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Impact of the Healthy Baby Prenatal Benefit on Perinatal Outcomes: A PATHS Equity for Children Project

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Research Team:

Marni Brownell	Mariette Chartier
Pat Martens	Dan Chateau
Nathan Nickel	Elaine Burland
Doug Jutte	Rob Santos
Joy Sarkar	Carole Taylor
Chun Yan Goh	Milton Hu

Collaborators:

Joanne Waskin, Cynthia Carr,
Tamara Hes, Shannon Dennehy



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Manitoba Centre for Health Policy

5 year Programmatic Grant: Evaluates policy impact on health equity

Research Team

PI: Dr. Marni Brownell

Leadership Group:

Drs. Alan Katz, Dan Chateau,
Nathan Nickel, Elaine Burland

Plus 14 scientists from Manitoba,
Canada, USA.

Advisory Board

- 6 Government Department Deputy Ministers, plus Healthy Child Committee of Cabinet
- Healthy Child Manitoba Office
- CEO of the Winnipeg RHA
- Executive Director of Manitoba RHAs
- United Way

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Manitoba Healthy Baby Program

- aimed at promoting pre- and perinatal health
- includes two components:
 - 1) prenatal income supplement (PB)
 - Available to low-income pregnant women
 - 2) community support programs (CSP)
 - Available to all women prenatally and postnatally

Manitoba Prenatal Benefit: Eligibility

- A medical note confirming pregnancy and expected date of delivery
- Completed application
- Net family income < \$32,000
- Benefits start in 2nd trimester of pregnancy; monthly cheque for \$81.41
- Resident of Manitoba

Hypothesis – Receipt of the Healthy Baby Prenatal Benefit will be associated with positive perinatal outcomes



Outcomes examined

- Low birth weight
- Small for gestational age
- Large for gestational age
- Preterm birth
- 5-minute Apgar

- Length-of-stay for birth hospitalization
- Breastfeeding initiation

- Readmission within 30 days
- Hospital admission first 2 years
- Immunization 1 and 2 years

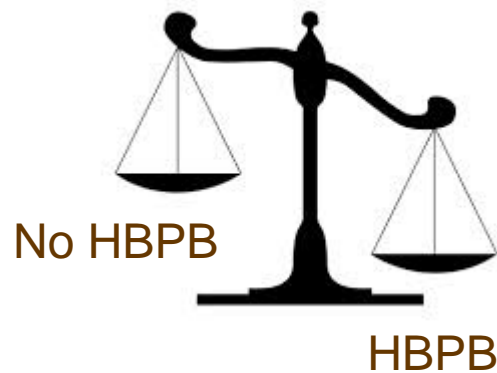


Methods

- If Healthy Baby Prenatal Benefit (HBPB) is targeted to low income women, who should we compare them to?
- Included all women receiving Income Assistance during pregnancy – all eligible for HBPB, but not all applied (years: 2003-2010)
 - 10738 HBPB,
 - 3853 no HBPB
- Used propensity scoring to ensure women in treatment and comparison group were comparable

Before Adding Weights

Uneven Levels of Risk



After Adding Weights

Look like HBPB = big weight

= more weight to response

Do not look like HBPB = small weight

= less weight to response



Table 1: Variables in the Propensity Score Model

	HBPB	Not in HBPB
<i>Mean mom age at first birth</i>	19.79	19.65
<i>Mean SES (SEFI)</i>	0.90	0.77
Prenatal Screening (%)	15.16	7.63
Use alcohol during pregnancy (%)	29.56	29.17
Use drug during pregnancy (%)	18.12	17.16
Family history of a disability (%)	5.26	5.60
Smoked during pregnancy (%)	58.91	62.47
Low education (%)	64.78	63.40
Social assistance (%)	84.12	73.86
Single parent family (%)	56.91	48.86
No prenatal care before 6th month (%)	7.88	15.93
Experienced depression (%)	26.79	22.96
Experienced anxiety disorder (%)	9.63	7.81
Schizophrenia or bipolar mom (%)	1.77	1.55
Mentally challenged mom (%)	1.82	1.81
Antisocial father (%)	8.23	5.38
Antisocial mom (%)	2.56	2.29
Substantiated abuse mom (%)	3.97	4.16
Isolation (%)	9.02	9.64
Experienced relation distress (%)	23.69	20.14
Violence between parents (%)	12.65	10.00
History of child abuse (%)	28.42	24.86

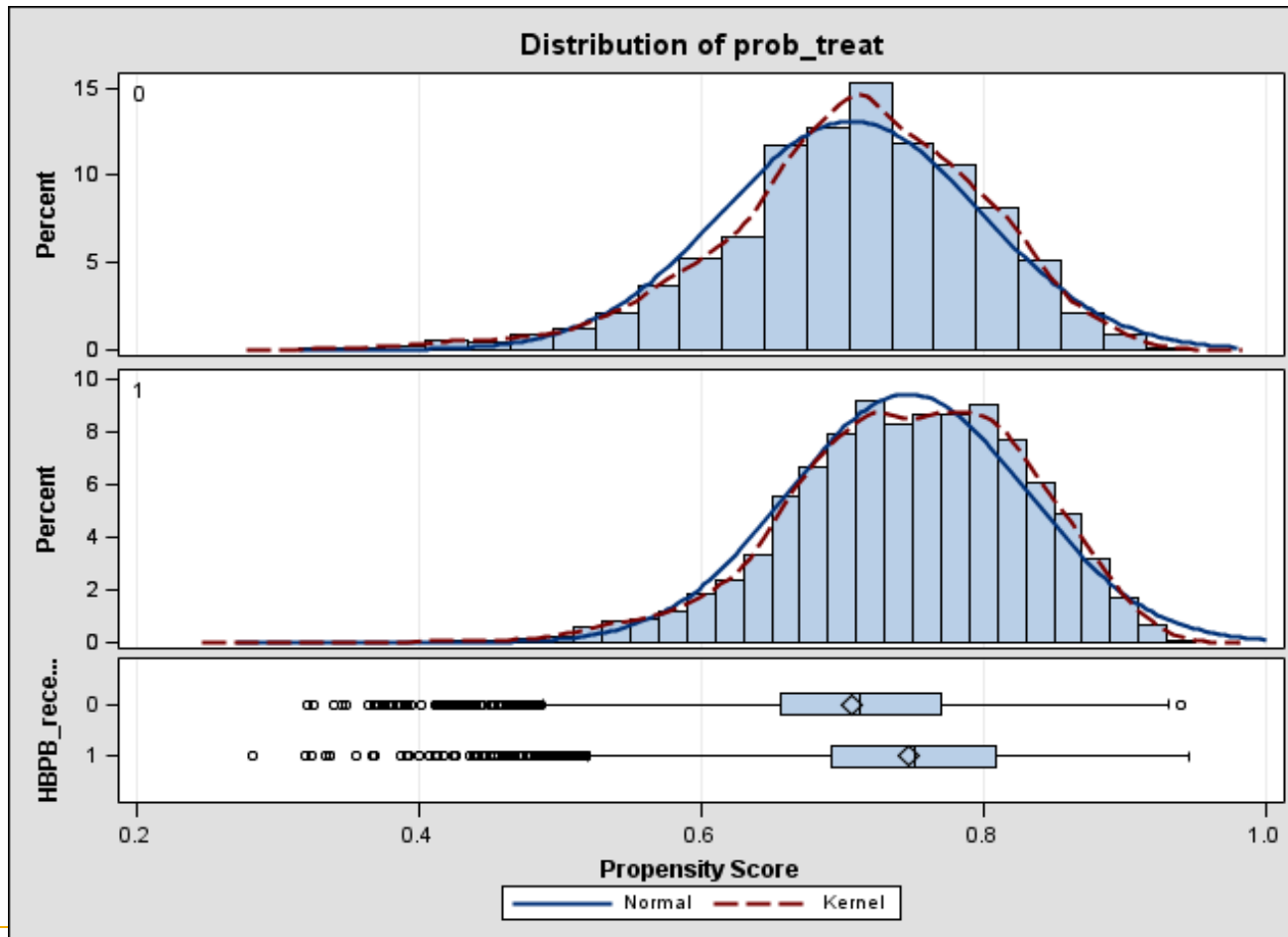


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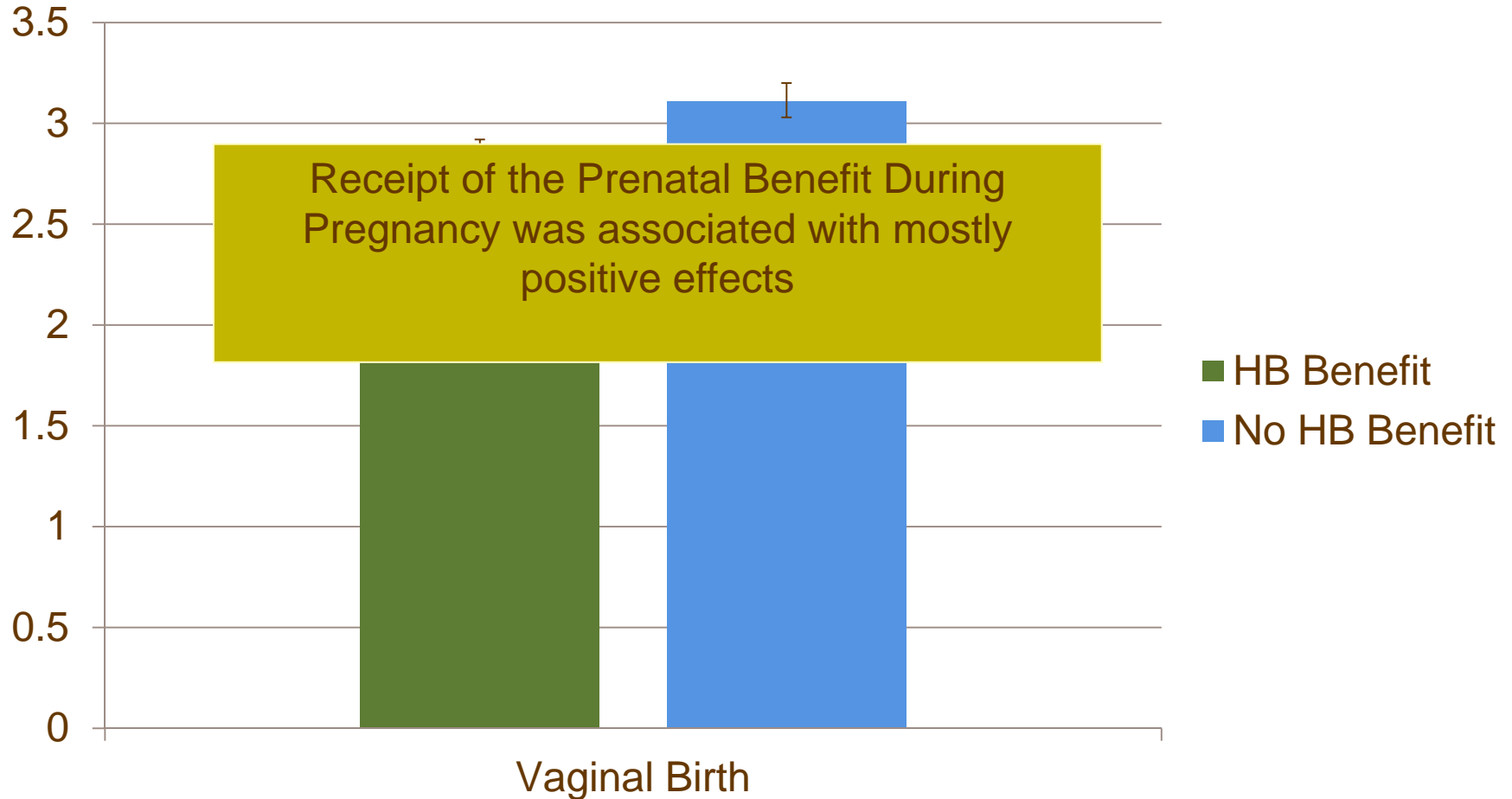


HEART & STROKE FOUNDATION

Figure 2: Distribution of Propensity Scores (HBPB IA Population)



Average Length of Birth Hospital Stay



Summary of findings

- Healthy Baby Prenatal Benefit associated with:
 - reduction in low birth weight births
 - Reduction in small for gestational age births
 - Reduction in preterm births
 - Increase in large for gestational age births
 - Increase in breastfeeding initiation
 - Decrease in birth hospitalization LOS
 - Increase in 1- and 2-year immunization rates



Discussion & Future Research

- Strong comparison group
 - sensitivity test demonstrates robust to confounding on 4 outcomes
- HBPB provides \$81 per month – no strings attached
 - Linking to physician
 - Linking to public health
 - Information with cheque
- Future research
 - Mechanisms for outcomes?
 - Closing the gap?
 - Cost-benefit?



~ ~ ~ Save the Date ~ ~ ~

Conference: **'Pathways to Health Equity: Levelling the Playing Field'**

when: **May 30 – June 1, 2016**

where: Fort Garry Hotel, Winnipeg

–International knowledge exchange and dissemination event, building on the theme of 'from research to policy'

–Themes include: child health; social determinants of health & equity; economics & equity; measuring health equity; indigenous health; health interventions & equity; international health equity; ethics and equity; gender equity

•For more information, visit our website at:

–http://www.umanitoba.ca/faculties/health_sciences/medicine/units/community_health_sciences/departamental_units/mchp/paths_conference.html

“The results and conclusions are those of the authors and no official endorsement by Manitoba Health, Healthy Living and Seniors is intended or should be inferred.”

Thank You / Questions

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