



UNIVERSITY OF SOUTH CAROLINA



Southern Institute
ON CHILDREN & FAMILIES
Policy and Research Center

Evaluation of a Program to Prevent Prematurity and Low Birth-weight Deliveries In A Low Income Population

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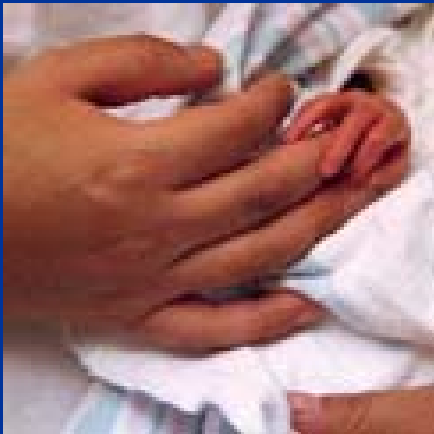


Institute *for* Partnerships to
Eliminate Health Disparities



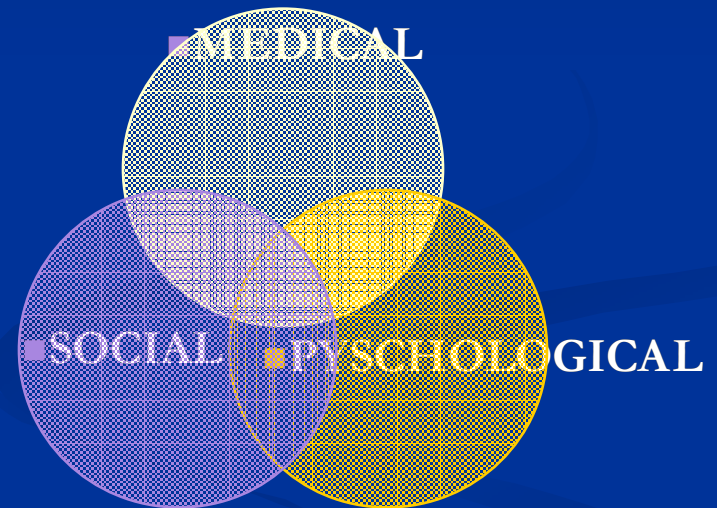
Prematurity Prevention Partnership (PPP)

- Seeks reductions in premature and low birth weight births
- Extends and focuses Palmetto Healthy Start (PHS) interventions
- Takes an holistic approach



Holistic Approach

- Addresses multiple risk factors beyond just physical risks



PHS/PPP Goals

- Reduce incidence of prematurity in Richland County Palmetto Healthy Start program participants
- Partner with the March of Dimes, key providers and community leaders
- Help women identify and address risk factors with effective interventions

Birth Outcomes

- Prematurity (preterm) <37 completed weeks gestation
- Low birth weight <2500 g / 5.8 lbs



PHS/PPP SERVICE PLAN

- Each client assessed for risks
- Those with modifiable risks for prematurity (74% of those screened) receive individualized service plans
- Plans implemented through contacts with PHS Social Workers and Resource Mothers

Resource Mothers



Evaluation Goals

Did prematurity and low birth weight ratios reduce over time and as compared to state and county levels?



Methods

- PHS collected birth outcomes
- Hospital delivery records
- State and county vital records
- X^2 and t-tests to detect significance of differences over time and as compared to state and county outcomes

Sample

- 1326 PHS/PPP participants (June 2003-August 2006)
- Average age 22.5
- 85% African American
- 52% had not completed high school
- First pregnancy for 51%
- 74% had not had a previous live birth

Successes

- Incorporated prematurity prevention strategy into an established Healthy Start Program and institutionalized into Palmetto Healthy Start.
- Promoted increasing awareness of risk factors for prematurity and interventions to prevent prematurity among providers and consumers.
- PHS/PPP worked with USC evaluators to establish a sound evaluation program plan that incorporated process, impact and outcome evaluation.

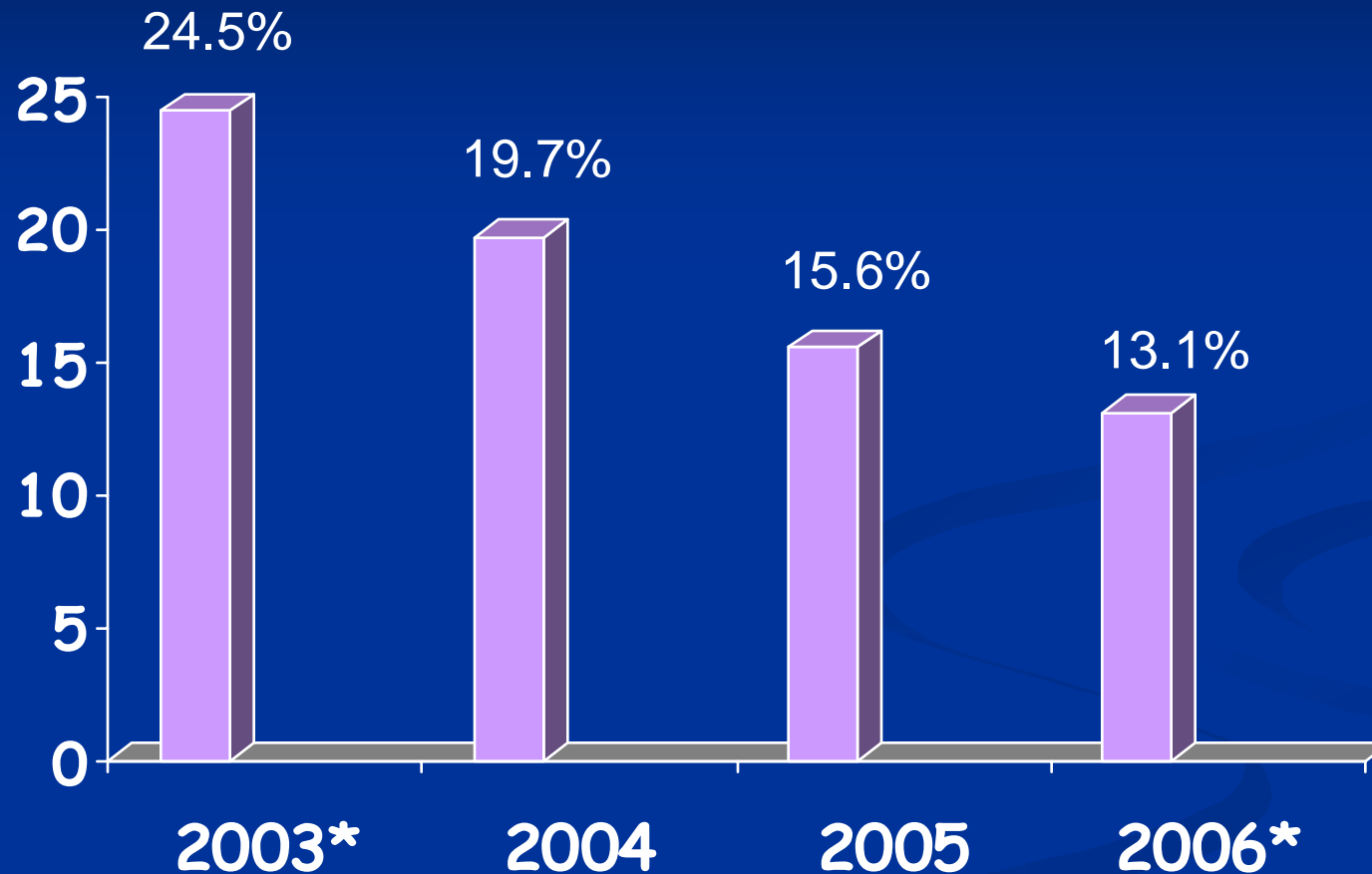
Outcomes

June 2003 through August 2006, the low birth weight ratio and prematurity ratio have dramatically declined:

- 65% decline for low birth weight
- 47% decline for prematurity

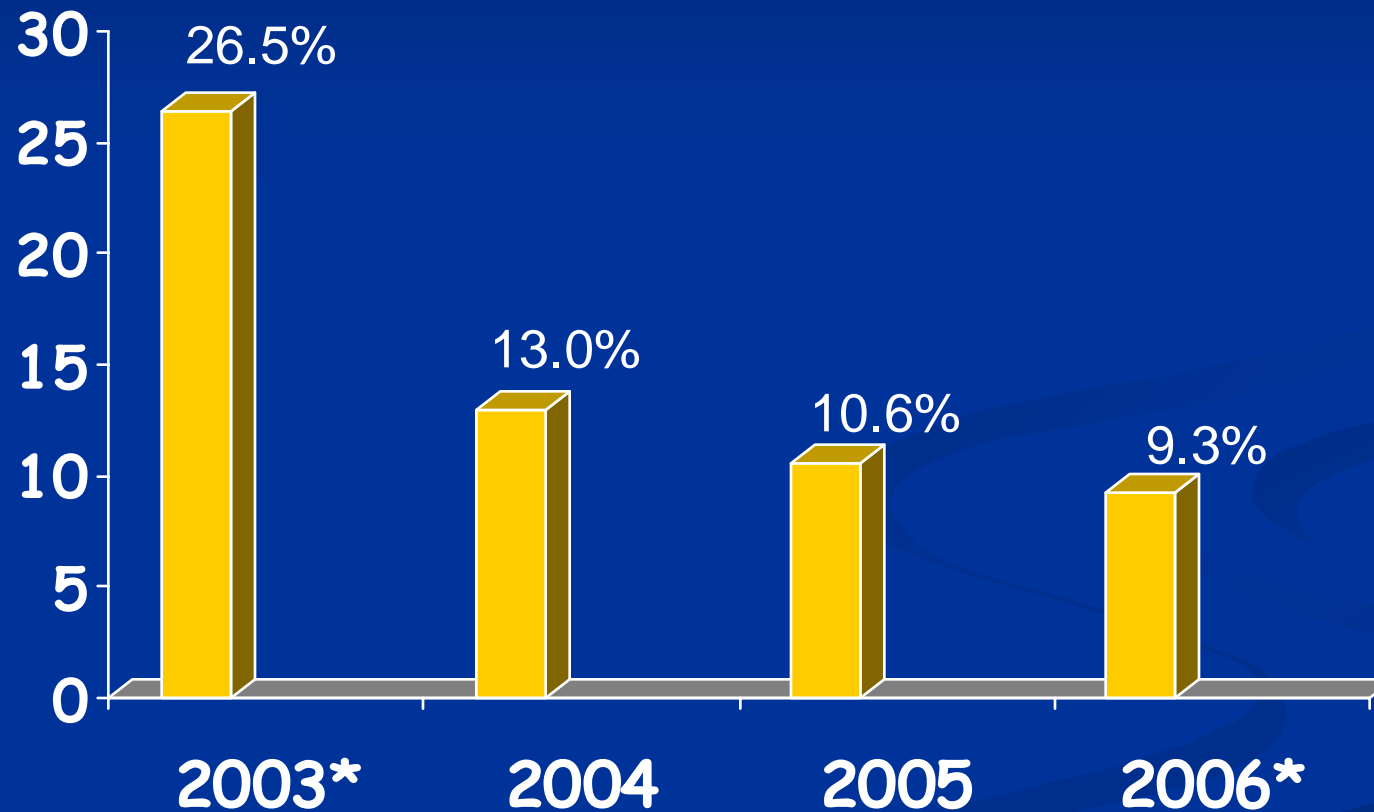


Prematurity Ratio Over Time for PHS/PPP Participants



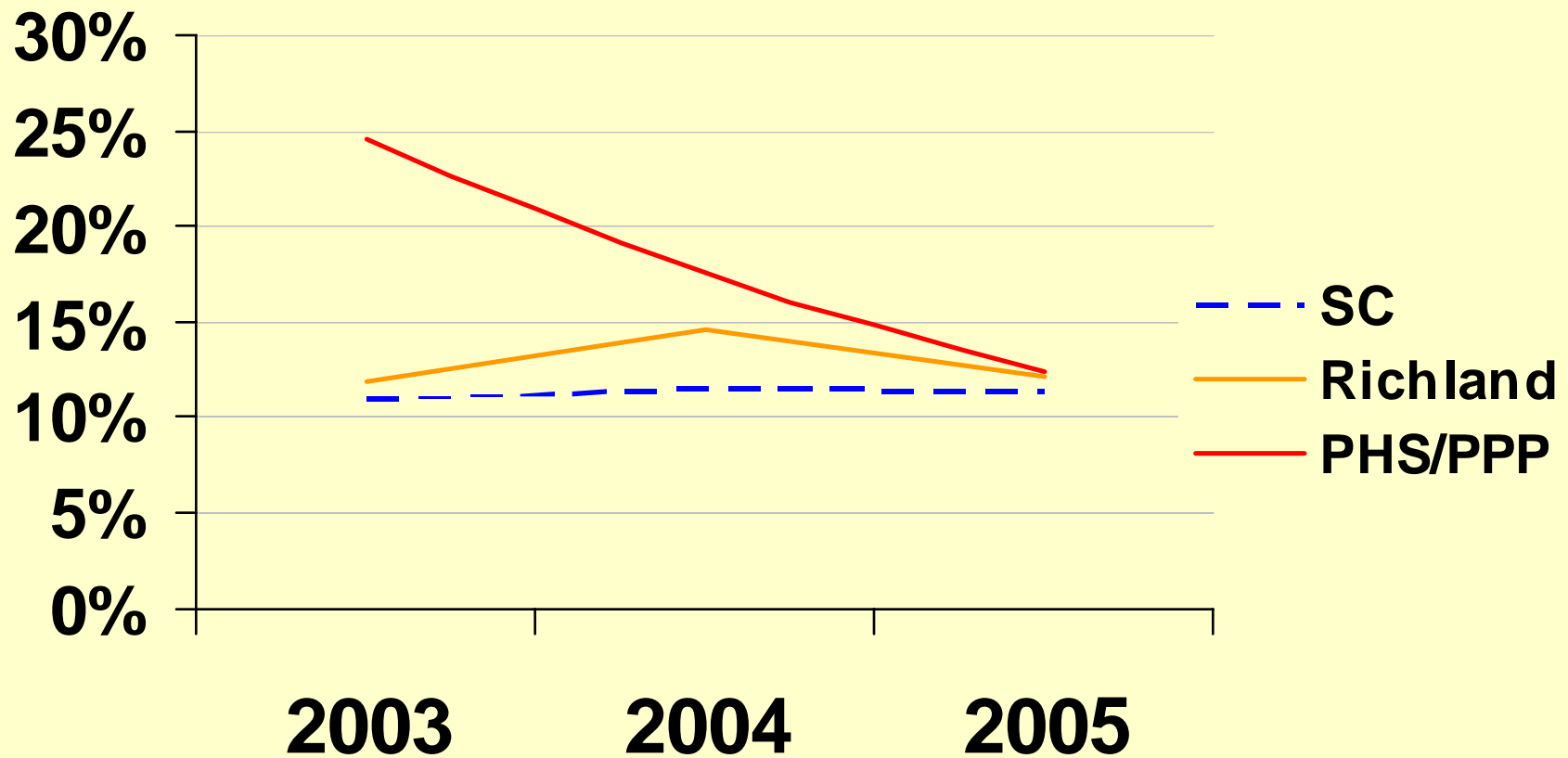
* Partial year

Low Birth Weight Over Time for PHS/PPP Participants



* Partial year

Comparison of African-American Prematurity Ratios Across Time



Extreme Prematurity

- Less than 32 weeks completed gestation.
- Likely to have serious health and developmental challenges
- 77% reduction from 2003 to 2006 for PHS/PPP clients



Comparisons of African American Extreme Prematurity Ratio over Time

Year	PHS/PPP	Richland County	SC
2003*	12.2%	3.3%	2.1%
2004	4.8%	3.6%	2.1%
2005	3.2%	3.2%	2.0%
2006**	2.8%		

* Partial year June 2003-December 2003

** Partial year Jan 2006-August 2006

Very Low Birth Weight

- Less than 1500 grams
- Likely to have serious health and developmental challenges
- 87% decrease in VLBW from 2003 to 2005 for PHS/PPP clients



Comparisons of African American Very Low Birth Weight Over Time

Year	PHS/PPP	Richland	SC
2003*	10.20%*	3.40%	3.48%
2004	3.11%	3.56%	3.58%
2005	1.28%	2.61%	3.44%

*Partial year June 2003-December 2003

Success Story

- Debra's fourth pregnancy; never carried her pregnancies long enough to deliver a live baby.
- At 31 weeks, her Resource Mother observed symptoms of preterm labor.
- Debra was doing heavy lifting as part of her job. Resource Mother obtained a "light duty" prescription. Debra was given a less strenuous workload.
- At 35 weeks, Debra delivered a small but healthy baby.

Acknowledgments

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