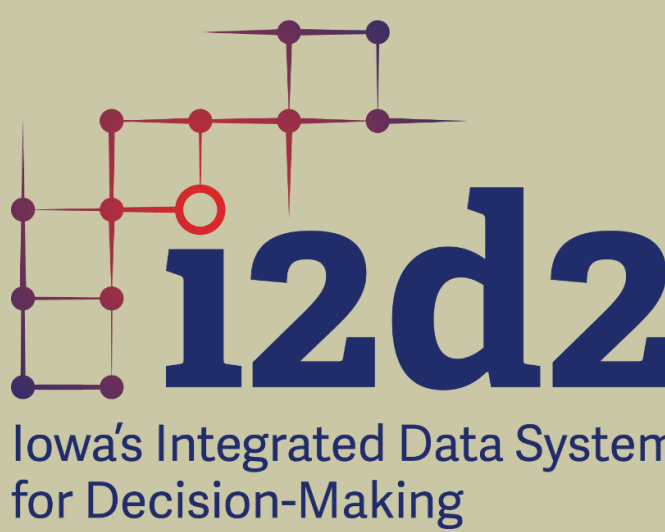


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Exploring Prenatal Connection to Home Visiting for Families with Low Social Support



Background and Objectives

- Since 2010, some Iowa prenatal resources such as hospital OB units have declined.
- MIECHV reauthorization emphasizes targeted, intensive services, such as by enrolling families prenatally in home visiting (HV) programs.
- Iowa HV administrators wanted to explore the potential of prenatal HV enrollment to offset negative outcomes of decreased OB care access (Rouse et al., 2022).
- They linked HV data with Vital Statistics (VS) birth record data on demographics and stressors via Iowa's Integrated Data System for Decision-Making (I2D2).



SCAN to learn more about DEI in the data linkage process for I2D2

Objectives of Work Reported Here

- Test association of family demographics & family stressors with the timing of HV enrollment
- A) Test the independent & B) interactive associations of social support and timing of HV enrollment with impacts on target behaviors.

Methods

Design: Cohort study

Setting: Iowa HV implementing HFA, PAT, NFP, EHS, & locally developed models

Data Source: I2D2, linking HV & VS records

Sample: Families newly enrolling in HV in 2017: 1,773 prenatal; 3,090 postnatal

Measurement

Demographics – Caregiver race, ethnicity, language, rurality

Target Behaviors at Follow Up – Life Skills Progression (LSP) Tool

- Scales for: 1) Caregiver Utilization of Resources, 2) Parent-Child Attachment, 3) Caregiver Support of Child Development

- Binary variable for each scale (0 = did not vs. 1 = did reach target)

Social Support at Enrollment – Life Skills Progression Tool

Binary variable (0 = low support ; 1 = high support)

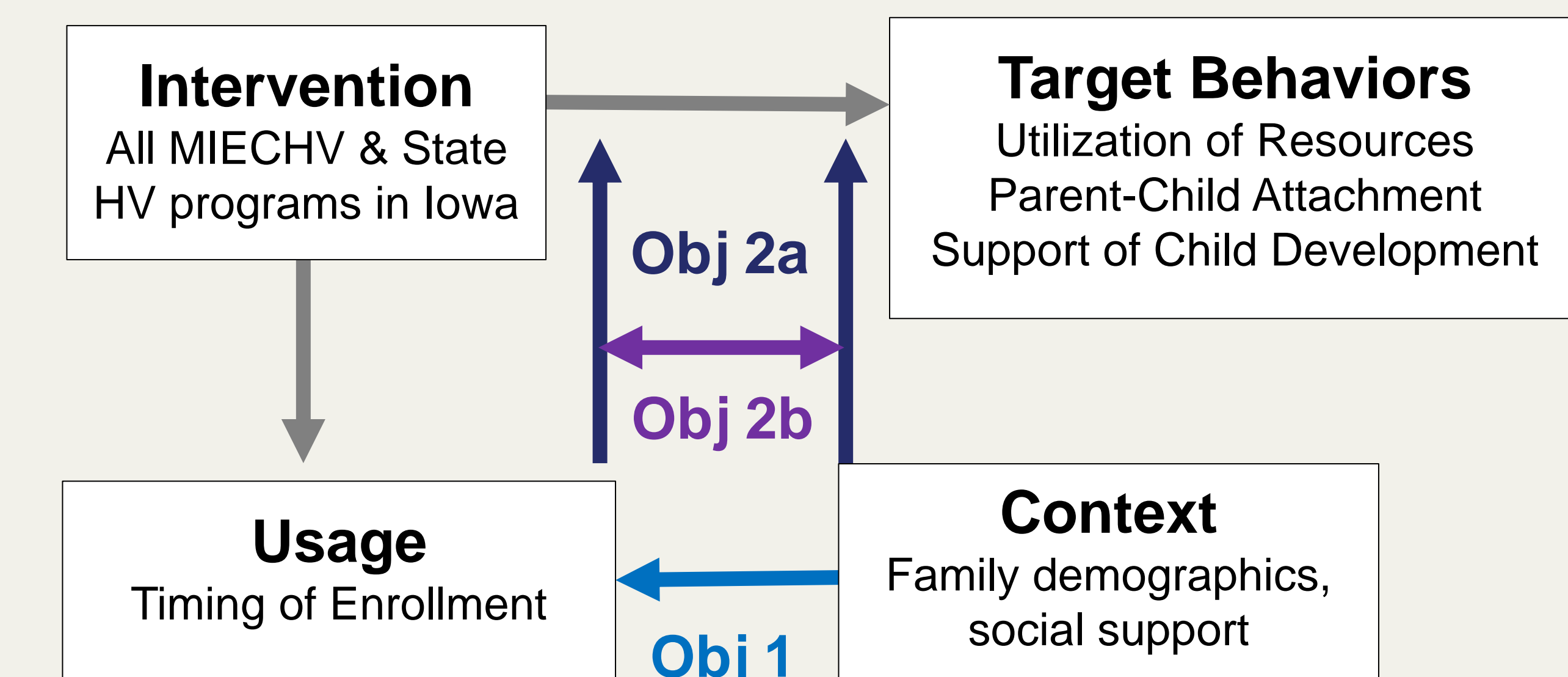
summed score of Relationships with Family, Spouse and Friends Scales

Analysis: Multiple Logistic Regression

Obj 1 DV - timing of HV enrollment, IVs - demographics, stressors, and social support

Obj 2 DV - target behaviors, IVs - demographics, stressors, timing of enrollment, social support, interaction of timing of enrollment & social support

Framework: Study objectives mapped to Precision Paradigm



Findings

Obj. 1:

- Families in rural areas (OR 0.63) or those with a late start to prenatal care (OR 0.82) were significantly less likely to enroll prenatally.
- Some families with stressors including low social support, poverty, teen parent, or low parent education were statistically significantly more likely to enroll prenatally.

OBJ 2a: Low Social Support*

	OR	CI
Use of Resources	0.21	0.165 0.261
Parent-Child Attachment	0.17	0.131 0.23
Support of Child Develop.	0.19	0.154 0.241

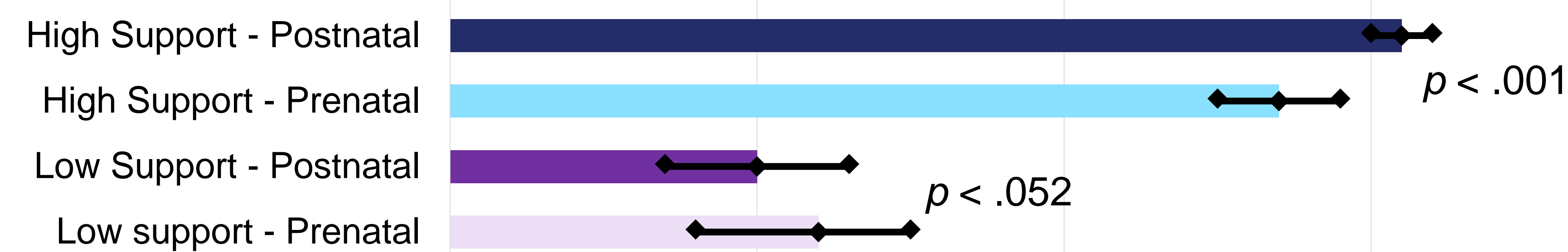
* In comparison to families with higher social support

Obj. 2a:

- Baseline low social support was associated with decreased likelihood of achieving the target score for all three outcome behaviors.
- Timing of enrollment in HV was not significantly associated with achievement of target behaviors as a main effect.

Predictive Probability of Achieving Target Scores

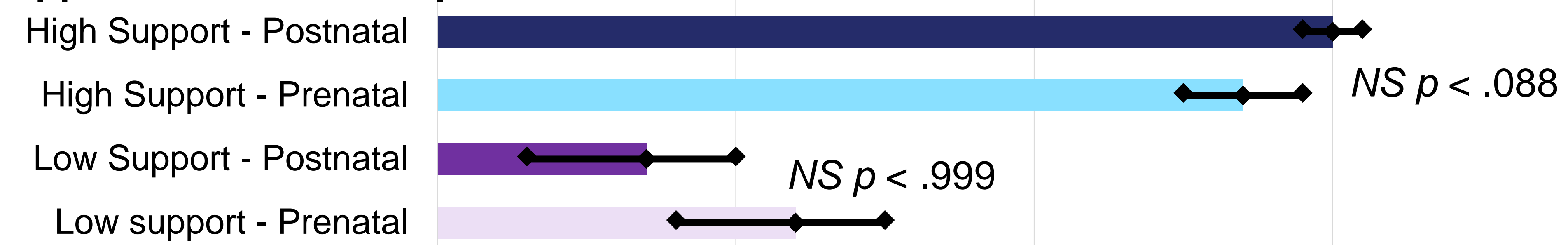
Utilization of Resources



Parent-Child Attachment



Support of Child Development



Note: p values indicate differences between prenatal/postnatal enrollment within each support group

Obj. 2b:

Controlling for family demographics and stressors:

- Utilization of Resources:** both families with low and higher social support are more likely to reach target scores when enrolling postnatally, prenatal enrollment for families with low social support significantly reduces the difference in likelihood of achieving target scores between families with low and higher social support
- Parent-Child Attachment, Support of Child Development:** There was no significant difference in reaching target scores between prenatal/postnatal enrollees with higher or low social support. However, prenatal enrollment decreased the difference in the likelihood of reaching target scores between families with lower vs. higher social support.

Implications & Next Steps

- Many families experiencing stressors are being enrolled prenatally in HV programs.
- Prenatal enrollment may be more beneficial for families with specific characteristics. However, this analysis included a limited set of covariates, and more work is needed to determine other potential areas of benefit.
- Emphasis on prenatal enrollment for families in rural areas and with low social support may help families with significant barriers to accessing services.
- Home visiting could provide a crucial link to populations who may struggle to access services due to geographic or social support challenges.
- Iowa HV programs can use this work to identify gaps in service and opportunities for targeted outreach.
- Future work in this line of inquiry will include additional years of home visiting data to examine child outcomes using ASQ-3 data.