

CenteringPregnancy: A successful model for group prenatal care

SC Birth Outcomes Initiative
June 24, 2015

Ms. BZ Giese, BSN, RN
Director, SC Birth Outcomes
Initiative

DISCLAIMER

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This webinar is being recorded.

OBJECTIVES

- Describe the key differences and similarities between CenteringPregnancy and traditional, individual prenatal care
- Identify the clinical evidence of the benefits of CenteringPregnancy
- Discuss the non-clinical benefits of CenteringPregnancy
- Discuss the process and impact of the statewide scale-up of CenteringPregnancy in South Carolina

AGENDA

- I. **Key differences between CenteringPregnancy and individual prenatal care**
Mary Alice Grady, MS, CNM
- II. **Clinical evidence of the benefits of CenteringPregnancy**
Amy Picklesimer, MD, MSPH
- III. **Non-clinical benefits of CenteringPregnancy**
Sarah Covington-Kolb, MSW, MPH
- IV. **Process and impact of the statewide scale-up of CenteringPregnancy**
Kristin Van De Griend, PhDc, MPH
- V. **Q & A**
- VI. **Survey**



Mary Alice Grady, MS, CNM
Consultant
Centering Healthcare Institute

Centering Pregnancy®

group prenatal care

Mary Alice Grady, MSN, CNM
Centering Healthcare Institute Consultant

Centering®

Centering Components of Care



HEALTH ASSESSMENT



INTERACTIVE LEARNING



COMMUNITY BUILDING

CenteringPregnancy: Design

Initial intake as usual:

History

Physical

Lab work

8 -12 women with similar due dates in the group



Four sessions every 4 weeks	16, 20, 24, 28 weeks
Six sessions every 2 weeks	30, 32, 34, 36, 38, 40 weeks
Reunion	1-2 months postpartum

Prenatal Care in a Group

30-40 minutes

Self assessment and individual assessments with the provider in the group space

60-75 minutes

“Circle-up” for facilitated discussion time

Women bring most questions and concerns to group discussion

Interactive learning

Health assessment occurs within the group space



Privacy is protected

Care is normalized

Common concerns discussed in group

Brief Provider Assessment

Medical Care/ Billable Visit

Women active in self assessment



Blood Pressure

Weight

Facilitated Group Discussion Not a Class



Circle



Interactive

Fun

Each session has an overall plan

Mom's Notebooks

Facilitator Guide



Stress management

Birth preparation

Nutrition and infant feeding

Infant development

Family Planning

“I’m learning that it doesn’t matter what we don’t talk about because we’re talking about what matters to the group.”

Centering®

Support



Common life experiences
Community building
Problem solving skills

Trust
Continuity of Care

“ . . . facts do not change feelings, and feelings are what influence behavior. The accuracy and clarity with which we absorb information has little effect on us: it is how we *feel* about the information that determines whether or not we will use it!”

V. Keane, Bulletin of ACNM, May 1967, pl. 41



Centering®

Building communities...one group at a time

www.centeringhealthcare.org

Centering®

A vertical teal bar on the right side of the slide contains the word "Centering" in white, oriented vertically. Below the text are several decorative, dark teal swirls that curve upwards and to the right.



Amy H. Picklesimer, MD, MSPH

Maternal Fetal Medicine

Department of Obstetrics and Gynecology

Greenville Health System

Clinical Benefits of CenteringPregnancy: What is the Evidence?

Amy H. Picklesimer, MD, MSPH

Maternal Fetal Medicine

Department of Obstetrics and Gynecology

Greenville Health System



GREENVILLE
HEALTH SYSTEM



Group Prenatal Care and Perinatal Outcomes

A Randomized Controlled Trial

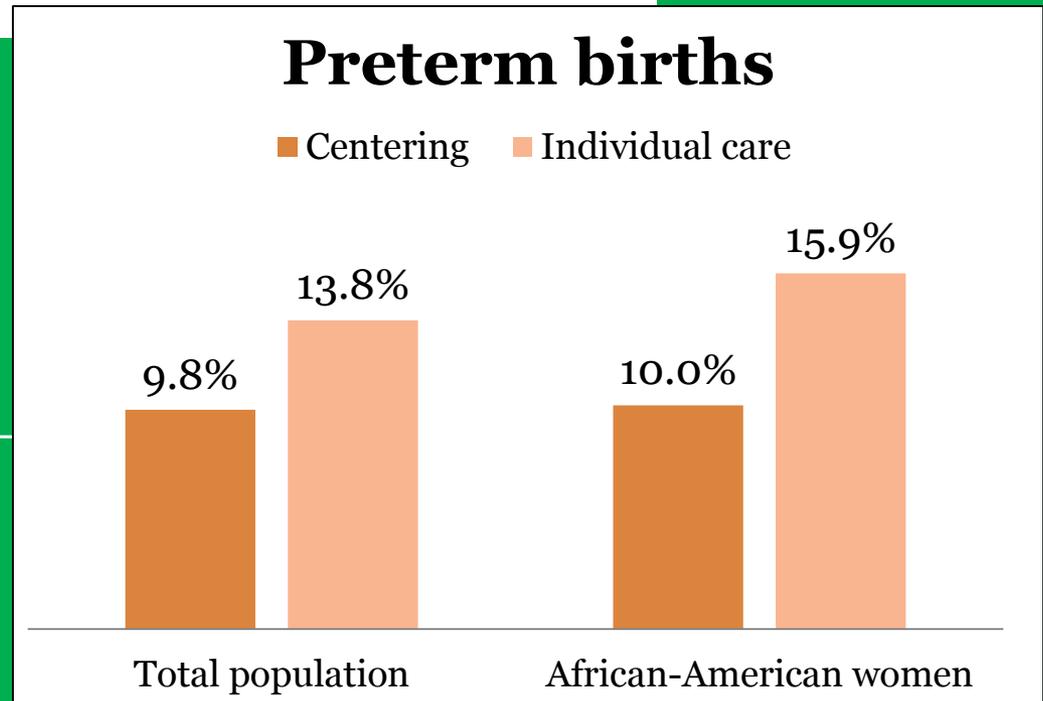
Jeannette R. Ickovics, PhD, Trace S. Kershaw, PhD, Claire Westdahl, CNM, MPH, Urania Magriples, MD, Zohar Massey, Heather Reynolds, CNM, MSN, and Sharon Schindler Rising, CNM, MSN

OR for total population –
0.67 (0.44-0.98)
p<.045

OR for African-American women –
0.59 (0.38-0.92)
p=.02

Preterm births

■ Centering ■ Individual care



OBSTETRICS

The effect of CenteringPregnancy group prenatal care on preterm birth in a low-income population

Amy H. Picklesimer, MD, MSPH; Deborah Billings, PhD; Nathan Hale, PhD;
Dawn Blackhurst, DrPH; Sarah Covington-Kolb, MSPH, MSW



OBJECTIVE: The purpose of this study was to evaluate the impact of group prenatal care on rates of preterm birth.

STUDY DESIGN: We conducted a retrospective cohort study of 316 women in group prenatal care that was compared with 3767 women in traditional prenatal care. Women self-selected participation in group care.

RESULTS: Risk factors for preterm birth were similar for group prenatal care vs traditional prenatal care: smoking (16.9% vs 20%; $P = .17$),

12.7%; $P = .01$), as was delivery at <32 weeks' gestation (1.3% vs 3.1%; $P = .03$). Adjusted odds ratio for preterm birth for participants in group care was 0.53 (95% confidence interval, 0.34–0.81). The racial disparity in preterm birth for black women, relative to white and Hispanic women, was diminished for the women in group care.

CONCLUSION: Among low-risk women, participation in group care improves the rate of preterm birth compared with traditional care, especially among black women. Randomized studies are needed to elimi-

Adjusted Odds Ratio 0.53
(95% CI 0.34 – 0.81)
for preterm birth

From the Departments of Obstetrics and Gynecology (Dr Picklesimer and Ms Covington-Kolb) and Quality Management (Dr Blackhurst), Greenville Hospital System University Medical Center, Greenville, and the Department of Health Promotion, Education, and Behavior (Dr Billings) and the Center for Health Services and Policy Research (Dr Hale), Arnold School of Public Health, University of South Carolina, Columbia, SC.

parenteral nutrition. Other complications of prematurity, such as cerebral palsy and retinopathy, can lead to life-long handicap.^{1,2} The annual cost of treatment for these and other complications that arise from preterm birth has been estimated at >26 billion dollars in the United States alone.³

Risk factors for spontaneous preterm delivery are well described and include a history of previous preterm birth, multiple gestation, vaginal bleeding, low prepregnancy weight, systemic and genital tract in-

fection, and chronic hypertension among non-Hispanic white women and 13.0% of Hispanic women.⁸ The Greenville Hospital System Obstetrics Center, located in Greenville, SC, provides prenatal care primarily to medically underserved women. Given the vulnerability of the population that is served, historic rates of premature birth among women in this practice (16.4%) are markedly higher than both state and national averages.

In an effort to address this long-standing issue, the Greenville Hospital System Ob-

OBSTETRICS

Group prenatal care: model fidelity and outcomes

Gina Novick, PhD, CNM; Allecia E. Reid, PhD; Jessica Lewis, CMFT; Trace S. Kershaw, PhD; Sharon Schindler Rising, CNM, MSN; Jeannette R. Ickovics, PhD

OBJECTIVE: CenteringPregnancy group prenatal care has been demonstrated to improve pregnancy outcomes. However, there is likely variation in how the model is implemented in clinical practice, which may be associated with efficacy, and therefore variation, in outcomes. We examined the association of fidelity to process and content of the CenteringPregnancy group prenatal care model with outcomes previously shown to be affected in a clinical trial: preterm birth, adequacy of prenatal care, and breast-feeding initiation.

STUDY DESIGN: Participants were 519 women who received CenteringPregnancy group prenatal care. *Process fidelity* reflected how facilitative leaders were and how involved participants were in each session. *Content fidelity* reflected whether recommended content was discussed in each session. Fidelity was rated at each session by a trained researcher. Preterm birth and adequacy of care were abstracted from medical records. Participants self-reported breast-feeding initiation at 6 months postpartum.

RESULTS: Controlling for important clinical predictors, greater process fidelity was associated with significantly lower odds of both preterm birth ($B = -0.43$, Wald $\chi^2 = 8.65$, $P = .001$) and intensive utilization of care ($B = -0.29$, Wald $\chi^2 = 3.91$, $P = .05$). Greater content fidelity was associated with lower odds of intensive utilization of care ($B = -0.03$, Wald $\chi^2 = 9.31$, $P = .001$).

CONCLUSION: Maintaining fidelity to facilitative group processes in CenteringPregnancy was associated with significant reductions in preterm birth and intensive utilization of care. Content fidelity also was associated with reductions in intensive utilization of care. Clinicians learning to facilitate group care should receive training in facilitative leadership, emphasizing atmosphere can play

Key words: Centering group prenatal care,



NIH Public Access

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Psychol Health. 2011 February ; 26(2): 235–250. doi:10.1080/08870446.2011.531577.

Effects of group prenatal care on psychosocial risk in pregnancy: Results from a randomised controlled trial

Jeannette R. Ickovics^{a,*}, Elizabeth Reed^a, Urania Magriples^b, Claire Westdahl^c, Sharon Schindler Rising^d, and Trace S. Kershaw^a

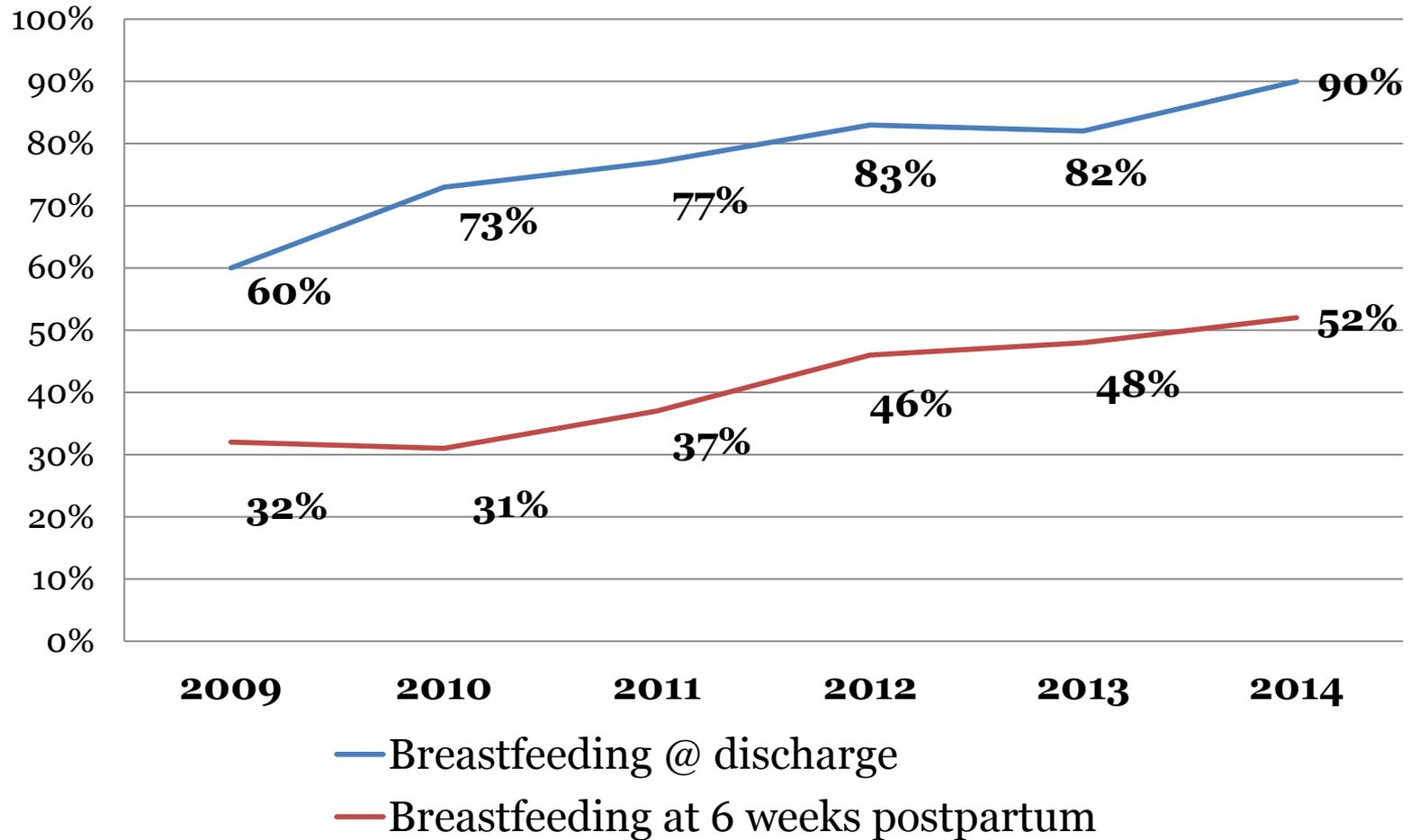
^aYale School of Public Health and the Yale Center for Interdisciplinary Research on AIDS, 60 College Street, New Haven, CT 06520-8034, USA

^bDepartment of Obstetrics and Gynecology, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06520, USA

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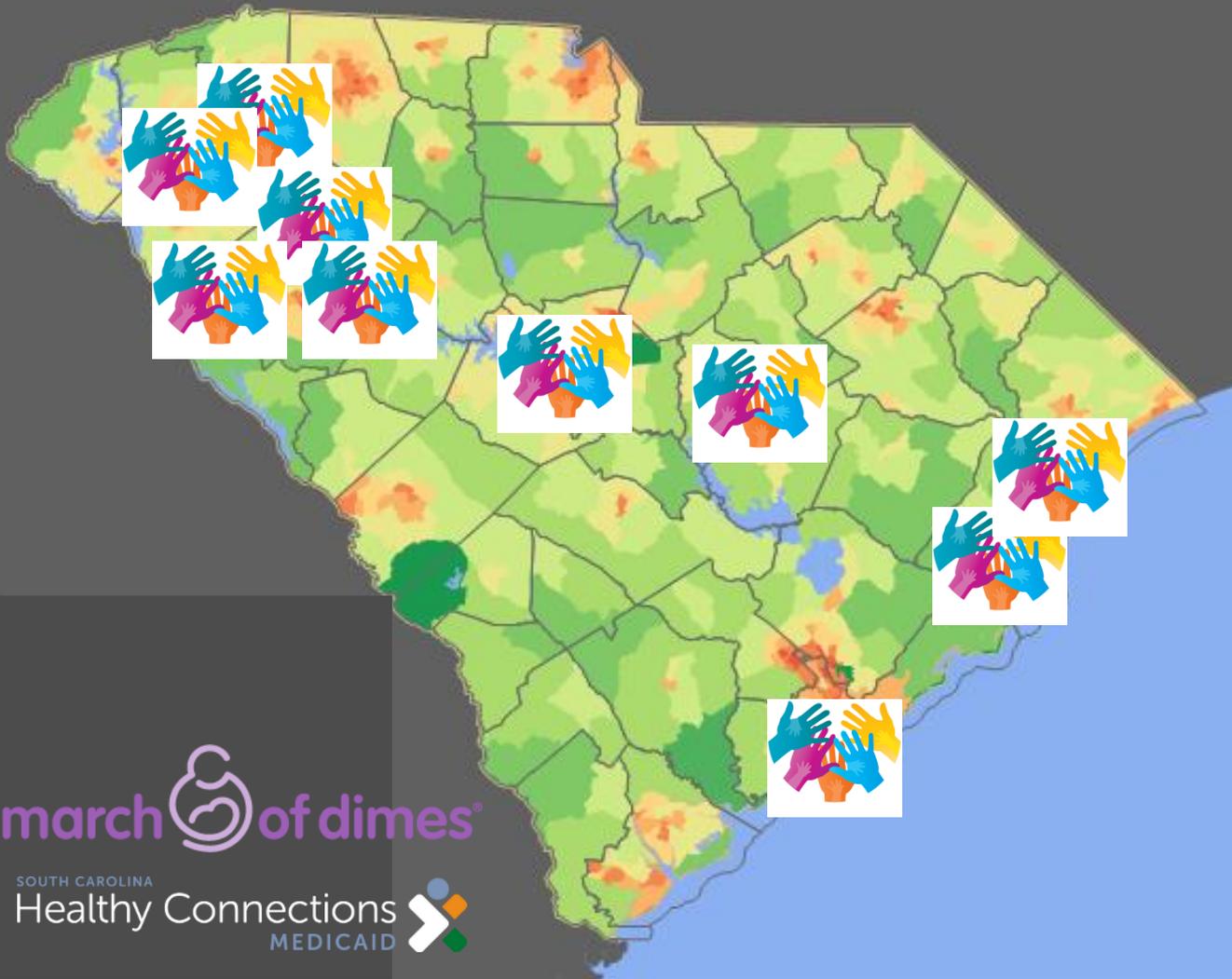
Breastfeeding rates



Cost Savings

- 22 Needed to treat in Centering to avoid one preterm birth (\$14,110)
- 30 Needed to treat in Centering to prevent one NICU admission (\$29,287)

Picklesimer. 2015. Clinical Obstetrics and Gynecology. 58 (2): 320-433



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Study population*

CenteringPregnancy (CP)

- From 7 sites
- Deliveries Aug. 2013 – Sept. 2014
- N = 674

Individual Care (IPNC)

- Same 7 sites
- Same months
- N=9,886

*All women are Medicaid eligible

Study Design

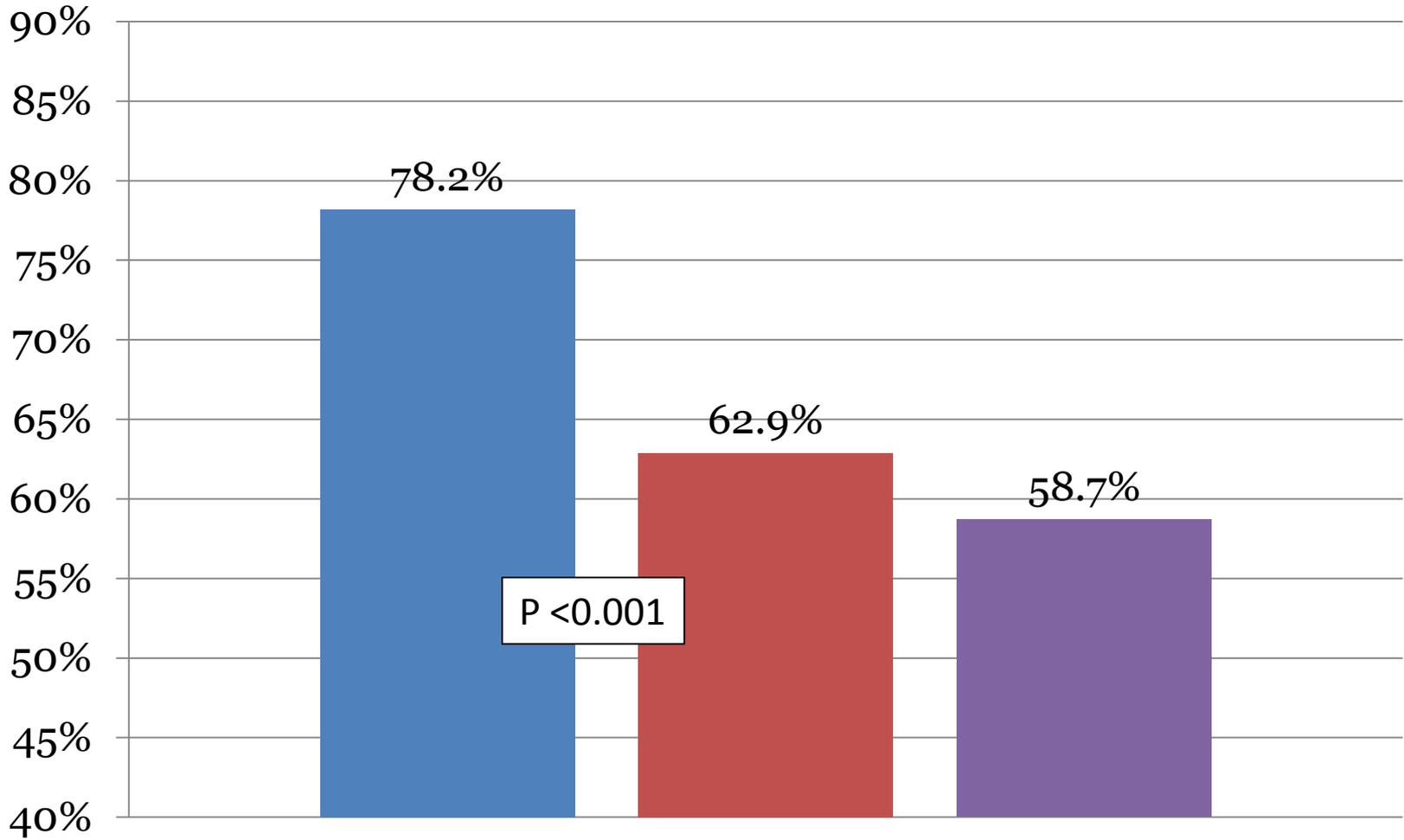
- Retrospective cohort using birth certificate data
- Exclusions:
 - Multiple gestation
 - Pre-gestational diabetes
 - BMI > 45 kg/m²
 - Entered prenatal care > 4 months
- Final sample for the analysis:
 - CP: N = 604
 - Individual care: N = 6807

Characteristics		CP N=604	IPNC N=6,807	P- value
Age (\pm SD)		24.5 (5.3)	25.0 (5.2)	0.03
Married		12%	17%	0.02
Education	<HS	23%	24%	0.005
	HS/GED	35%	34%	
	>HS	42%	41%	
Race	White	45%	48%	<0.001
	Black	40%	46%	
	Hispanic	13%	5%	
	Other	1%	1%	

Characteristics		CP N=604	IPNC N=6,807	P- value
Nulliparity		60%	39%	<0.001
Previous PTB		2%	5%	0.002
STI in current pregnancy		12%	10%	0.08
Tobacco use		12%	19%	<0.001
Entry to PNC <2 mos		53%	43%	<0.001
Adequacy	Inadequate	1%	2%	<0.001
	Intermediate	2%	8%	
	Adequate	23%	32%	
	Adequate +	74%	58%	

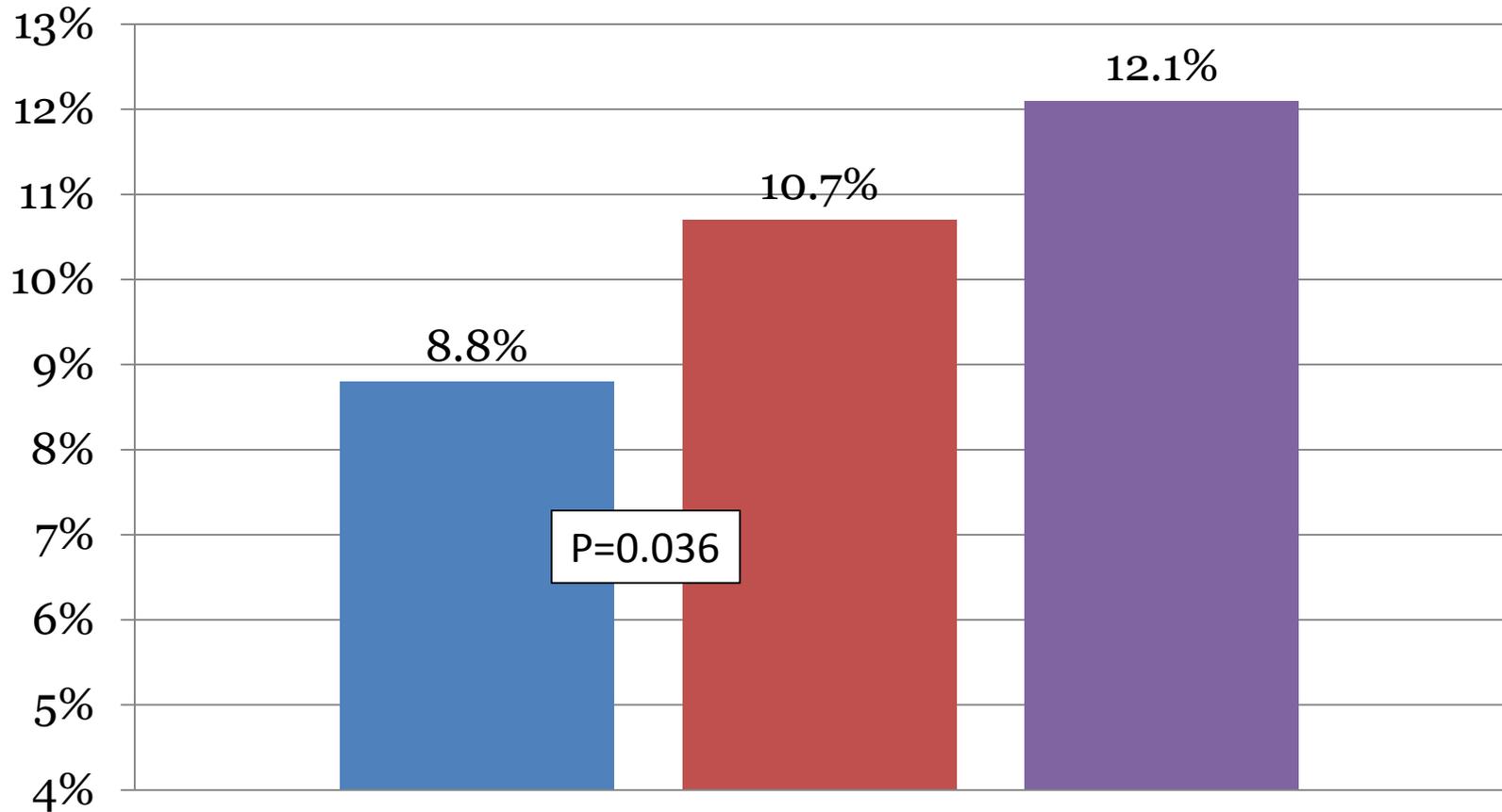
Breastfeeding

■ CP ■ IPNC ■ SC Medicaid



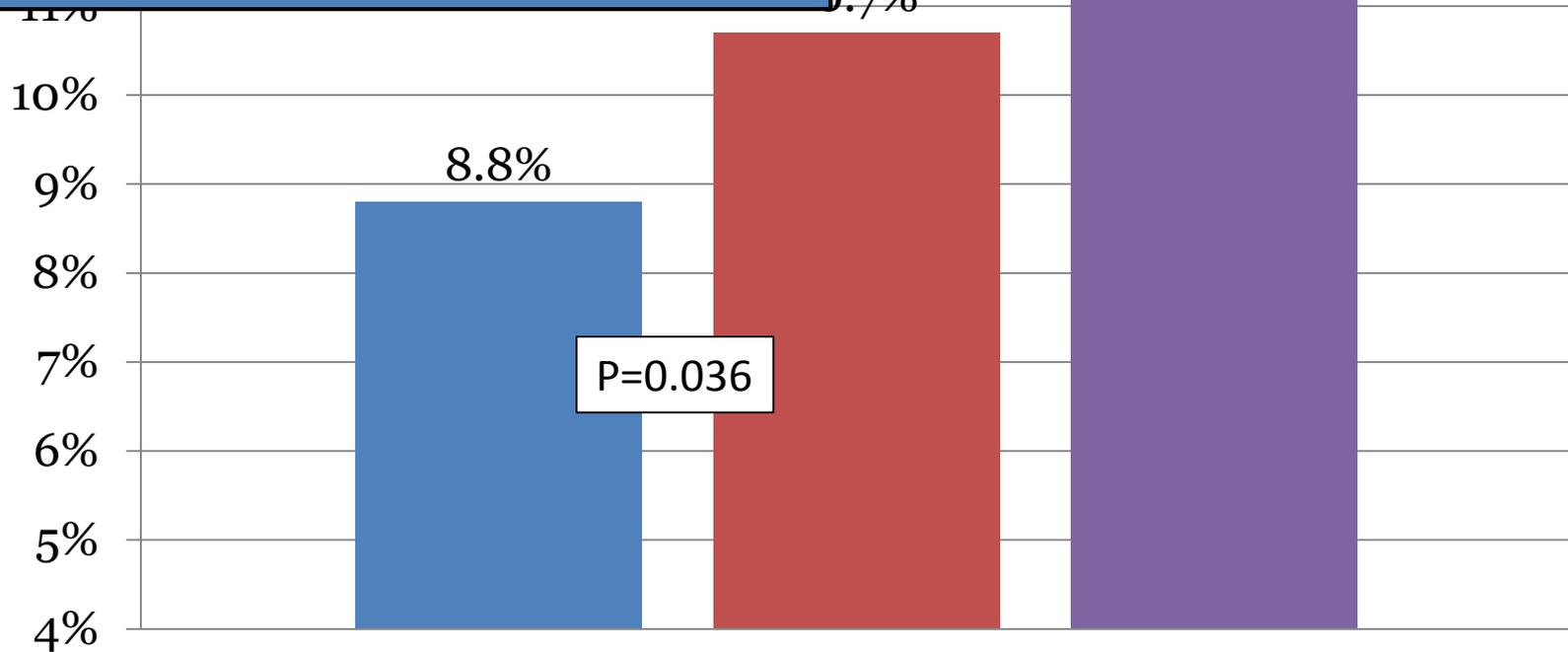
Preterm births < 37 weeks

■ CP ■ IPNC ■ SC Medicaid

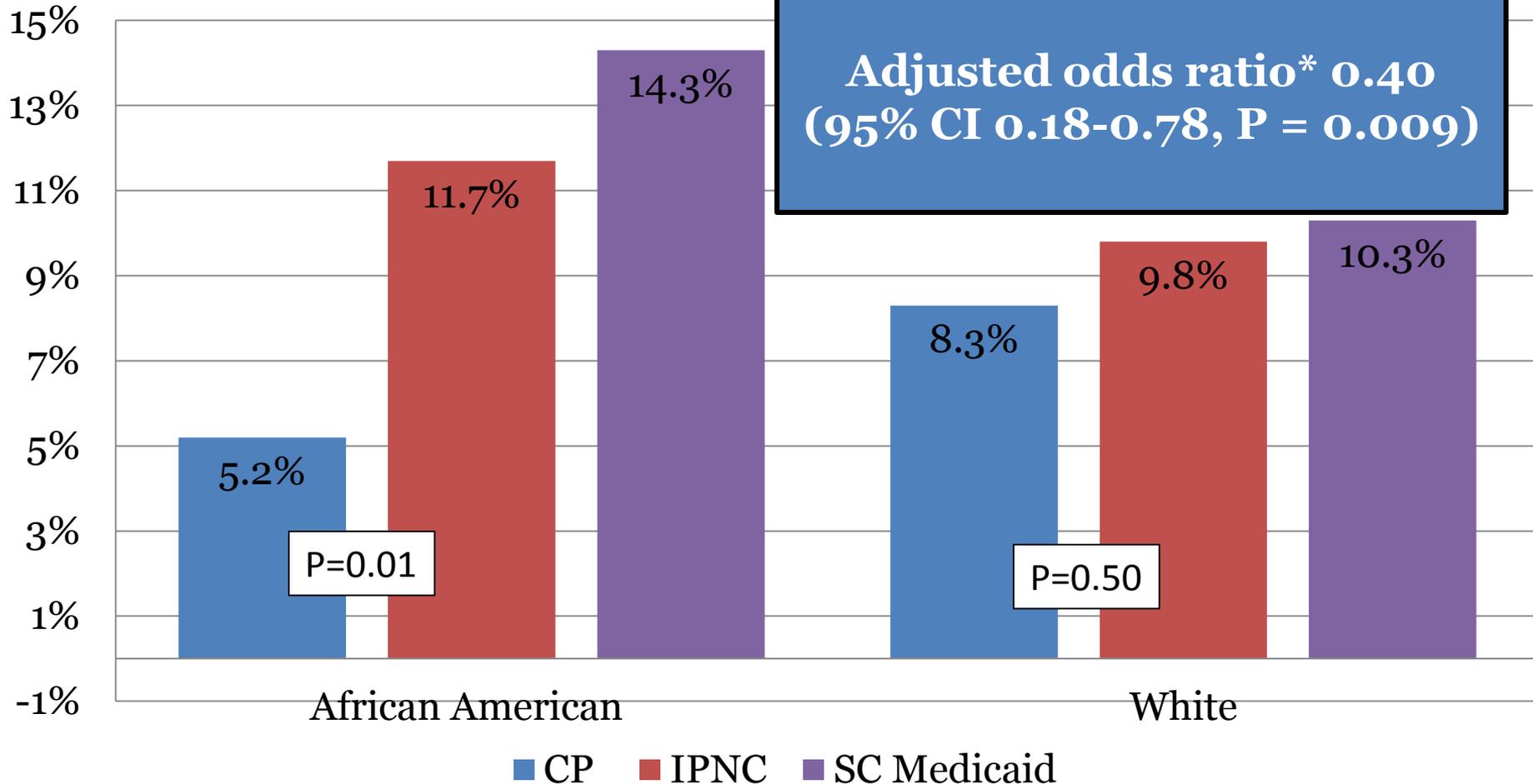


**Adjusted odds ratio* 0.66
(95% CI 0.45-0.97, P = 0.03)**

* adjusted for age, education, race, parity, Kotelchuck index, time of entering prenatal care, and previous preterm birth history.

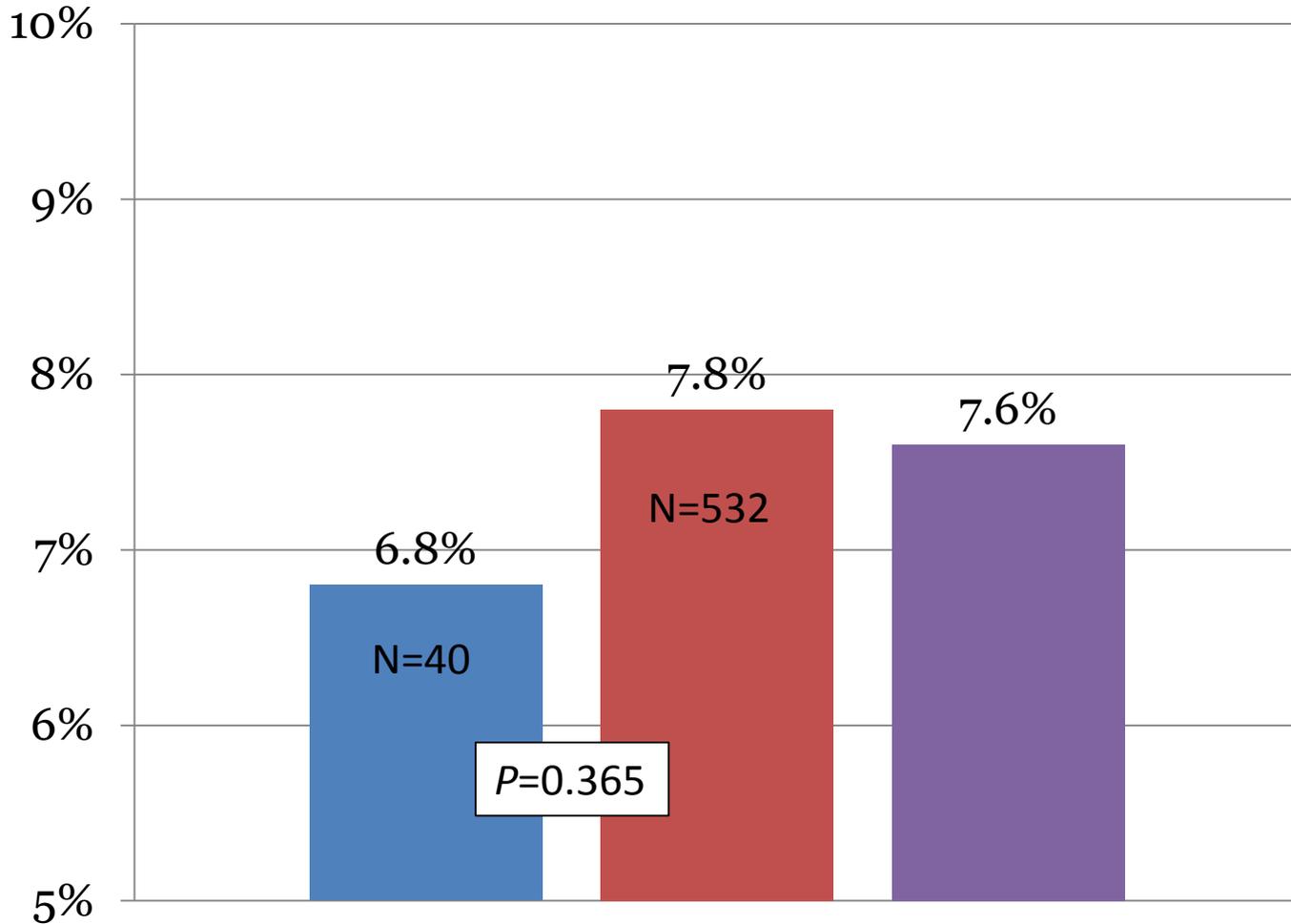


Preterm birth by race



NICU Admission

■ CP ■ IPNC ■ SC Medicaid





Sarah Covington-Kolb, MSW, MSPH
CenteringPregnancy South Carolina Coordinator
Greenville Health System



Other benefits of CenteringPregnancy

Sarah Covington-Kolb, MSW, MSPH
CenteringPregnancy South Carolina
Coordinator

CenteringPregnancy

Why do it?



- Patient satisfaction
 - More time with provider
 - Address more of their concerns

“What I like best about Centering is the people in the group. Make you feel like a family and I've learned a lot.”



“We all kind of bond over our common symptoms and problems. It's kind of funny. We spend a lot of time laughing together.”



“I'm able to voice questions and get multiple opinions and answers.”



“We have fun and if there are any questions or concerns we can talk freely and not be embarrassed”

CenteringPregnancy

Why do it?



- Patient satisfaction
 - No waiting room
 - Effective use of time

“It is personal. I know the people here and I am not just another patient.”



“I don't have to wait in the waiting area for a long time and I can do some of my own prenatal care.”



CenteringPregnancy

Why do it?



- Patient satisfaction
 - “I didn’t feel alone”



CenteringPregnancy

Why do it?



- Provider satisfaction
 - More time with patients
 - Less repetition
 - Fun



CenteringPregnancy

Why do it?



- Provider satisfaction
 - Fulfilling career goals
 - Shared responsibility with the patient



CenteringPregnancy

Why do it?



- Benefits to the practice
 - More satisfied patients and providers
 - Frees exam rooms



CenteringPregnancy

Why do it?



- Benefits to the practice
 - Marketing

The Greenville News
greenvilleonline.com

Prenatal program improves outcome

Liv Osby, losby@gannett.com 6:44 a.m. EDT April 29, 2014

CenteringPregnancy is a model of care that provides enhanced education, support and health care for a group of women who are due to have babies at the same time



(Photo: Heidi Heilbrunn, Staff)

Jeannie Hammond thought she knew a lot about childbirth when she joined a new kind of prenatal program in Greenville — after all, she'd already had one baby.

But not too long into the six-month program, she realized she had a lot more to learn.

"It was really interesting," she said. "Like how they told you about the stages of labor."

Hammond, 24, was one of seven women who went through prenatal care in a group as part of a new program called CenteringPregnancy. And last week, the Piedmont woman and her 6-week-old baby, Rylee, joined the other women and their babies for a reunion.

the Sumter ITEM
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DON'T FORGET



Group doctor visits?

Some pregnant women say yes

BY JADE REYNOLDS
jreynold@heritem.com
803-774-1250

It's not the traditional approach, but it does have fans. For the last year, Sumter OB-GYN has been offering CenteringPregnancy.

"It's a model of care for low-risk patients that takes them out of the traditional setting of one-on-one with a physician behind a closed door and moves them to a group setting where they see each other every two-to-four weeks for two hours," said Tom Whitaker, practice manager. "It takes the mystery out of the process. It empowers the patient to be more involved in the pregnancy and provides a support system."

Group meetings start after the traditional visit around the 16-to-18-week mark. If you're a candidate and choose Centering, you'll meet with up to 11 other women due to deliver within a month of your date until about the 36-week mark, Whitaker said. Then you will return to the private setting until you deliver and return for a celebration after the babies are born.

When the women come in, they take and record their vitals, Whitaker said. Then they can enjoy refreshments and talk while each individual goes behind a partition for "tummy



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WEATHER, A8
NOT QUITE AS HOT
Expect mostly cloudy skies today and partly cloudy skies tonight
HIGH 86, LOW 63

DEATHS, A7
Charles H. Overton Jr.
Sidney E. Walton Jr.
Earlene H. Bennett



Centering pregnancy

New initiative works to provide comprehensive prenatal care to all expectant moms

Story By Angie Campbell
Photo by Cindy Hesse

Sometimes women have little-to-no family support when they discover they're pregnant. Some women who have had children can feel unaccommodated about proper prenatal care. Others have setting alone in waiting rooms for quick checkups with their doctors.

The Upstate is home to two centering sites approved by the Centering Health-care Institute that aim to resolve each of these problems and more. One centering program is held at Bagley Family Hospital and another at Greenville Health System OBGYN Clinic — but what does centering mean?

"It's a totally different way of doing prenatal care, and basically how," said Amy H. Picklesimer, medical director of the Obstetric Center at Greenville Health System. "Probably 800 women a year participate in our groups."

Instead of those women visiting a medical provider individually, groups of eight to 10 women attend sessions together, Picklesimer said.

"The three elements of the sessions are assessment — a physical assessment is done for each woman," she said. "There's education, so there's time to do teaching about childbirth preparation and getting ready to parent. Social support is the last big element of it. There's intentionally time for the women to develop a relationship and make friends as they have someone who can support them."

Each centering program consists of 30 two-hour visits scheduled over a six-month period, and groups are made up of women from various backgrounds, ages and child-bearing experiences.

Everyone receives prenatal care with in the group, Picklesimer said. Participants listen to their children's heartbeats, measure mothers' blood pressure and blood pressure and meet with qualified medical providers. Plus, there are activities throughout each visit, which help the group get to know each other and learn about pregnancy health and parenting.



Andrea Alexander listens to a pregnant woman's fears about her delivery during a group session at the Greenville Health System's Obstetrics Centering Program.

The program at the Greenville Health System OBGYN Clinic has been funded by the South Carolina March of Dimes since 2009, and five more locations across the state are testing its office centering program, Picklesimer added. "I feel there are a lot of things about prenatal care and the way it's being done that has a lot of gaps, and there are other ways we could be doing it better," she said. "Centering is a great chance to get to know your doctor or provider as well as yourself and the other women in your group."

Anyone interested in learning more about or joining centering programs can visit www.centeringhealthcare.org. For information about the program at the Greenville Health System OBGYN Center, call 864-655-8400 or visit www.greenville.org/centeringpregnancy-at-the-obstetric-center.php. For details about the program at Bagley Family Hospital, call 864-853-5006 or visit www.bagleyhospital.org.

42 Upstate Parent

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Better births, informed moms result from centering program

Tuesday, April 8, 2014



One of the first centering groups recently held a reunion to share their experiences and show off their new babies.

Traditionally, pregnant women have seen their doctor one-on-one.

SOUTH CAROLINA



MEDICINE

University of South Carolina School of Medicine

SUMMER 2014



CenteringPregnancy:
A group approach
to prenatal care



CenteringPregnancy

Why do it?



RESEARCH

www.AJOG.org

OBSTETRICS

The impact of Centering Pregnancy Group Prenatal Care on postpartum family planning

Nathan Hale, PhD; Amy H. Picklesimer, MD, MSPH; Deborah L. Billings, PhD; Sarah Covington-Kolb, MSPH, MSW

OBJECTIVE: The objective of the study was to evaluate the impact of group prenatal care (GPNC) on postpartum family-planning utilization.

STUDY DESIGN: A retrospective cohort of women continuously enrolled in Medicaid for 12 months ($n = 3637$) was used to examine differences in postpartum family-planning service utilization among women participating in GPNC ($n = 570$) and those receiving individual prenatal care (IPNC; $n = 3067$). Propensity scoring methods were used to derive a matched cohort for additional analysis of selected outcomes.

RESULTS: Utilization of postpartum family-planning services was higher among women participating in GPNC than among women receiving IPNC at 4 points in time: 3 (7.72% vs 5.15%, $P < .05$), 6 (22.98% vs 15.10%, $P < .05$), 9 (27.02% vs 18.42%, $P < .05$), and 12 (29.30% vs 20.38%, $P < .05$) months postpartum. Postpartum family-planning visits were highest among non-Hispanic black women at each interval, peaking with 31.84% by 12 months postpartum. After

propensity score matching, positive associations between GPNC and postpartum family-planning service utilization remained consistent by 6 (odds ratio [OR], 1.42; 95% confidence interval [CI], 1.05–1.92), 9 (OR, 1.43; 95% CI, 1.08–1.90), and 12 (OR, 1.44; 95% CI, 1.10–1.90) months postpartum.

CONCLUSION: These findings demonstrate the potential that GPNC has to positively influence women's health outcomes after pregnancy and to improve the utilization rate of preventive health services. Utilization of postpartum family-planning services was highest among non-Hispanic black women, further supporting evidence of the impact of GPNC in reducing health disparities. However, despite continuous Medicaid enrollment, postpartum utilization of family-planning services remained low among all women, regardless of the type of prenatal care they received.

Key words: Centering Pregnancy, family planning, group prenatal care, postpartum, prenatal care

Cite this article as: Hale N, Picklesimer AH, Billings DL, et al. The impact of Centering Pregnancy Group Prenatal Care on postpartum family planning. Am J Obstet Gynecol 2014;210:50.e1-7.

The interconception period from the postpartum visit and until the following pregnancy is an important time

★ EDITORS' CHOICE ★

States each year are unintended, and of these, about 43% end in abortion.³

Pregnancy intention and appropriate

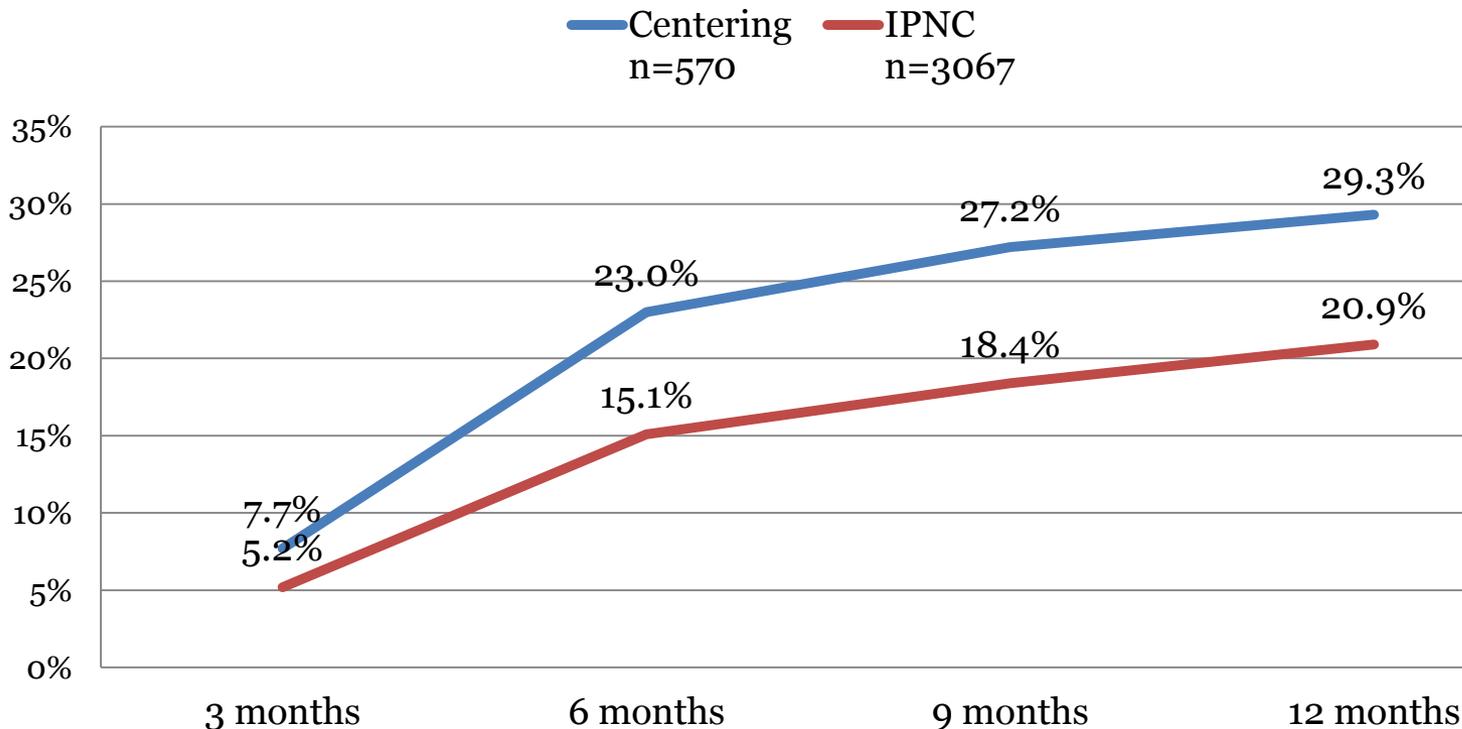
CenteringPregnancy Why do it?



RESEARCH

www.AJOG.org

Postpartum family planning visits



CenteringPregnancy

Why do it?



More likely to establish a medical home for their child

- Higher rates of satisfaction with PNC
- Higher rates of attendance at PNC visits
 - Low-income Latinas in Florida
 - RCT @ Air Force Hospital patients in the Pacific NW
 - RCT @ Connecticut and Atlanta
 - One study found no significant difference in participation or satisfaction with care

More likely to attend their postpartum visit

CenteringPregnancy

Why do it?



- Benefits to the practice
 - Sustainable funding

\$\$\$

Reimbursable prenatal care

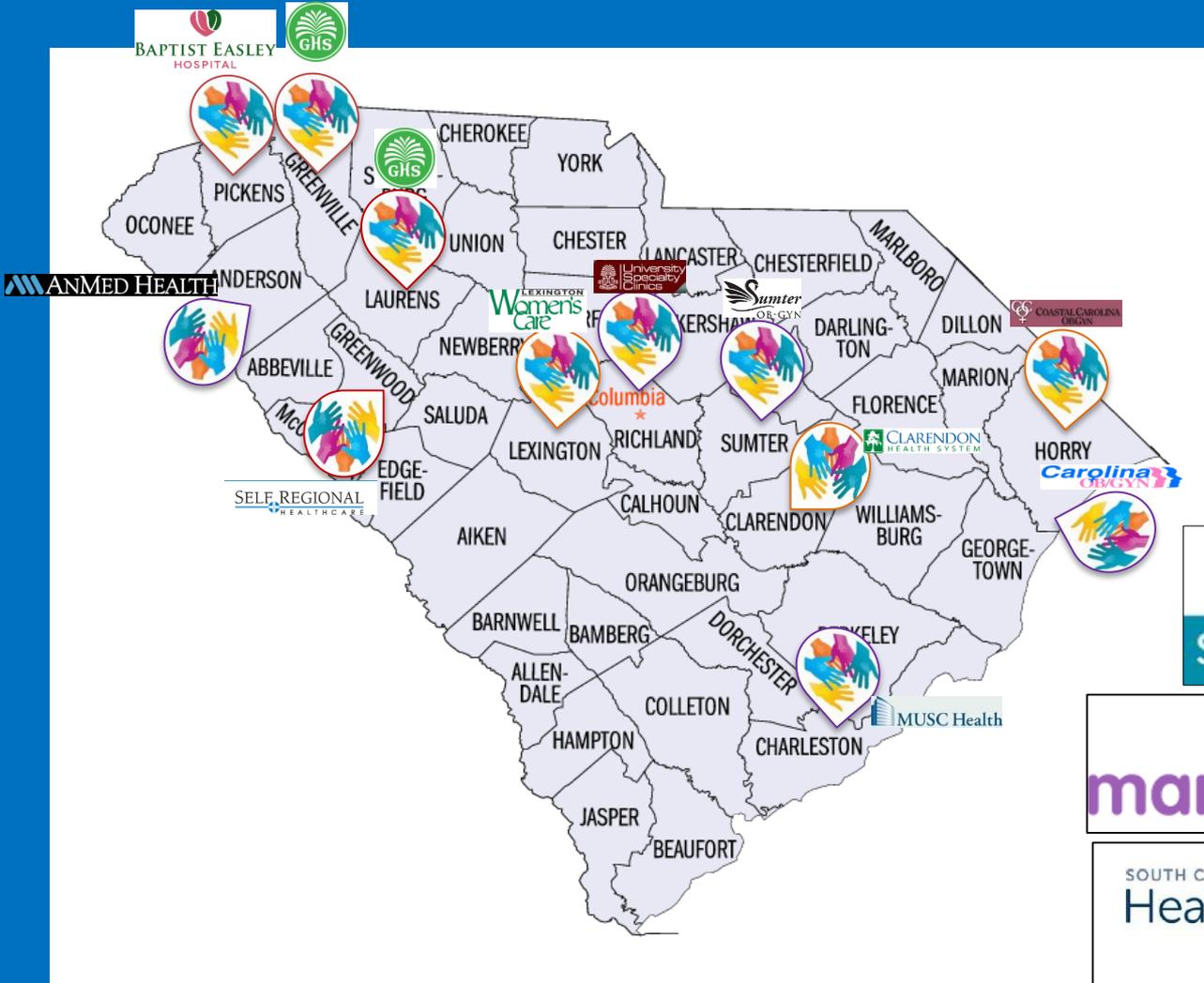
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SC Medicaid: \$30 additional /
patient / visit up to \$150

\$\$\$

Blue Choice Medicaid and BCBSSC: \$30
additional / patient / visit up to \$300 *plus*
additional \$175 if > 5 Centering sessions

CenteringPregnancy Why do it?





Kristin Van De Griend, MPH, PhDc
University of South Carolina
Department of Health Promotion, Education, &
Behavior

Statewide Scale-up of Group Prenatal Care in South Carolina



Kristin Van De Griend, MPH, PhDc
University of South Carolina
Department of Health Promotion, Education, & Behavior

Overview

- **Introduction & Methods**
- **Results & Implications**



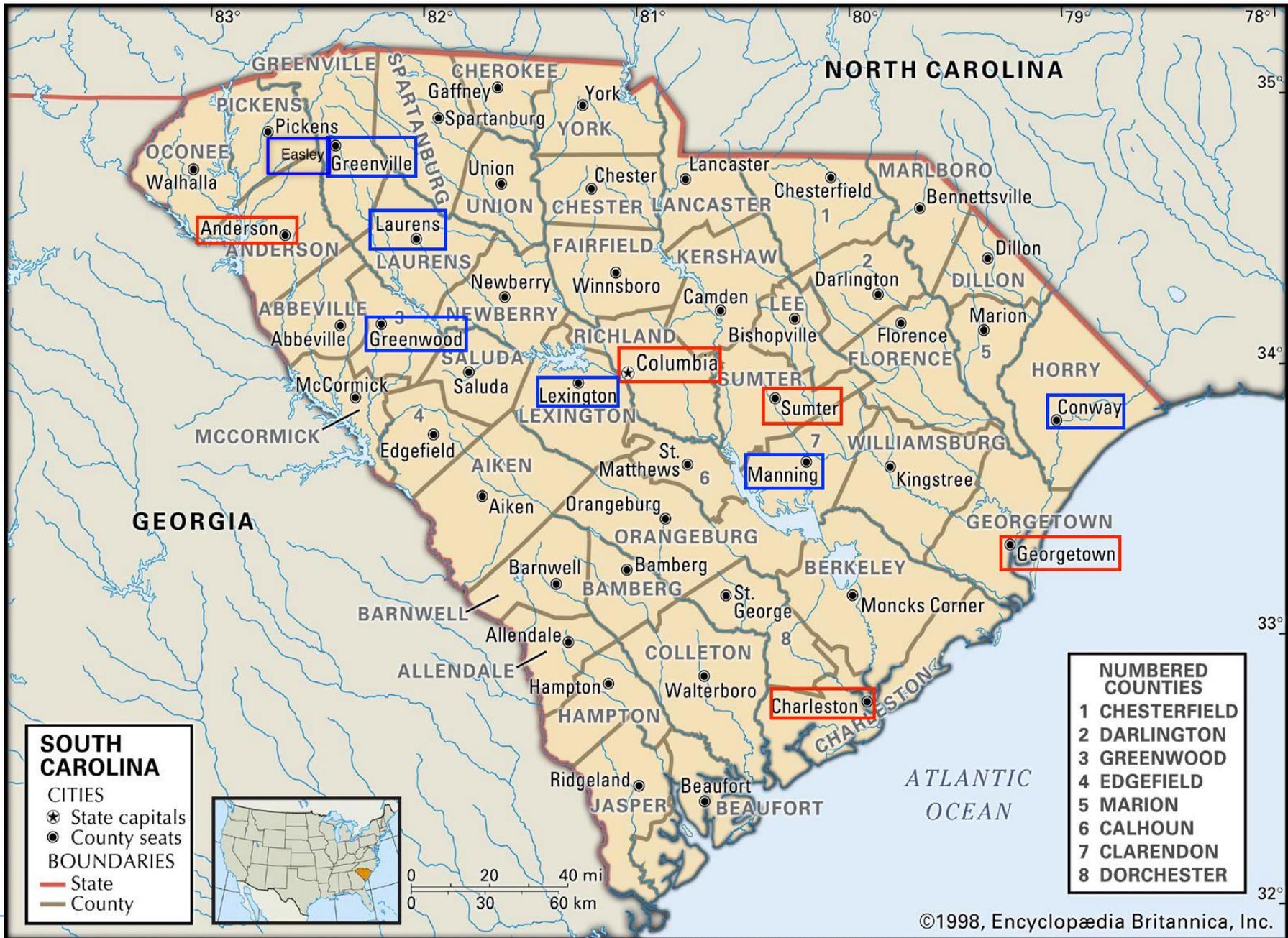
Introduction & Methods

Process Evaluation

- Process evaluation involves:
 - Examining the strengths and limitations of interventions
 - Monitoring implementation in real-time
 - Studying influences (context) that could impact implementation
- Helps us understand why the intervention has or does not have expected outcomes
 - And which features were successful or not
- New implementing groups can learn from successes and overcoming challenges

Healthcare Systems Offering CenteringPregnancy

Site Name	Location	Year initiated CP	Inclusion in this process evaluation
Greenville Health System	Greenville	2008	No, not an expansion site
Mountainview OB-Gyn	Easley	2008	No, not an expansion site
AnMed Health Family Medicine	Anderson	2013	Yes
Tuomey Healthcare System OB-Gyn	Sumter	2013	Yes
University of South Carolina School of Medicine Department of Obstetrics and Gynecology	Columbia	2013	Yes
Carolina OB-Gyn, Georgetown Hospital System	Murrells Inlet	2013	Yes
Medical University of South Carolina	Charleston	2013	Yes
Montgomery Center for Family Medicine	Greenwood	2014	No
Carolina Women's Center	Clinton	2014	No
Palmetto Women's Healthcare	Manning	2015	No
Lexington Women's Care	Lexington	2015	No
Costal Carolina OB-Gyn	Conway	2015	No



GEORGIA

NORTH CAROLINA

ATLANTIC OCEAN



OCONEE
Walhalla

Anderson

GREENVILLE

PICKENS
Pickens

Easley

Greenville

ANDERSON

ABBEVILLE

Abbeville

MCCORMICK

McCormick

EDGEFIELD

Aiken

BARNWELL

Allendale

ALLLENDALE

Hampton

HAMPTON

Ridgeland

JASPER

Beaufort

BEAUFORT

CHEROKEE

Gaffney

Spartanburg

UNION

Laurens

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Aiken

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Ridgeland

JASPER

Beaufort

BEAUFORT

2

DARLINGTON

LEE

BISHOPVILLE

FLORENCE

SUMTER

Sumter

SUMTER

Aiken

Orangeburg

Barnwell

Bamberg

BAMBERG

Allendale

Hampton

Ridgeland

JASPER

Beaufort

BEAUFORT

3

GREENWOOD

EDGEFIELD

MARION

CALHOUN

CLARENDON

DORCHESTER

Charleston

CHARLESTON

Beaufort

4

EDGEFIELD

MARION

CALHOUN

CLARENDON

DORCHESTER

Charleston

CHARLESTON

Beaufort

5

MARION

CALHOUN

CLARENDON

DORCHESTER

Charleston

CHARLESTON

Beaufort

6

CALHOUN

CLARENDON

DORCHESTER

Charleston

CHARLESTON

Beaufort

7

CLARENDON

DORCHESTER

Charleston

CHARLESTON

Beaufort

8

DORCHESTER

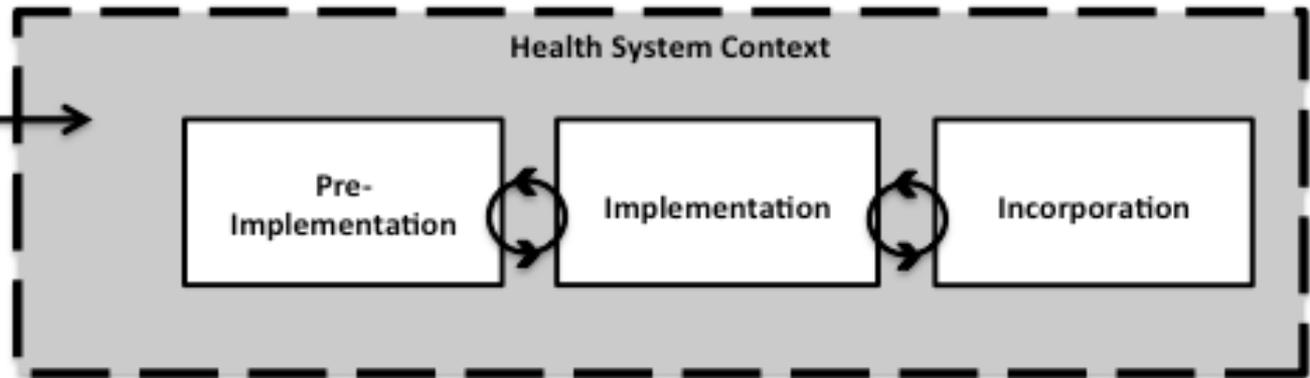
Charleston

CHARLESTON

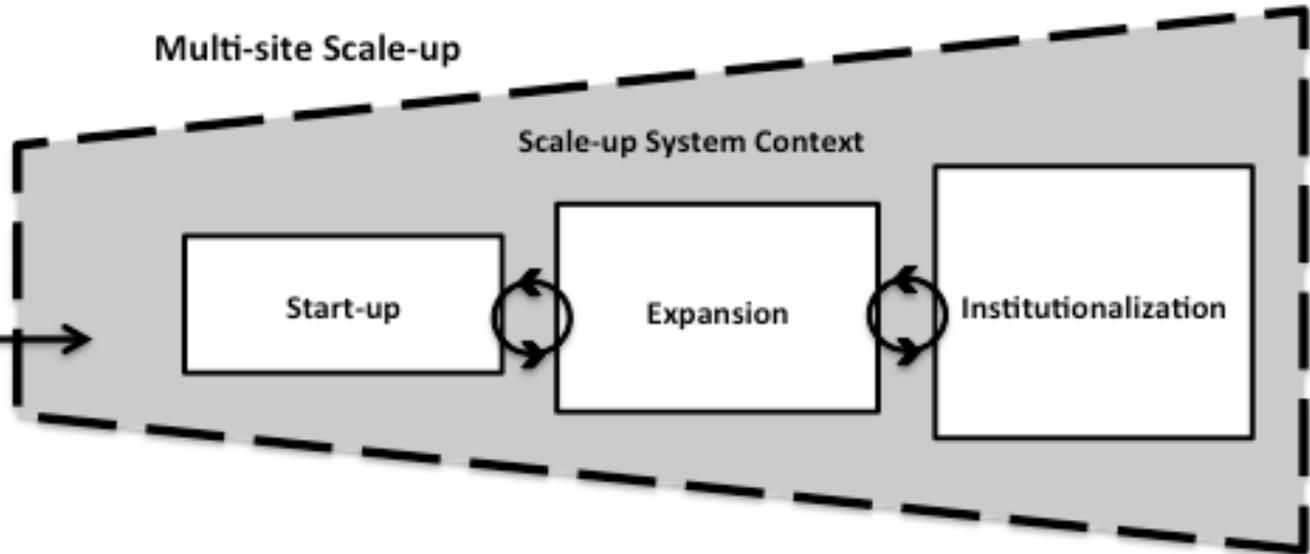
Beaufort

External Elements

Site-level Implementation



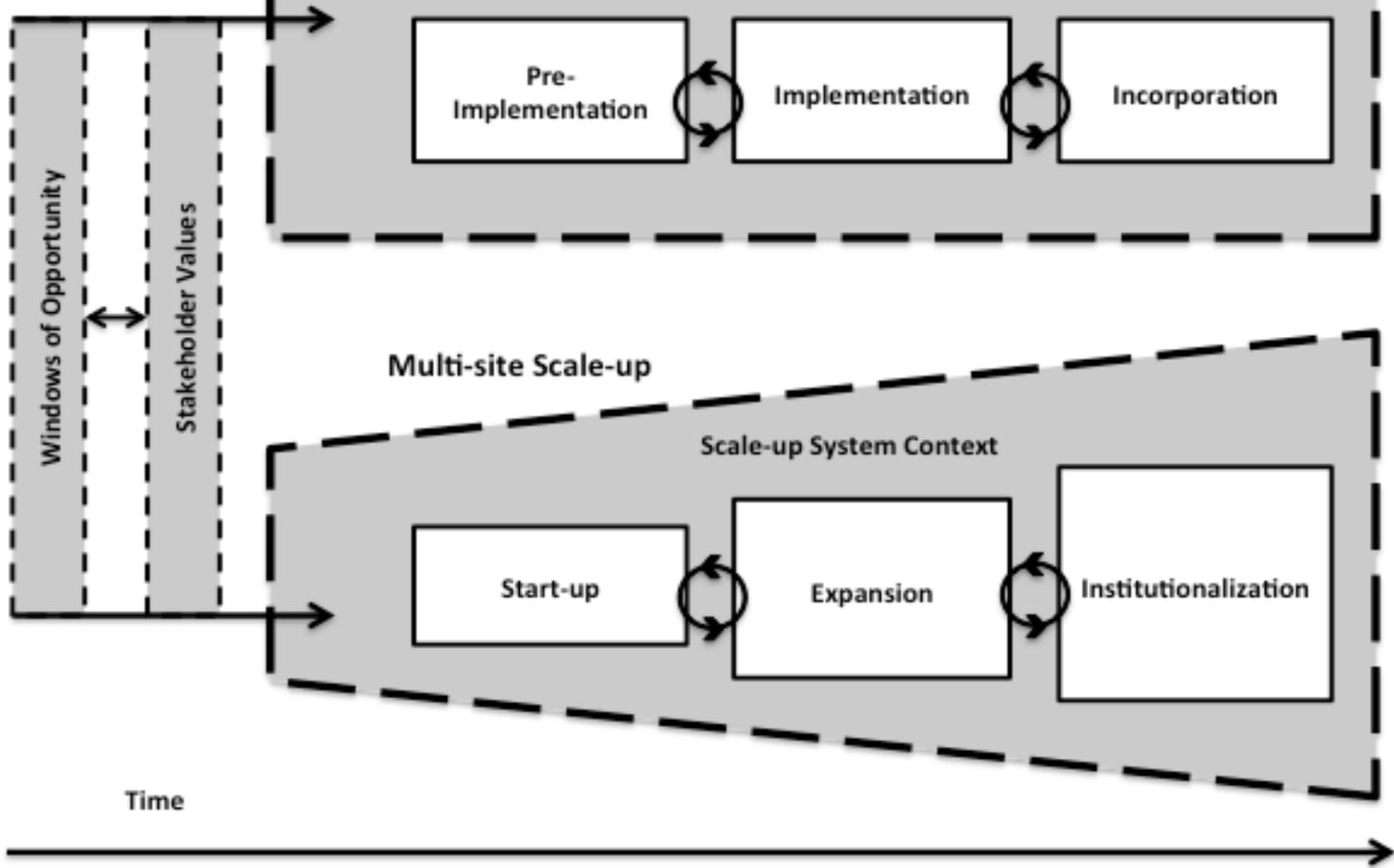
Multi-site Scale-up



Windows of Opportunity

Stakeholder Values

Time



Results & Implications



Site Implementation Monitoring Results

Randomized Site Number	Self-reported Fidelity Score (based on 13 Essential Elements and sub-elements)	Observed Fidelity Score (based on 13 Essential Elements)	Self-reported Content Score	# CP Patients from September 2013 – September 2014
1	85.7%	95.8%	92.2%	37
2	86.9%	Not observed	100.0%	51
3	82.9%	Not observed	90.6%	129
4	83.8%	87.5%	95.0%	36
5	84.6%	95.8%	92.4%	60

Health System Implementation

- Coordinated effort
 - Training and technical assistance
 - Strong stakeholder and administrative support
 - Organizational collaborations
- Collaborations within healthcare systems
 - Steering committees
- Organizational capacity
 - Dedication of time and staff

Statewide Scale-up

- Continued critical political support and financial resources
 - Resources to sustain CenteringPregnancy
 - Strong political will
 - Continued enthusiasm
- Advocacy and community engagement
- Training, monitoring, and supervision
- Changes in policies, norms, and guidelines
- Statewide Coordination Team (GHS)

Implications

- This is the first coordinated statewide scale-up of CenteringPregnancy
 - ...and the first thorough process evaluation to understand it
- Future decisions about how CenteringPregnancy is implemented and moved to scale
- How the implementation process relates to future studies on outcomes

References

- Durlak, J. A., & DuPre, E. P. (2008). Implementation matters: a review of research on the influence of implementation on program outcomes and the factors affecting implementation. *Am J Community Psychol*, 41(3-4), 327-350. doi: 10.1007/s10464-008-9165-0
- Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M., & Wallace, F. (2005). Implementation research: A synthesis of the literature. Tampa, Florida: University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network.
- de Savigny, D., & Adam, T. (2009). Systems thinking for health systems strengthening (Alliance for Health Policy and Systems Research, Trans.). Geneva, Switzerland: WHO Press.

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Questions?

SC Birth Outcomes Initiative

