

# Integrating Early Childhood Development Programs into the Health Sector - Evidence from Sao Paulo's Western Region

Alexandra Brentani<sup>1</sup>, Sandra Grisi<sup>1</sup>, Susan Chang-Lopez<sup>2</sup>, Christine Powell<sup>2</sup>, Günther Fink<sup>3</sup>

<sup>1</sup>Faculdade de Medicina da Universidade de São Paulo (FMUSP), Brazil, <sup>2</sup> University of West Indies (TMRI), Jamaica, <sup>3</sup>Swiss TPH

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# Background

- A estimated 250 million children in low- and middle income countries currently do not reach their developmental potential
- Delays in early childhood development have been shown to be highly predictive of later life outcomes, including height, schooling, income and health
- Early childhood care and education have been increasingly recognized as the most effective tools to ensure children get the care and learning opportunities they need (SDG 4.2)

# Background

- While center-based ECCE is generally used for children ages 3 and older, home-visiting programs are currently considered most effective for improving ECD under age 3
- Home visiting programs typically contain both a health and a nutritional component so that governments operate these programs through their health sectors
- How to best integrate these programs into existing health systems is not obvious → we set up an RCT to investigate this empirically in the urban setting of Sao Paulo, Brazil

# Study Setting

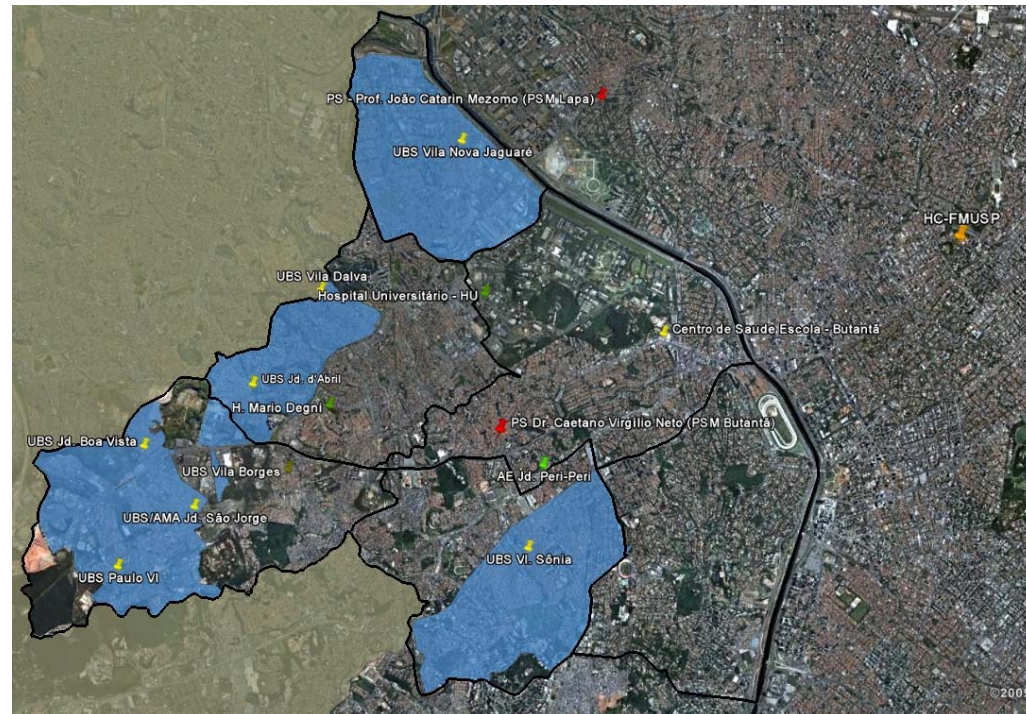
**Study Population: 377,000**

Current project infrastructure:

1 hospital

7 primary health care units

31 Family Health Teams (goal 51)





# The Butantã-Jaguarié Region



# The Experiment

- 800 randomly selected mother-child dyads enrolled in intervention study
- Randomly assigned to one of 3 arms:
  1. Control
  2. Home visits through Child Development Agents (CDAs)
  3. Home visits through community health workers

**Which platform is most effective and which one is most cost-effective?**

# Results – Per Protocol Analysis

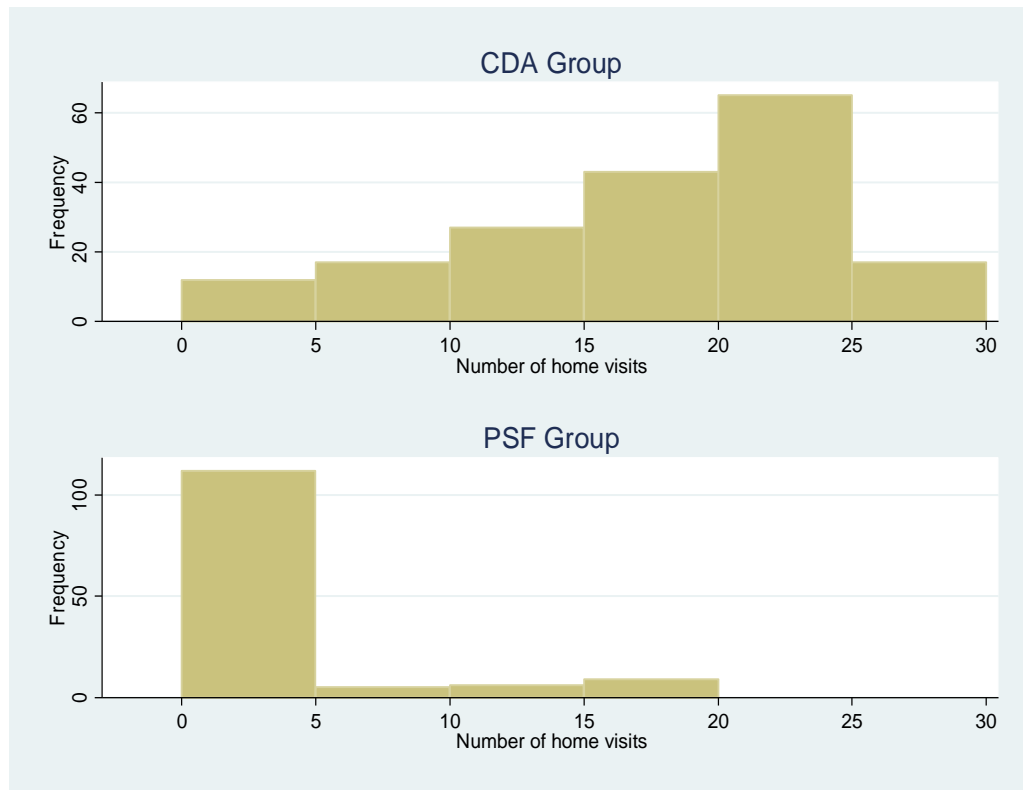
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	<b>PRIDI z-score</b>	<b>CREDI cognition z-score</b>	<b>Height for age z-score</b>	<b>Weight for age z-score</b>
Home visiting program	0.249* (0.08)	0.300** (0.01)	0.254* (0.08)	0.236* (0.06)
Observations	447	507	481	479
R-squared	0.165	0.108	0.255	0.214

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Notes: All estimates are z-score differences, and include full set of baseline controls. P-values in parentheses.

# Compliance with Home Visitation Schedules



**Mean number of visits: 16.9**

**Mean number of visits: 2.1**



# Results Summary

- Home visiting programs can lead to substantial improvements in early childhood development in urban middle-income settings
- Different from previous studies in Bangladesh and Pakistan we found that integrating these services into existing CHW programs was not possible in Brazil
- New cadre of health workers will likely be needed for delivering ECD services in middle and high income settings

# Thank You!

