POLICYLAB

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OPPORTUNITIES FOR SYSTEM INTEGRATION TO PROMOTE MATERNAL-CHILD HEALTH THROUGH SERVICE COLOCATION

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HARC Collaborative Science of Home Visiting Meeting

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Presenter Disclosures

No relationships to disclose

1. BACKGROUND ON THE MIECHV EVALUATION IN PA

2. Qualitative and Quantitative Methods
3. Colocation Findings
4. Limitations
5. Conclusions and Next Steps

MIECHV in Pennsylvania

Four models eligible

- Early Head Start
- Healthy Families America
- Nurse-Family Partnership
- Parents As Teachers

32 LIAs selected

Urban – Rural mix

MIXED METHODS DESIGN

Outcomes

What are the outcomes of home visiting programs?

Maternal and child health and well-being indicators, for example:

- Appropriate health care utilization
- Smoking cessation
- Referrals to community resources

Data

What are the available data sources for outcome and contextual measures?

- Program enrollment data
- Vital statistics records
- Medicaid files
- CPS data
- Key stakeholder perspectives

Methods

What methods are most appropriate to capture and analyze these measures?

Quantitative:

Observational, Quasi-experimental

Qualitative:

Surveys, Semi-structured interviews

Dissemination

What findings are meaningful for translation to quality improvement efforts?

- Site-level variation in performance by geography, program model, client and staff characteristics
- Relevant community contextual factors

FOCUS ON COLOCATION

Qualitative interviews and observations

- Model colocation emerged from the data

Mixed methods evaluation

- Explored impact of other approaches to service colocation

BACKGROUND ON HOME VISITING AND COLOCATION

- Home visiting models have traditionally existed as separate entities, emphasizing distinguished target populations, curriculum, and program outcomes.

- Limited funding has often reinforced siloes and inhibited collaboration.

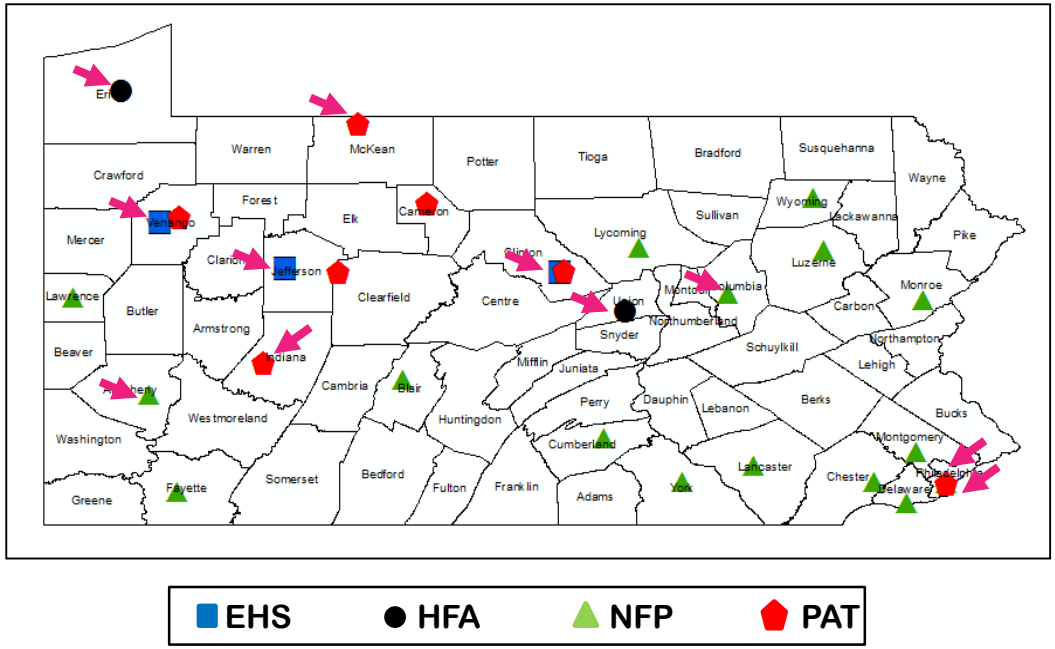
- Recently, model leadership have called for system integration to help achieve population-level change.

1. Background on the MIECHV Evaluation in PA
2. **QUALITATIVE AND QUANTITATIVE METHODS**
3. Colocation Findings
4. Limitations
5. Conclusions and Next Steps

QUALITATIVE SAMPLING

Selected 11 of the 38 MIECHV-funded programs based on:

- Model type
- Geographic location and population density
- Program size



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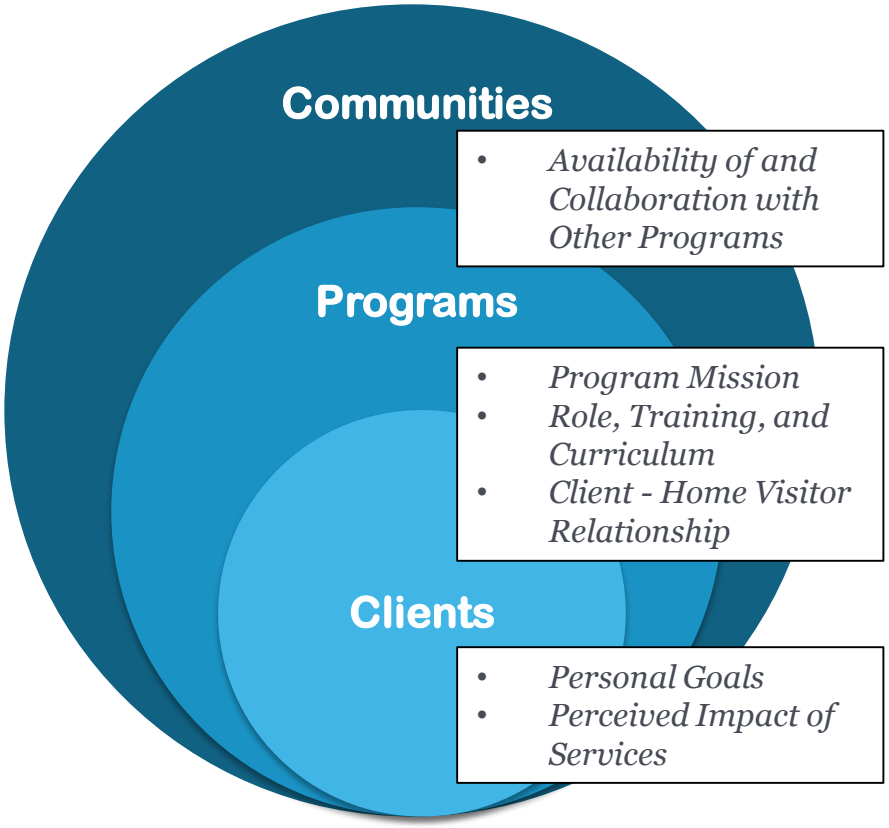
QUALITATIVE DATA COLLECTION

With input from state and program model leadership, we developed 3 interview guides

- Program Administrators
- Home Visitors
- Parents engaged in programming



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QUALITATIVE CODING

We took a Modified Grounded Theory approach to coding.

A priori codes developed from

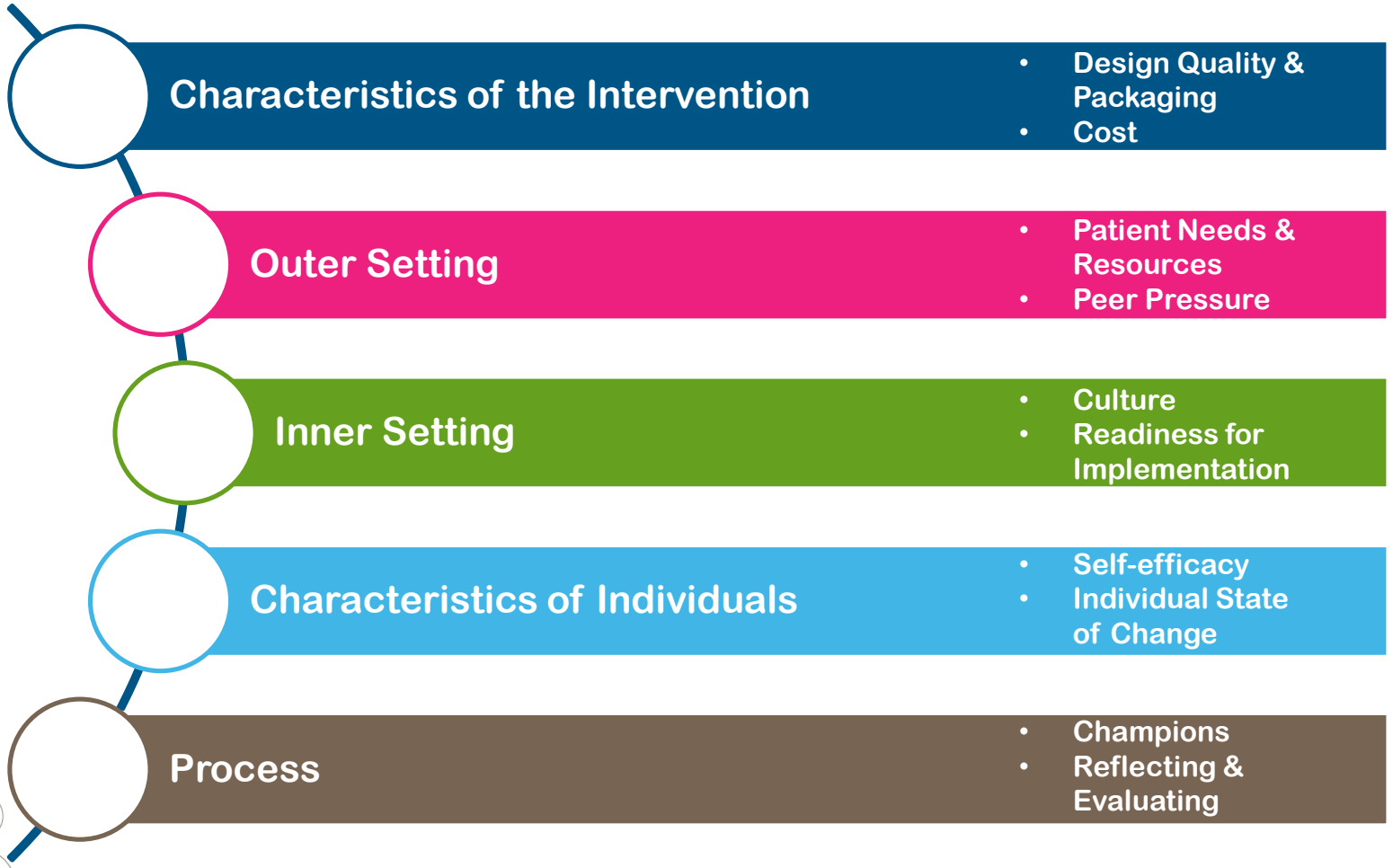
- Study aims and interview domains
- The Home Visiting Applied Research Collaborative Research Priorities

Additional codes emerged from interview data

HARC Research Agenda

1. Strengthen and broaden home visiting effectiveness
2. Identify core elements of home visiting
3. Promote successful adoption of home visiting innovations
4. Promote successful adaptation of home visiting innovations
5. Promote fidelity in implementing home visiting innovations
6. Build stable, competent home visiting workforce
7. Promote family engagement in home visiting
8. Promote home visiting coordination with other services for families
9. Promote the sustainment of effective home visiting
10. Build home visiting research infrastructure

THE CONSOLIDATED FRAMEWORK FOR IMPLEMENTATION RESEARCH



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QUANTITATIVE METHODS:
DOES HEALTH CARE COLOCATION IMPROVE PROGRAM PERFORMANCE?

Home visiting Nurse-Family Partnership (NFP) clients from Pennsylvania between 2006 and 2012.

Outcomes:

- Prenatal smoking cessation
- Receipt of intermediate or better prenatal care
- Recommended well-child visits

Primary data sources:

- NFP enrollment data from all 22 sites
- Birth and death certificate files
- Welfare eligibility files
- Medicaid claims data

DATASET CREATION

Multisource Linked Administrative Dataset 2006 – 2012

Client Enrollment Data	Smoking Cessation Prenatal Care	TANF Food stamps	Well-Child Visits

COHORT CREATION

We used Propensity Score Matching to create our study cohort

Benefits:

- Mimics randomized control trial
- Matches non-clients to clients on selected enrollment variables

Includes:

- Maternal age
- Race/ethnicity
- Maternal education
- Marital status
- TANF/food stamp receipt
- Maternal substance abuse/mental health history
- Reside in same geographical area

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DEMOGRAPHICS OF QUALITATIVE SAMPLE

Staff	N	%
Role		
Administrator	25	34
Home Visitor	43	58
Other	6	8
Program		
EHS	18	24
HFA	15	20
NFP	26	35
PAT	16	22
Urbanicity		
Urban	30	41
Rural	44	59
Total	74	100

Clients	N	%
Years in Program		
Less than 1	12	16
1 to 2	37	49
2+	27	36
Program		
EHS	11	14
HFA	11	14
NFP	36	47
PAT	18	24
Urbanicity		
Urban	39	51
Rural	37	49
Total	76	100

INTERVENTION CHARACTERISTICS - ADAPTABILITY

Having a number of home visiting models to choose from, agencies selected the one that matched their needs and local context

- Expanding the reach of agency by serving a new client base
- Awareness of community size and existing community services

> *With the population that [model 2] has enabled us to serve, it was twofold… it was birth through 5 and it did not have an income requirement because we have too many families that may just not meet [model 1]… [W]e have such a huge population here of people in poverty that they're always the higher priority than folks that we have in [model 2].*

OUTER SETTING – PATIENT NEEDS & RESOURCES

Implementing models with varied eligibility criteria and curricula better served the needs of families

- Home visiting services were available to families who were not previously eligible

- Families could be matched to the curriculum that matched their needs

> *[Model 1 staff] work with first time moms, so that's awesome. But then on the flipside, if they're not first time moms, luckily they can come to us at that point.*

OUTER SETTING – COSMOPOLITANISM

A new model can benefit from existing relationships

- A new model can build from the agency's existing reputation in the community
- Recruiting new families is facilitated by established referral relationships

> *[Model 1] does a lot of outreach, they are still looking for more people to enroll, and …they have a great reputation. …[N]obody knows [model 2]…so people are starting to get to know… about [model 2] because of [model 1].*

INNER SETTING – IMPLEMENTATION CLIMATE

The existing climate at home visiting agencies lends itself well to integrating a new model

- Administrative burdens, requirements, and workflows will serve more staff and clients

- Home visiting staff tend to be collaborative, communicative, and supportive

> *I also conduct the socializations twice a month. I organize those and facilitate those [...] for the individuals who are enrolled in the program, both with [model 1] and [model 2].*

> *[W]e have learned so much from the training with [model 2] that has spilled over into our other home visiting programs, so that's the big thing.*

PROCESS – ENGAGING

Communication and planning with staff about implementing a new model impacts buy-in

- Most sites described teamwork and cooperation between models
- At one site, relationships between home visitors from the original and new model were tense

> *I know [model 1], they've been doing it for a long time. And we are this brand new program that came in, and us just trying to establish who we are. And I don't – maybe they felt like we stepped on their toes here and there. …But that collaboration I think has been hard for us. … I'll just leave it at I believe there are tensions.*

PROCESS – PLANNING

Co-located sites have the opportunity to be strategic and synergistic

- Implementing models that share a curriculum enabled the new model to serve an existing waitlist with a seamless transition later

- Having a central intake for both models facilitated communication with referral sources, families, and prevented dual enrollment

> *We're lucky that [model 2] families are invited to our socializations as well. So most families that come know all – the other two home visitors that they could get. They get a letter from [Administrator] saying a spot is opened up. This is your new home visitor. And then […] our [model 2] home visitor, will say, I hear that you're getting [model 1 home visitor name 1] or [model 1 home visitor name 2]. She's really just looking forward to your call.*

DEMOGRAPHICS OF MATCHED COHORT

	NFP Clients (N=1,171)	Comparisons (N=4,245)
% Under 18	45.5%	45.7%
Race/ethnicity		
White	59.8%	60.1%
Black	25.0%	24.9%
Hispanic	21.2%	20.5%
Other	15.3%	15.0%
% Unmarried	90.0%	90.5%
% Smoking prior to pregnancy	39.3%	39.3%

QUANTITATIVE RESULTS

Prenatal Care:

- Higher rates of prenatal care among colocated (77.8%) vs non-colocated (70.7%) clients
  - However, no program effect observed between colocated clients versus community comparisons (OR: 1.04, 95% CI: 0.81 – 1.34)

Well-Child Visits:

- Higher rates of well-child visits among colocated (69.0%) vs non-colocated clients (56.8%)
  - Positive program effect for colocated clients versus community comparisons (OR: 1.32, 95% CI: 1.05, 1.66)

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LIMITATIONS

Model colocation results should be considered exploratory

Observational study design subject to bias

- Propensity score matching minimizes bias

Duration of program enrollment

- “Intention-to-treat” analysis

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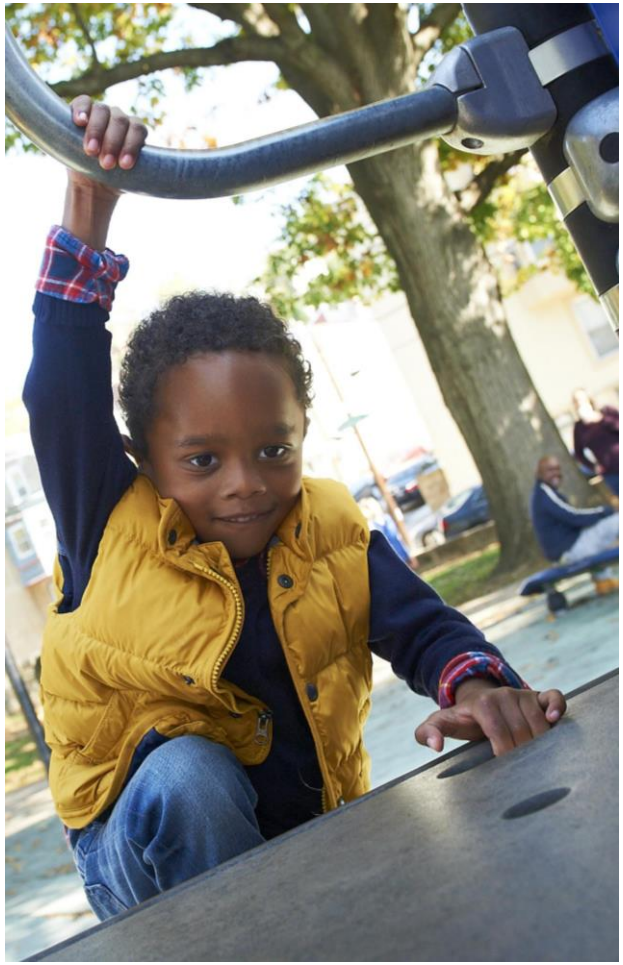
CONCLUSIONS AND NEXT STEPS

- Colocation of services benefit programs and clients, including a measurable impact on healthcare utilization outcomes.
- Dialogue among model leadership, LIAs, and other health services about collaboration will improve system integration and family outcomes.
- This work informs policy across the early childhood and health systems spectrum and exemplifies novel home visiting model enhancements.



THANK YOU TO OUR POLICYLAB TEAM AND RESEARCH PARTNERS!

HRSA Maternal & Child Health

pennsylvania OFFICE OF CHILD DEVELOPMENT AND EARLY LEARNING

Early Head Start

Mixed Methods Research Lab

Nurse-Family Partnership Helping First-Time Parents Succeed

Parents as Teachers

healthy families america

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QUESTIONS AND COMMENTS?

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