



Effect of Medicaid Expansion on Postpartum Coverage and Outpatient Care in Arkansas

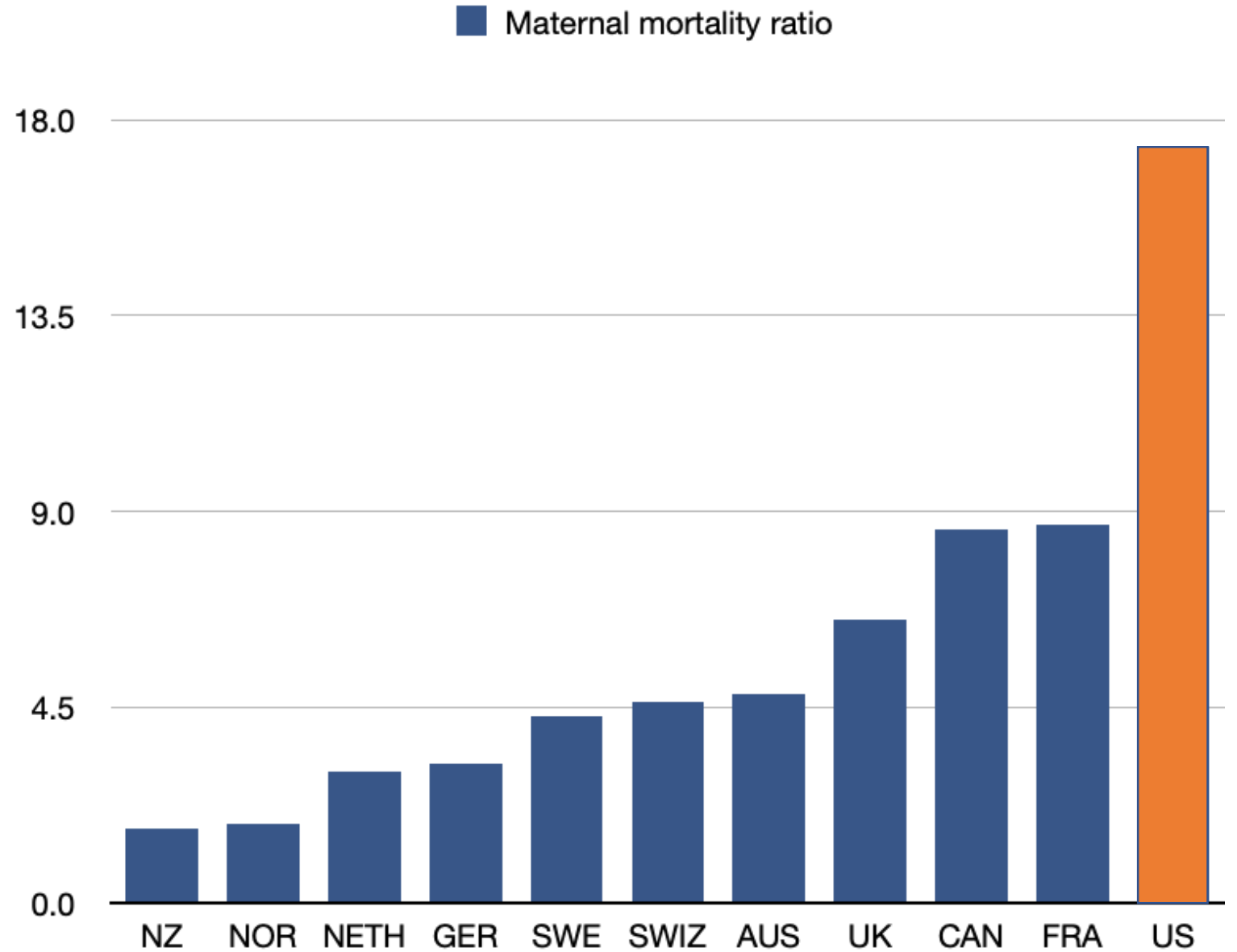
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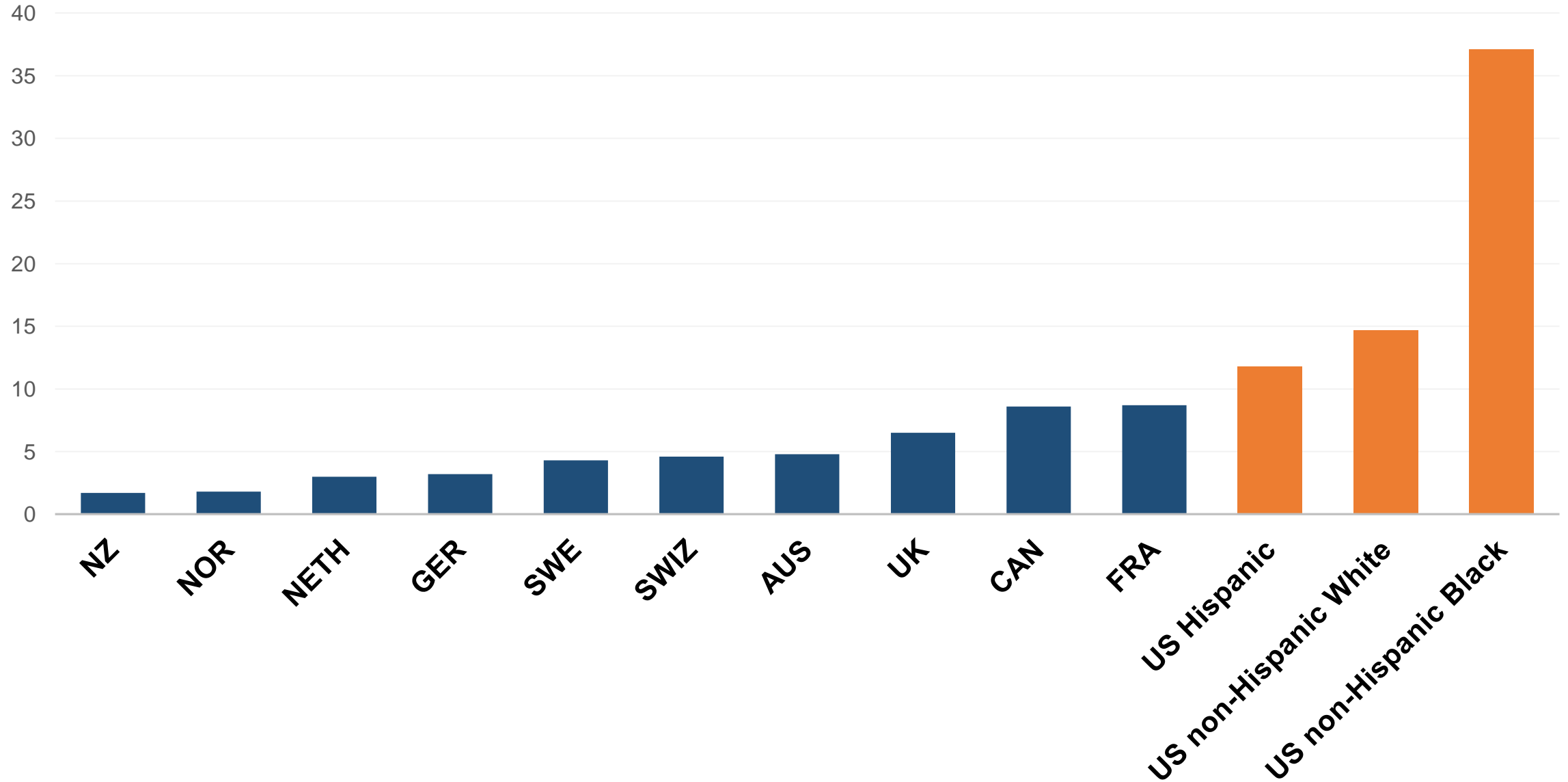


Motivation

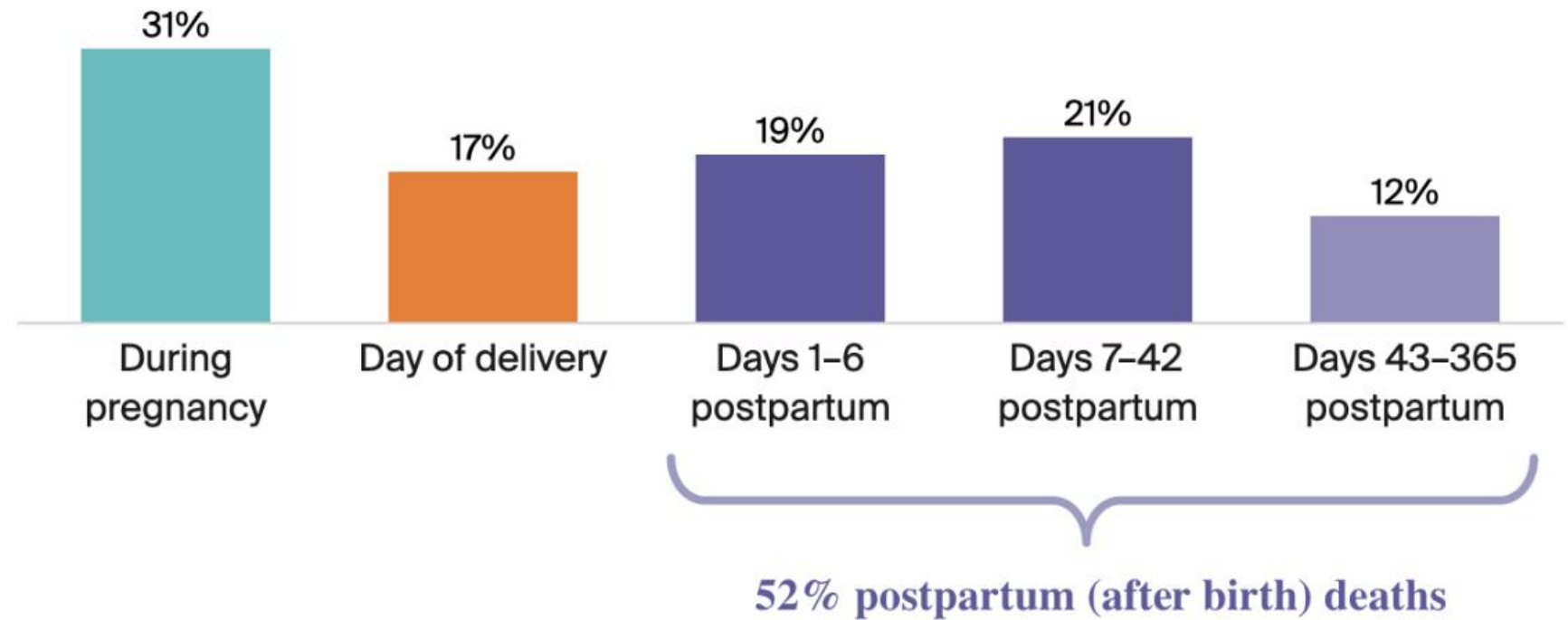
High
maternal
mortality
in US



Maternal mortality ratio



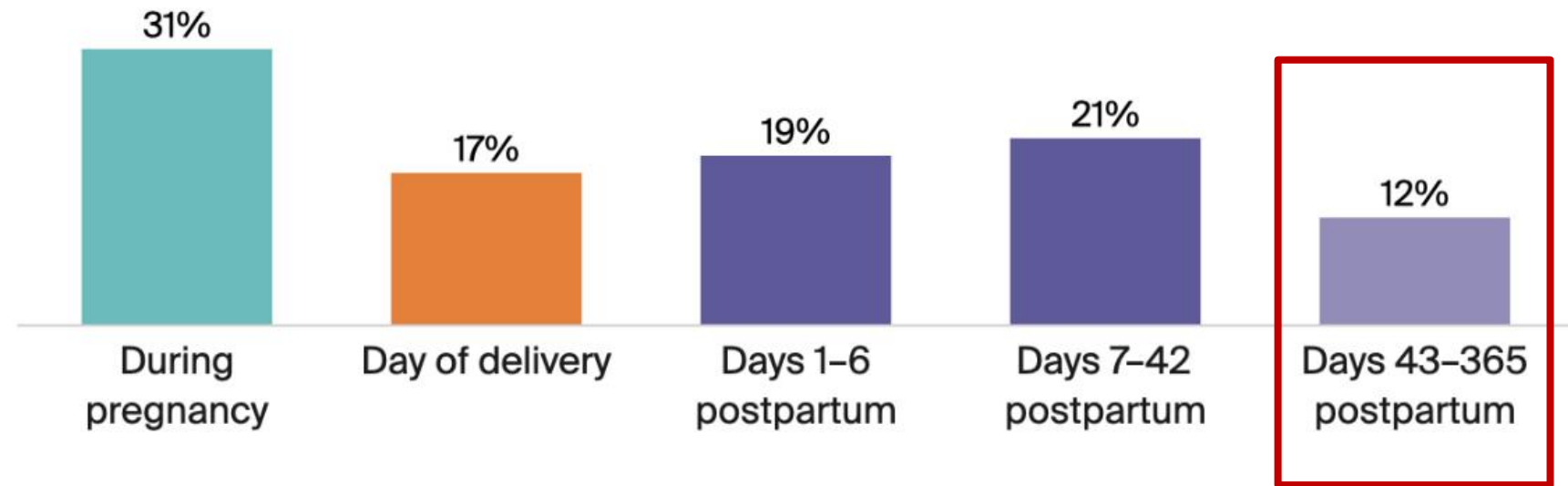
Most pregnancy-related deaths take place after childbirth



Data: Centers for Disease Control and Prevention Pregnancy-Related Mortality Surveillance data from: Emily E. Petersen et al., “Vital Signs: Pregnancy-Related Deaths, United States, 2011–2015, and Strategies for Prevention, 13 States, 2013–2017,” *Morbidity and Mortality Weekly Report* 68, no. 18 (May 10, 2019): 423–29.

Source: Roosa Tikkanen et al., *Maternal Mortality and Maternity Care in the United States Compared to 10 Other Developed Countries* (Commonwealth Fund, Nov. 2020). <https://doi.org/10.26099/411v-9255>

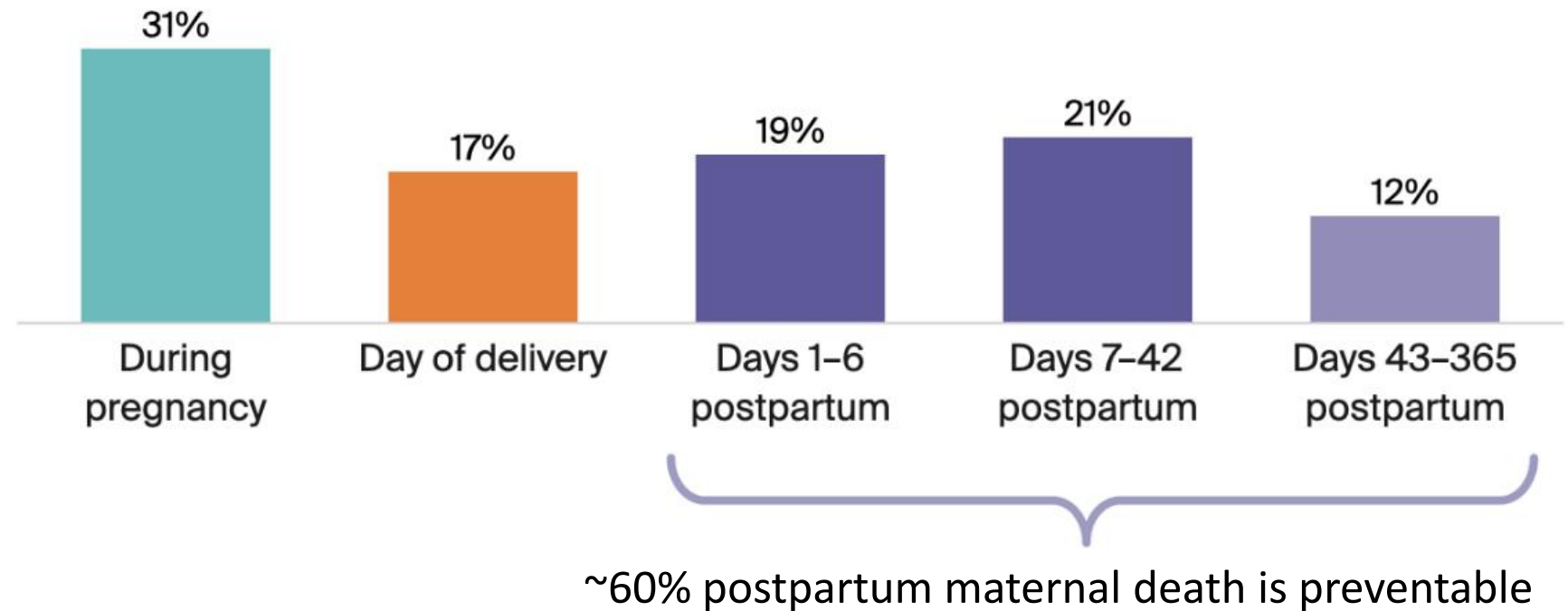
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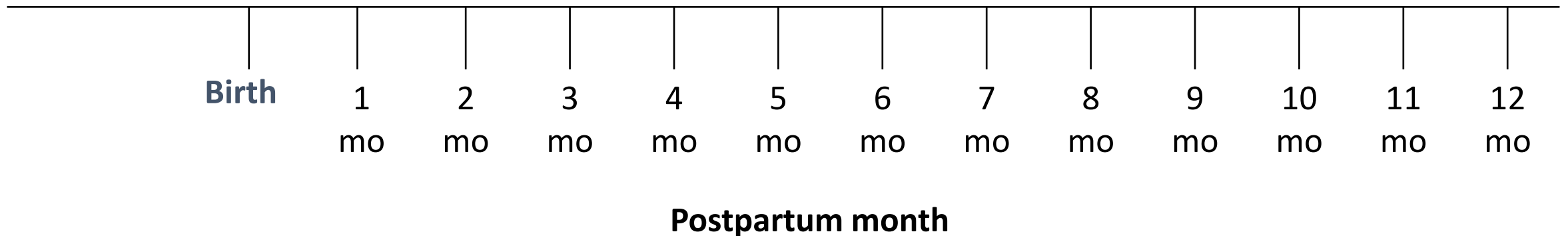


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Medicaid pregnancy coverage

Eligible for
Medicaid
through
pregnancy
185% FPL



Medicaid pregnancy coverage

Eligible for
Medicaid
through
pregnancy
185% FPL



Medicaid
Pregnancy
Coverage
Ends



Birth

1
mo

2
mo

3
mo

4
mo

5
mo

6
mo

7
mo

8
mo

9
mo

10
mo

11
mo

12
mo

Postpartum month

Medicaid pregnancy coverage

Eligible for
Medicaid
through
pregnancy
185% FPL



Medicaid
Pregnancy
Coverage
ends



Eligible for Medicaid
through parental pathway

Birth

1
mo

2
mo

3
mo

4
mo

5
mo

6
mo

7
mo

8
mo

9
mo

10
mo

11
mo

12
mo

Postpartum month

Medicaid pregnancy coverage

Eligible for Medicaid through pregnancy
185% FPL



Medicaid Pregnancy Coverage ends



Eligible for Medicaid through parental pathway

138% FLP expansion states



Birth

1 mo

2 mo

3 mo

4 mo

5 mo

6 mo

7 mo

8 mo

9 mo

10 mo

11 mo

12 mo

Postpartum month

Medicaid pregnancy coverage

Eligible for Medicaid through pregnancy
185% FPL



Medicaid Pregnancy Coverage ends



Eligible for Medicaid through parental pathway



138% FPL expansion states
41% FPL non-expansion states

Birth

1
mo

2
mo

3
mo

4
mo

5
mo

6
mo

7
mo

8
mo

9
mo

10
mo

11
mo

12
mo

Postpartum month

Medicaid expansion increased postpartum coverage nationally

- Expansion increased postpartum insurance by 10 percentage points (Daw et al., 2020)

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- Less evidence exists on the effect of expansion on postpartum healthcare use overall, and on racial disparities in care use

Medicaid expansion in Arkansas

- Expanded Medicaid coverage under the Affordable Care Act on January 1, 2014 through a “private option”
- Increased income eligibility for parents from 16% of FPL in 2013 to 138% in 2014

Study aims

1. Examine the effect of AR Medicaid expansion on continuity of 6-month postpartum insurance
2. Examine the effect of AR Medicaid expansion on healthcare visits in the first 6 months postpartum

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2. Examine the effect of AR Medicaid expansion on healthcare visits in the first 6 months postpartum
 - Examine effects separately among non-Hispanic white and non-Hispanic Black birthing persons
3. Examine (descriptively) changes in racial disparities after expansion

Methods

Data

Birth certificates
2013 – 2015



All Payer Claims
Data
2013 – 2016

Outcomes

- Continuous 6-months health coverage after childbirth

Outcomes

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- Number of outpatient visits during six months postpartum

Outcomes

- Continuous 6-months health coverage after childbirth
- Number of outpatient visits during six months postpartum
 - Total
 - Visits 1 - 60 days
 - Visits 61 days - 6 months

Difference-in-differences analytic strategy

- Women with Medicaid-financed childbirth in treated group

Difference-in-differences analytic strategy

- Women with Medicaid-financed childbirth in treated group
- All under 200% FPL, likely to be eligible for parental Medicaid

Difference-in-differences analytic strategy

- Women with Medicaid-financed childbirth in treated group
- Women with commercially-financed childbirth in control group

Difference-in-differences analytic strategy

- Women with Medicaid-financed childbirth in treated group
 - Women with commercially-financed childbirth in control group
- Unlikely to be eligible for parental Medicaid after expansion

Pre-period
Births Jan-June
2013

6-mos postpartum

Jan
2013

Apr
2013

Jul
2013

Oct
2013

Jan
2014

Apr
2014

Jul
2014

Oct
2014

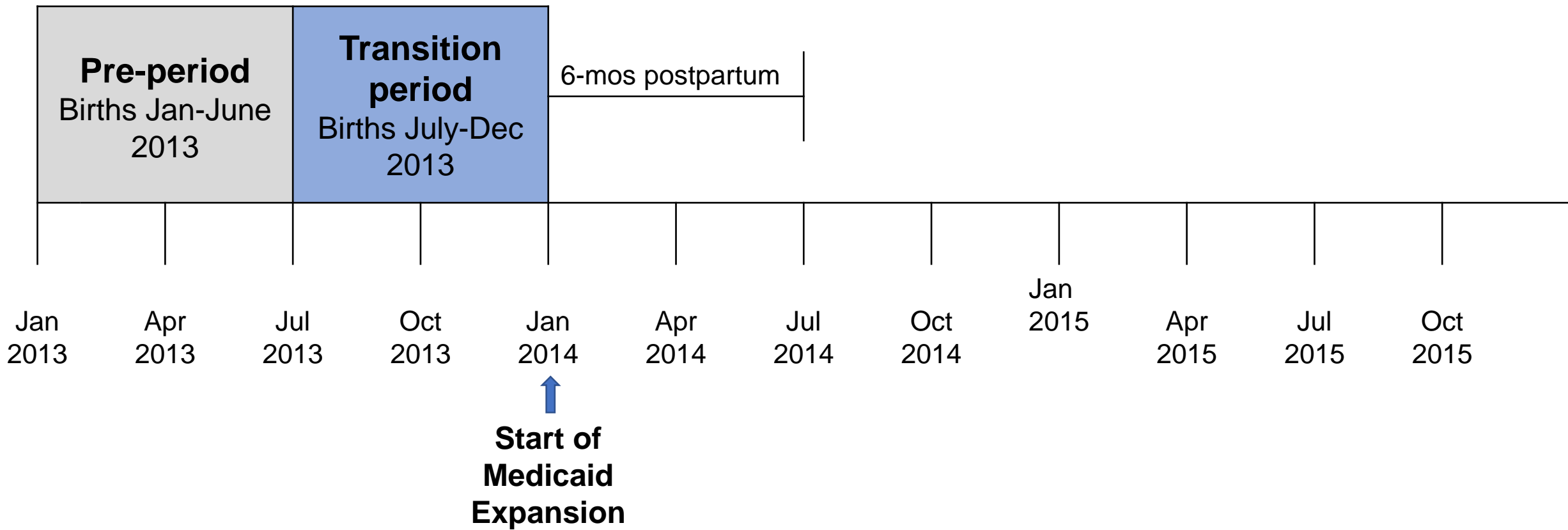
Jan
2015

Apr
2015

Jul
2015

Oct
2015

↑
**Start of
Medicaid
Expansion**





Pre-period
Births Jan-June
2013

**Transition
period**
Births July-Dec
2013

Post period
All births in 2014 & 2015

Jan
2013

Apr
2013

Jul
2013

Oct
2013

Jan
2014

Apr
2014

Jul
2014

Oct
2014

Jan
2015

Apr
2015

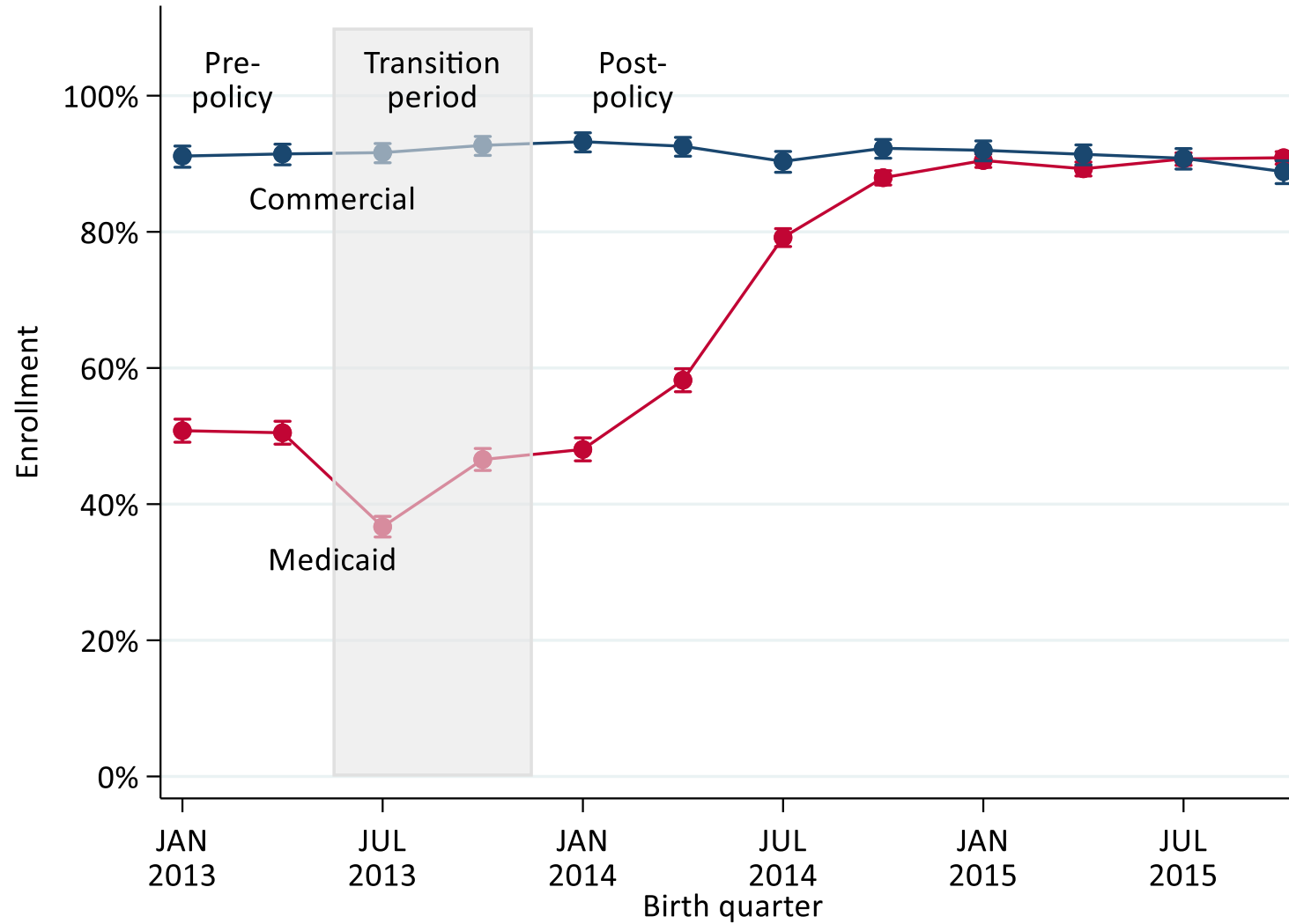
Jul
2015

Oct
2015

**Start of
Medicaid
Expansion**

Results

Continuous 6-month postpartum coverage, by source of coverage at childbirth



Effect of Medicaid expansion on continuous 6-month postpartum coverage

	Medicaid-financed			Commercial-financed			
	Pre-expansion	Post-expansion	Change	Pre-expansion	Post-expansion	Change	
	Percent (95% CI)	Percent (95% CI)	Percent (95% CI)	Percent (95% CI)	Percent (95% CI)	Percent (95% CI)	Percentage Points (95% CI)
Enrollment	50.6 (49.5, 51.8)	80.0 (79.5, 80.4)	29.3 (28.0, 30.6)	91.3 (90.2, 92.4)	91.8 (91.3, 92.3)	0.5 (-0.6, 1.7)	27.8*** (23.7, 31.9)

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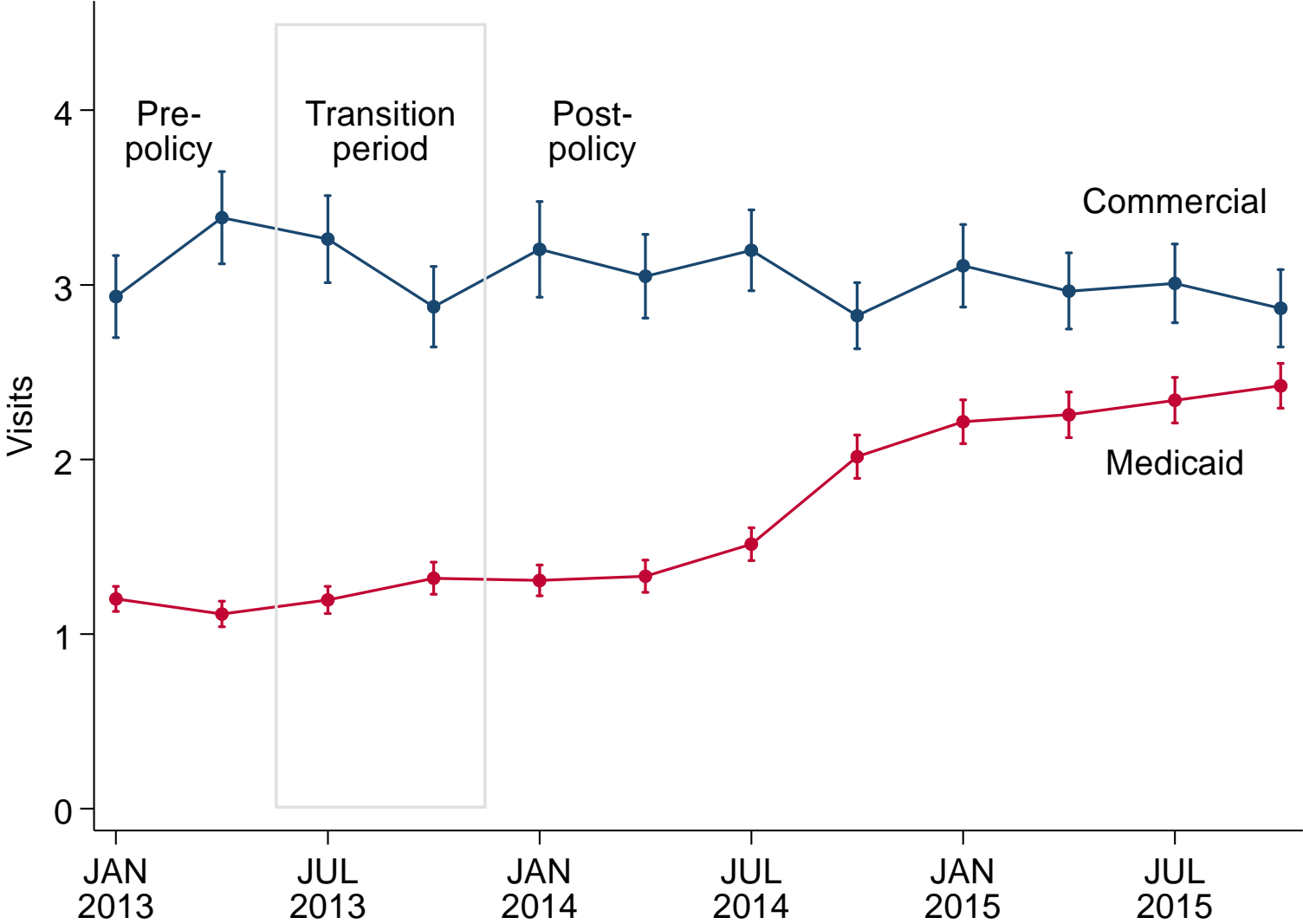
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Outpatient visits first 6 months postpartum by source of coverage at childbirth



Visits during the first 6-months after childbirth

	Medicaid-financed			Commercial-financed			Percentage Points (95% CI)
	Pre-expansion	Post-expansion	Change	Pre-expansion	Post-expansion	Change	
	Percent (95% CI)	Percent (95% CI)	Percent (95% CI)	Percent (95% CI)	Percent (95% CI)	Percent (95% CI)	
Full six months	1.2 (1.1, 1.3)	2.0 (2.0, 2.0)	0.8 (0.7, 0.9)	3.2 (3.0, 3.3)	3.0 (2.9, 3.1)	-0.2 (-0.4, 0.0)	0.9*** (0.8, 1.1)

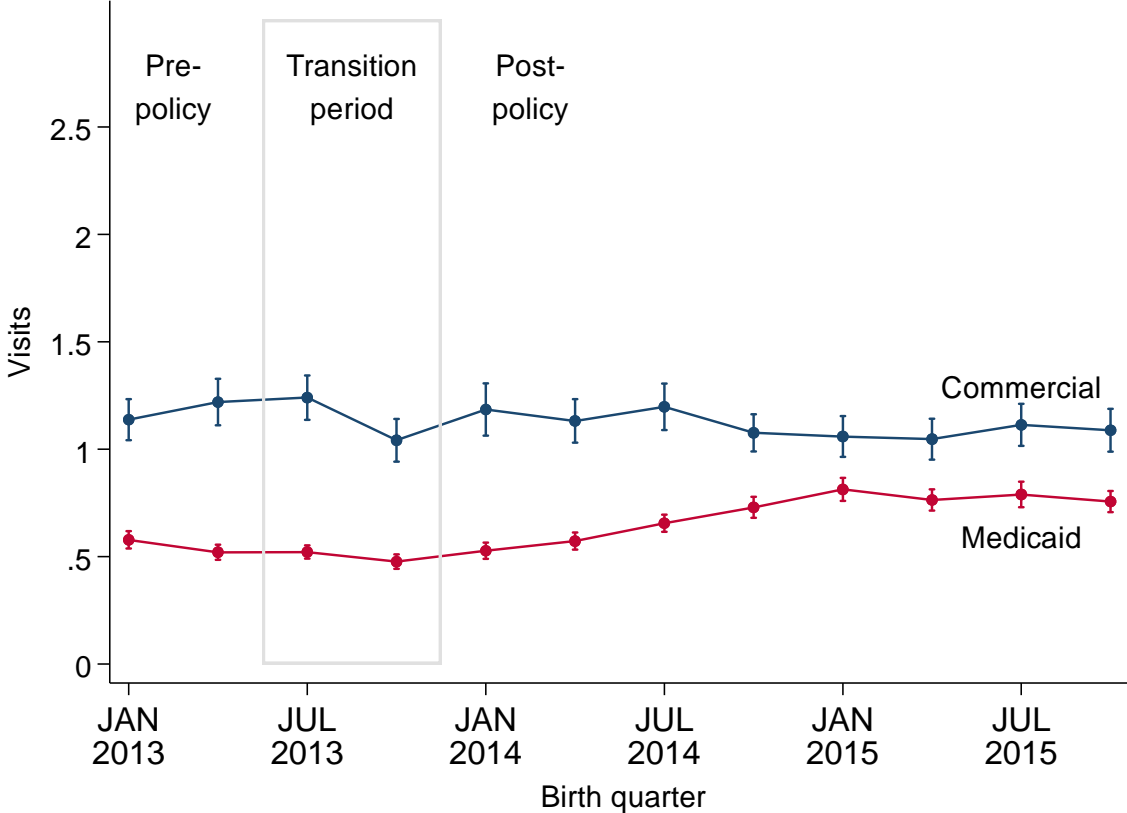
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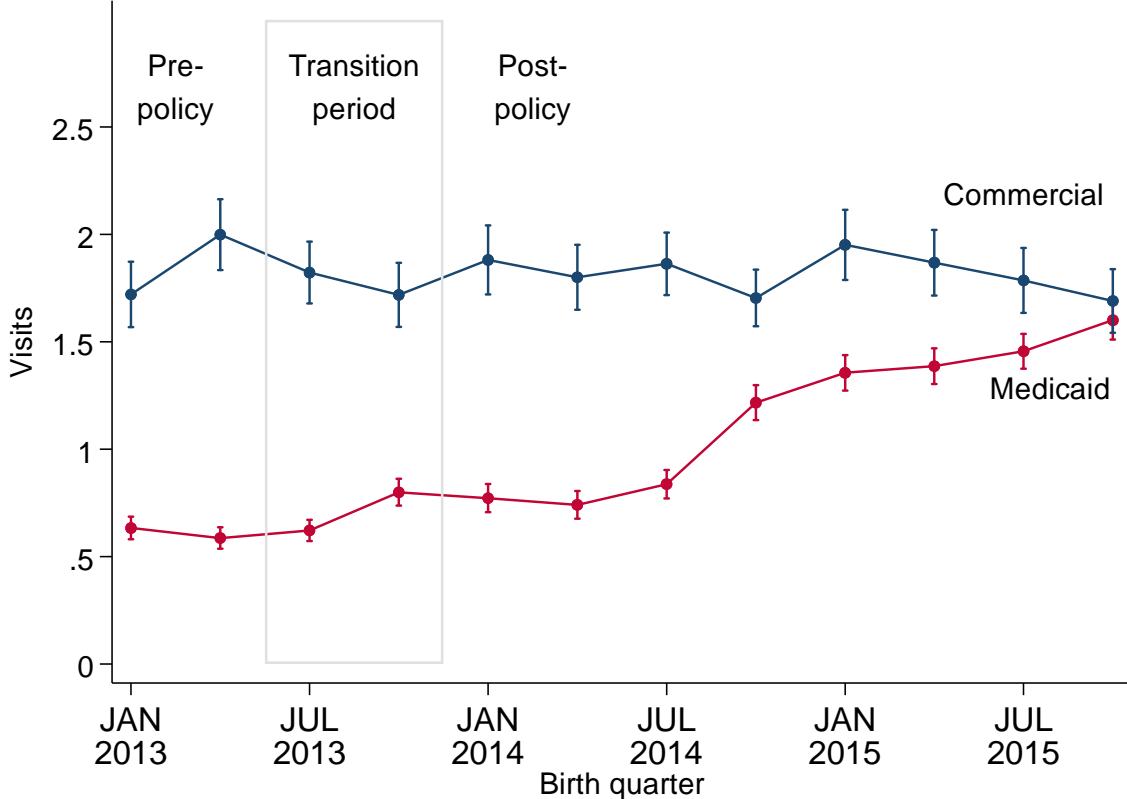
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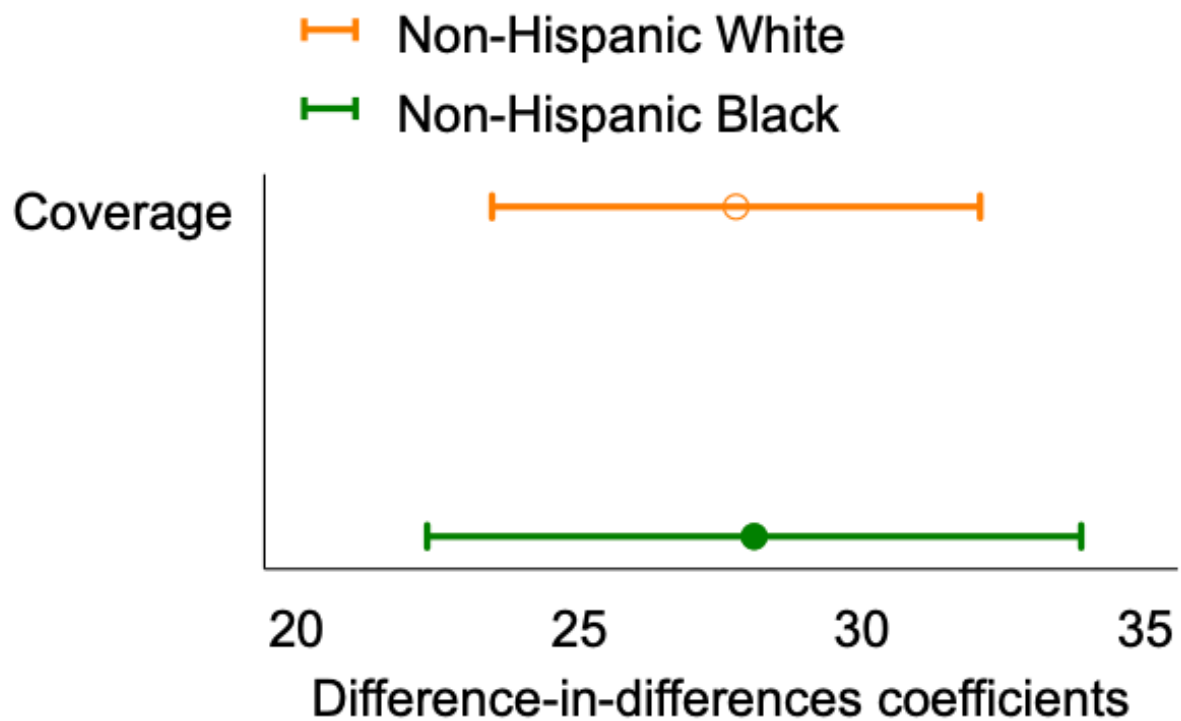
Visits 1–60 days postpartum



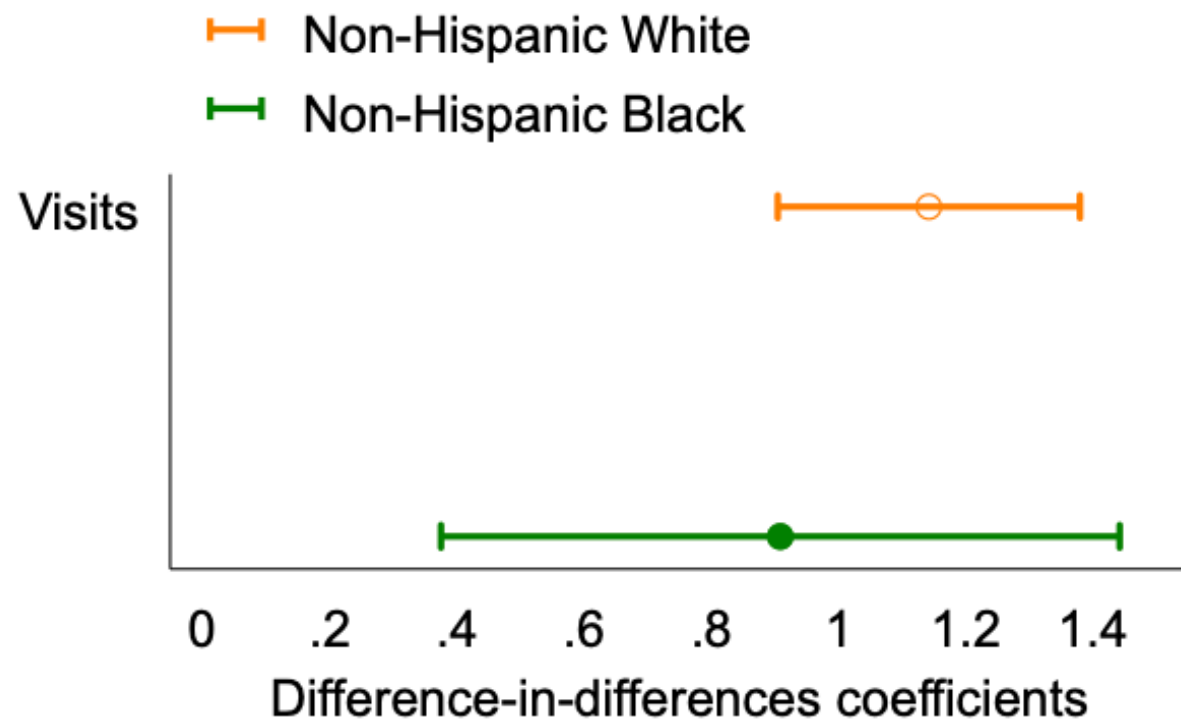
Visits 61 days–6 months postpartum



Continuous 6-month postpartum coverage



Visits during the first 6 months postpartum



Coverage disparities decreased after Medicaid expansion

Group	Pre-expansion Percent (95% CI)	Post-expansion Percent (95% CI)
Black women	62 (59.6, 63.8)	79 (77.7, 80.2)
White women	68 (66.8, 69.1)	79 (78.0,79.4)

Important disparities in visits remained after expansion

Group	Pre-expansion Number (95% CI)	Post-expansion Number (95% CI)
Black women	1.6 (1.4, 1.7)	1.8 (1.7,1.8)
White women	2.0 (1.9,2.1)	2.2 (2.2,2.3)

Discussion

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- Uninsurance after childbirth an important driver of differences in healthcare utilization between persons with commercial and Medicaid-paid childbirth

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- Uninsurance after childbirth an important driver of differences in healthcare utilization between persons with commercial and Medicaid-paid childbirth
- Pregnancy Medicaid extensions, implemented in remaining non-expansion states, are likely to accomplish similar gains in coverage and care
- **Increased coverage not sufficient to reduce racial disparities in outpatient postpartum care**

Additional needs to improve maternal health

- Care that is respectful, patient-centered, culturally competent
- Increase paid leave from work, childcare, and transportation

Acknowledgments

The findings presented represent independent analysis conducted by the authors and do not represent the opinions of the Arkansas Insurance Department or the Arkansas Healthcare Transparency Initiative. Approval to use data from the Arkansas Healthcare Transparency Initiative for this analysis is not an endorsement of the results presented herein.

This study was funded by the National Institute for Health Care Management and the Agency for Healthcare Research and Quality (1K01HS027464)

Extra slides

VARIABLE	MEDICAID PRE (N=14,525)	MEDICAID POST (N=29,578)	COMMERCIAL PRE (N=5,680)	COMMERCIAL POST (N=11,574)
	Percent (95% CI)	Percent (95% CI)	Percent (95% CI)	Percent (95% CI)
Age	25.4 (25.3, 25.4)	25.6 (25.6, 25.7)	29.3 (29.2, 29.5)	29.4 (29.3, 29.5)
Age 19-24	51.7 (50.9, 52.6)	49.2 (48.6, 49.7)	16.3 (15.3, 17.3)	15.9 (15.2, 16.5)
Age 25-30	32.2 (31.4, 33.0)	33.2 (32.6, 33.7)	44.6 (43.3, 45.9)	44.5 (43.6, 45.4)
Age 31-35	9.9 (9.4, 10.3)	11.1 (10.7, 11.4)	24.6 (23.5, 25.7)	24.8 (24.0, 25.6)
Age 36-50	6.2 (5.8, 6.6)	6.6 (6.3, 6.9)	14.5 (13.6, 15.4)	14.8 (14.2, 15.5)
Non-Hispanic white	55.5 (54.7, 56.3)	59.2 (58.7, 59.8)	86.6 (85.7, 87.4)	86.0 (85.4, 86.6)
Non-Hispanic black	29.0 (28.3, 29.7)	26.8 (26.3, 27.3)	7.2 (6.5, 7.9)	7.1 (6.6, 7.5)
Hispanic	12.1 (11.6, 12.7)	10.1 (9.8, 10.4)	2.8 (2.4, 3.3)	3.1 (2.8, 3.4)
Less than college	94.1 (93.7, 94.5)	95.3 (95.0, 95.5)	40.5 (39.2, 41.8)	46.4 (45.5, 47.3)
College or greater	5.9 (5.5, 6.3)	4.7 (4.5, 5.0)	59.5 (58.2, 60.8)	53.6 (52.7, 54.5)