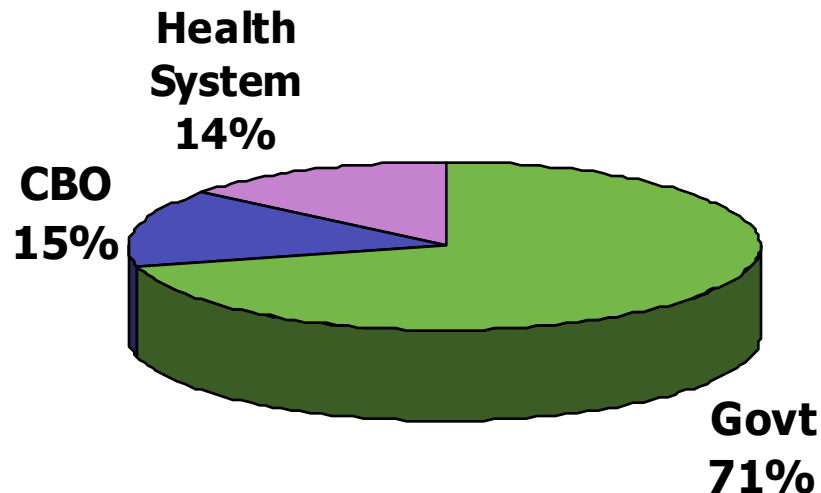
# Results

## Organization Environment (n=114)

### ■ Organization Type

Mean Age of program: 15.5 yrs

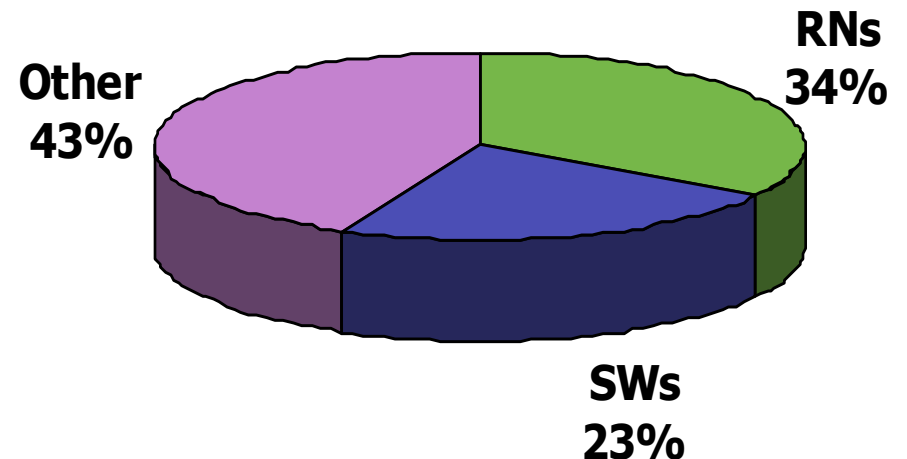
Range: 3 – 27 years



### ■ Organization Size

Mean FTEs: ~ 4

Range: 0 to 21



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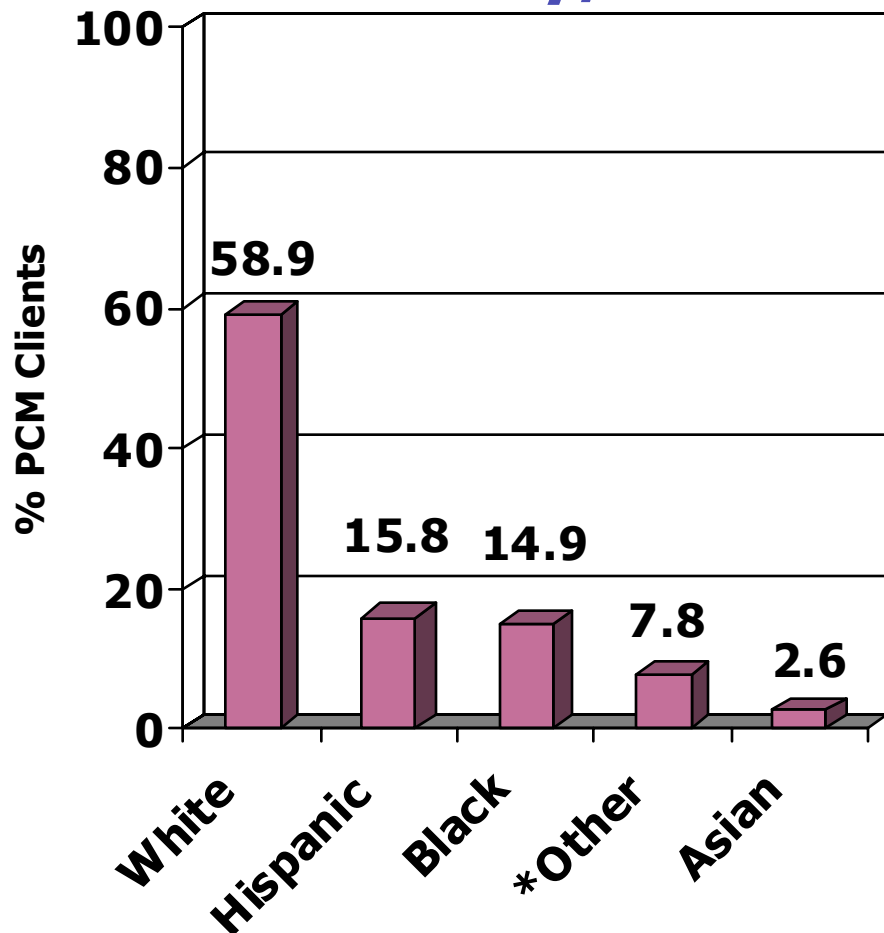
# Client Characteristics

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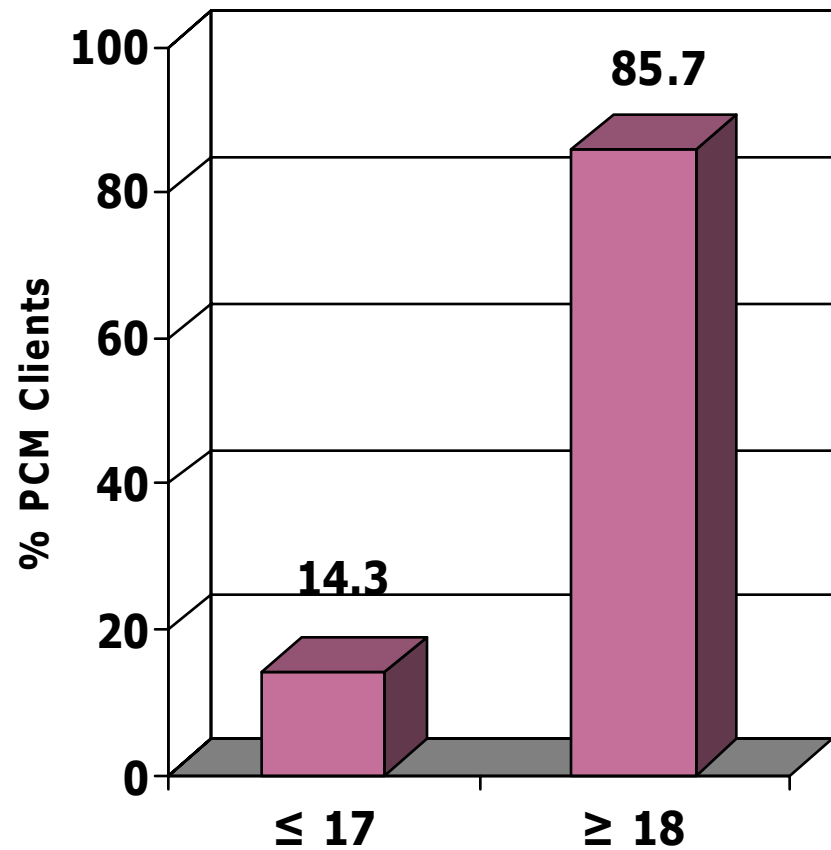
- PDs estimated number clients served per client characteristics:
  - Ethnicity/Race
  - Age
  - Birth Outcomes
  - Insurance Status
- Number of clients per mo. based on averaging number for current and last month
  - Average = 118 clients / program / month
  - Range = 1 – 1836 / month

# Client Characteristics

## Ethnicity/Race



## Age

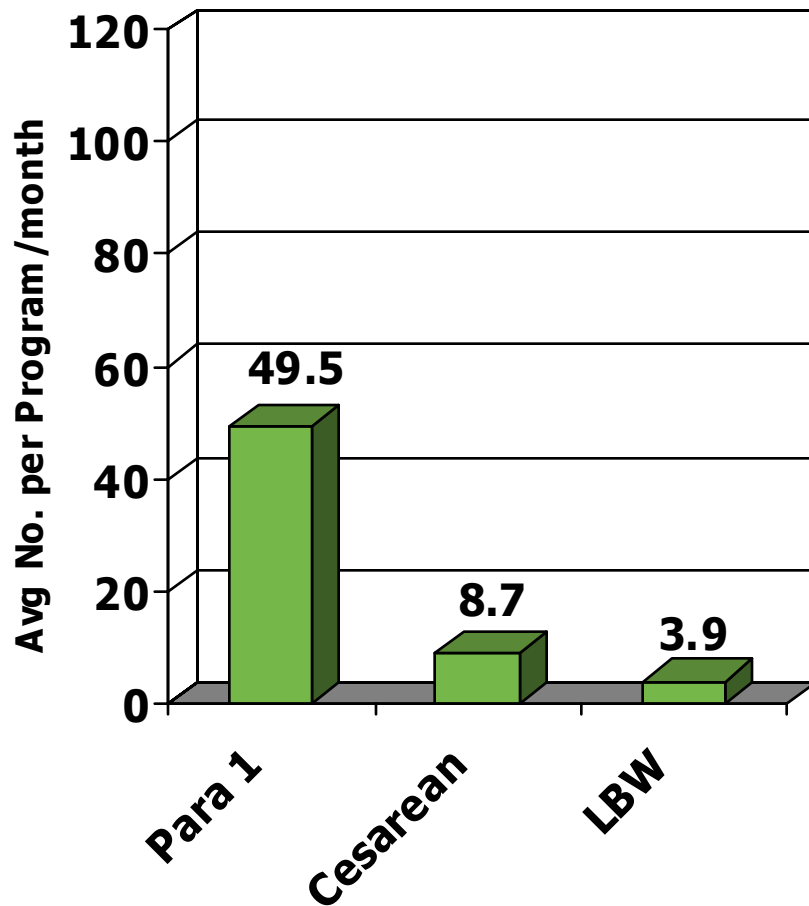


\*Note: Includes NA and mixed

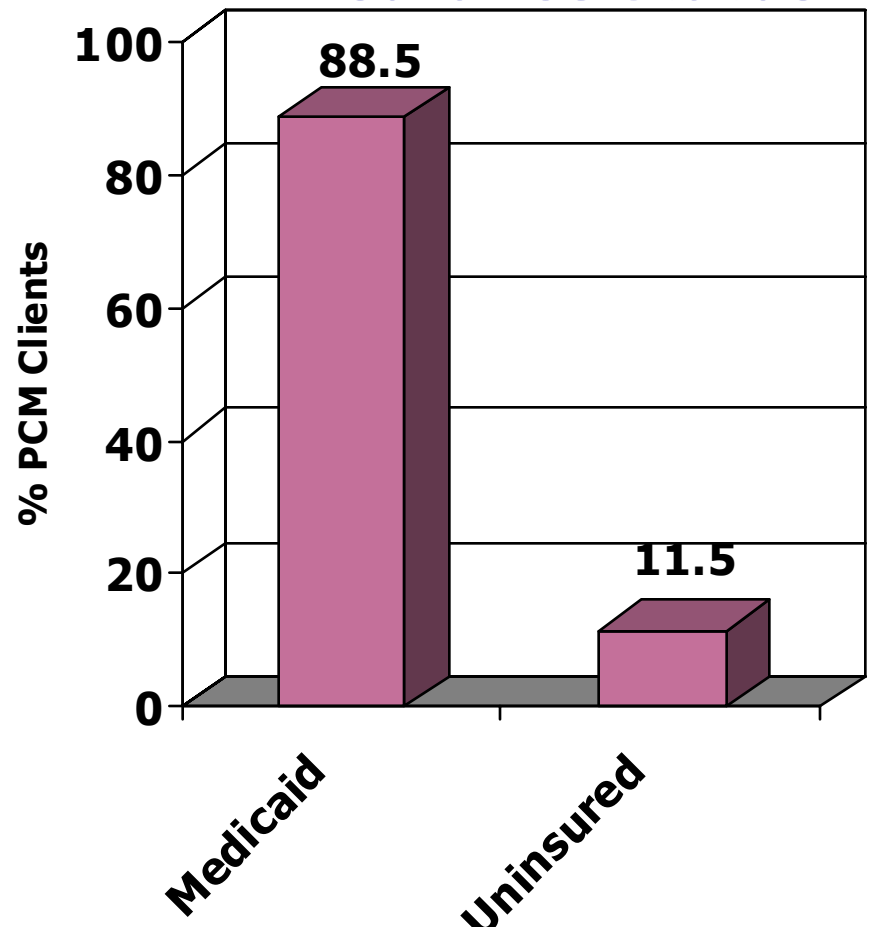
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# Client Characteristics

## Birth Outcomes



## Insurance Status



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# Results

## By Organizational Type & Ownership

	Type (Gov vs. CBO, HS)	Ownership (Gov vs. FP, NFP)
Whites	<b>p &lt; .05</b>	
Blacks	<b>p &lt; .001</b>	<b>p &lt; .05</b>
Hispanics	<b>trend</b>	
Asian		
Other	<b>p &lt; .05</b>	<b>p &lt; .05</b>
≤ 17	<b>trend</b>	
≥ 18	<b>trend</b>	
Medicaid	<b>p &lt; .001</b>	
Uninsured	<b>p &lt; .01</b>	<b>p &lt; .05</b>
LBW		
Caesarean		
1 <sup>st</sup> Time	<b>trend</b>	



# Results

## Program Funding Sources

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Program directors listed % PCM funding from various sources:

- Medicaid
- Private insurance, managed care contracts
- Fees, private pay
- City and county funds or programs
- State funds or programs
- Federal funds or programs
- Foundation support
- Other



# Results

## By Program Funding Diversity Score

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- Funding Diversity Score (FDS)
  - Continuum from low (total uniformity) to high (extreme diversity)
  - Calculated as sum of funding source variance divided by number of funding sources
  - Mean FDS = 855.6; (Range = 0-1428.54, SD=527.9)
  
- FDS decreases as average number of Medicaid clients increases ( $r=-.25$ ,  $p=.02$ )



# Results

## By Program Policies & Procedures

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- Formalization: extent to which delivery of PCM is guided by written policies and protocols.
  - Policy Formalization Score: based on number of written policies of 10 listed (range 0-10)
  - Policy Formalization Score Mean = 5.5 (SD= 2.4)
- Clients did not differ based on the degree of formalization of PCM program.





# Summary

## Do Clients Differ By...

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- Organizational Characteristics? Yes.
  - State and local HDs serve significantly **more** Whites, Blacks, Other, Uninsured, Medicaid vs. CBOs or health systems.
  - Government owned organizations serve significantly **more** Blacks, Uninsured and Other compared to For-Profit and Not-For-Profit.
- Funding Sources? Yes.
  - ↓ FDS with ↑ % Medicaid clients in PCM
- Program Policies and Procedures? No.
  - No client difference by degree of formalization of a PCM program.



# Study Limitations

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- Methodology and Data collection
  - Program directors
    - Limited Contact
    - High Turnover
  - Long time for data collection; possible ineligibilities
  - Low response rate -- potential non-response bias
  
- Sample and Generalizability
  - Mostly government sample
  - State distribution (22 out of 32)



# Discussion

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- High % of Government type organizations in sample and Medicaid reimbursed program participation may influence
  - Significance of organization type and ownership on clients
  - Relationship b/w Medicaid and FDS
- Large SD and range for FDS is concern for longevity of PCM programs. Low FDS means high dependence of the program on a single funding source.
- Formalization not tailored to the diversity or vulnerability of the clients served.

# Program Director Comments

"Is there anything about your PCM program you feel is important for us to know? We are listening."

- *"Our program is state/federal funded via Medicaid. There has been **no increase in rate of payment for 15+ years**. Yet we are continually expected to do more... At least we would like improved reimbursement for our **high risk clients**."*
- *"Our staff, many times, goes **above & beyond** for our clients with **no reimbursement** from Medicaid or our health care facility."*
- *"Due to state budget constraints the state health department dropped their involvement in pre-natal case management. We continually struggle to keep our doors open...Many of our **clients do not have the means to afford transportation** to get to us."*
- *"The nurses are enthusiastic and willing. **Clients are hesitant to work with us because we are 'the government'** and suspect motives."*



# Implications for PCM Programs

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- Policy

- Increase diversity of funding sources for PCM programs to increase long-term sustainability
- Governmental agencies have disproportionate share of most vulnerable, with possible fiscal and provider consequences

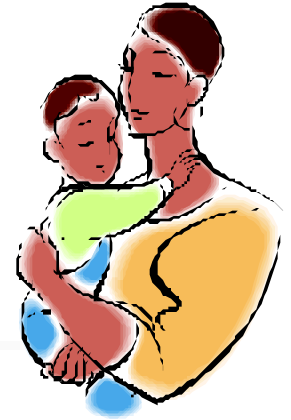
- Practice

- Build trust and provide culturally appropriate practices to minimize stigma associated with government provided/funded services.
- May need greater formalization of PCM programs



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Jenna Khan, Amanda Schultz, Erica Gaddy

Study Website: <http://tigger.uic.edu/~issel/index.htm>

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