TeamBirth: What does the data show?

Amber Weiseth, DNP, MSN, RNC-OB



ARIADNE LABS

BRIGHAM HEALTH

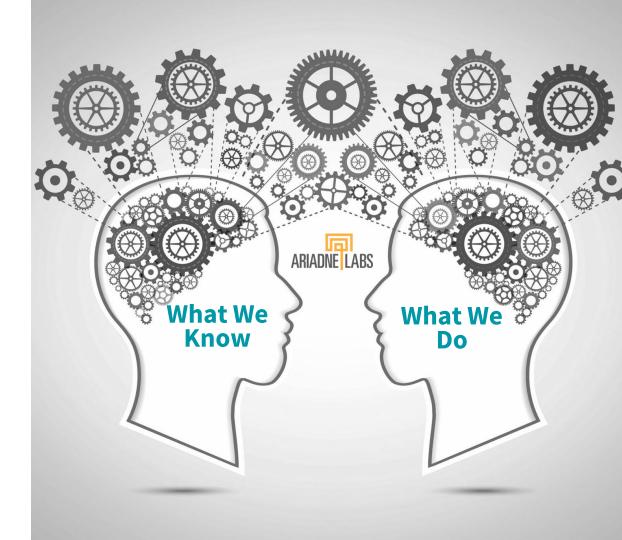


BRIGHAM AND WOMEN'S HOSPITAL



We are a joint center for health systems innovation at Brigham & Women's Hospital and the Harvard T.H. Chan School of Public Health. We Focus on Systemic Breakdowns **"Know-Do Gaps"**

Gaps between what we know should be done, and what actually occurs in our health care and public health systems.





DELIVERY DECISIONS INITIATIVE

Our vision is a world in which every person can choose to grow their family with dignity.

Meet the TeamBirth Team



Amber Weiseth DNP, MSN, RNC-OB Director





Joyce Edmonds PhD,MPH, RN Sr. Research Scientist



Trisha Short BSN, RN Sr. Implementation Specialist



Misha Severson MN, RN Sr. Implementation Specialist



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Indigo Miller MPH, RN Sr. Implementation Specialist

Whitney Miller MSN, CNM, FNP-BC Implementation Specialist



Angela Chien Cathy Han MD MD **TeamBirth Faculty TeamBirth Faculty**



Yara Altaher

MPH

Sr. Research

Coordinator



Lynn El Chaer

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Research Assistant



Kaya Duguay

MPH

Project Coordinator



Tyler Fox

MPH

Strategy & Project

Coordinator







Isabel Griffith Kelsey McLernon MPH **Project Assistant Research Specialist**

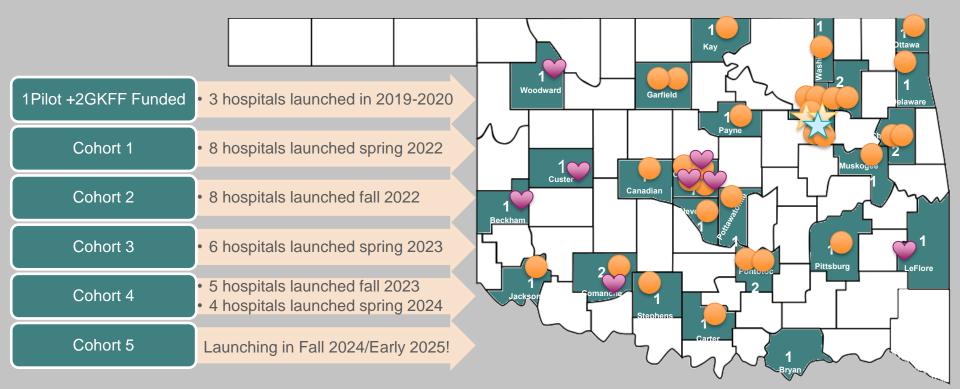
Interns

Neema Leema, Christie Louis, Kathryn Ault, Jen Trebbin, Fiona Unsworth, Harini Somanchi



IMPROVEMENT COLLABORATIVE





- Total Oklahoma Birthing Hospitals as of July 2024 = 43
 - Original TeamBirth Pilot Hospital =
 - George Kaiser Family Foundation Funded = 2
- HRSA SMHIP Funded through Oklahoma State Department of Health Launched = 31
- HRSA SMHIP Funded through Oklahoma State Department of Health Launching in 2024 =



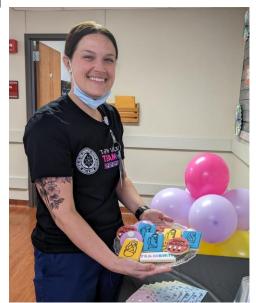
TeamBirth Launches















- 1. Ascension St. John Medical Center, Tulsa
- 2. Bailey Medical Center
- 3. Hillcrest Hospital Claremore
- 4. Hillcrest Hospital South
- 5. Mercy Hospital OKC
- 6. Saint Francis Muskogee
- 7. Saint Francis South
- 8. Saint Francis Hospital
- 9. St. Mary's Regional Medical Center, Enid

- 1. Ascension St. John Jane Phillips
- 2. Ascension St. John Owasso
- 3. INTEGRIS Health Baptist Medical Center
- 4. INTEGRIS Health Enid Hospital
- 5. INTEGRIS Health Canadian Valley Hospital
- 6. INTEGRIS Health Edmond Hospital
- 7. INTEGRIS Health Miami Hospital
- 8. McAlester Regional Medical Center

- 1. Cherokee Nation W.W. Hastings
- 2. Chickasaw Nation
- 3. Mercy Hospital Ardmore
- 4. Norman Regional Medical Center
- 5. SSM St. Anthony OKC
- 6. SSM St. Anthony Shawnee
- 7. Stillwater Medical Center

- 1. Comanche County Memorial Hospital
- 2. Duncan Regional Hospital
- 3. INTEGRIS Health Grove Hospital
- 4. INTEGRIS Health Ponca City Hospital
- 5. Jackson County Hospital
- 6. Mercy Hospital Ada
- 7. Northeastern Health System
- 8. Oklahoma Children's Hospital

- 1. Claremore Indian Hospital
- 2. Choctaw Nation Health Care Center
- 3. Great Plains Regional Medical Center
- 4. INTEGRIS Health Southwest Medical Center
- 5. INTEGRIS Health Woodward Hospital
- 6. Lakeside Women's Hospital
- 7. Southwestern Medical Center
- 8. Weatherford Regional Hospital



TeamBirth Background and Overview



80–90% of reported sentinel events are due to failures of communication and teamwork.

The TeamBirth solution embodies two design principles:

TEAMWORK:

Promote psychological safety and shared decision-making with the birthing person

SIMPLICITY:

Reliably communicate information across the full care team, including the birthing person

TeamBirth's components promote *four key behaviors*:





* Labor progress refers to the laboring uterus and cervix. Plans for progress should also be discussed in postpartum and newborn huddles.

TeamBirth **Core** Components

Critical to successful delivery of TeamBirth across the maternal health continuum



Shared Planning Board Example: Norman Regional Health System

NORMAN REGIONAL Health System	Labor Deliv	/ery Pl	anning l	Board
Welcome:	Date:		Room #:	
Team		Plan		
		Mom:		
		Baby:		
		Labor Progr	ess:	
Preferences				
		Next Huddle	:	
		Early Labor	Active Labor	Pushing
Notes	Important Numbers Emergency: Dial 88 F		Photography Policy video or audio taping with still cameras labor and delivery. You may video and t born at the discretion of your physician	ake pictures as soon as the baby is



TeamBirth Research

OK Patient Survey Overview (cohort 1-4 combined)

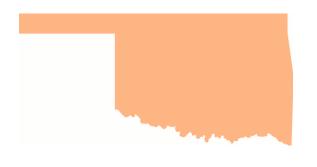
6,528 total surveys completed 9/8/2022

starting date

6/30/2024 ending date

months of data collection

22

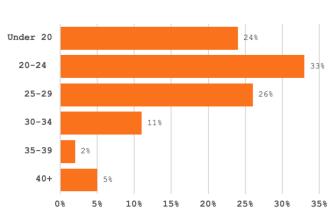


32 Hospitals across Oklahoma implemented TeamBirth

Patient Survey Demographics

Race & Ethnicity

Age



White	57%						
Hispanic	18%						
AIAN	8%						
Multiracial	8%						
Black	6%						
Asian	3%						
Native Hawaiian/Other Pacific Islander	1%						

Education

High school graduate
Some college
College degree
Postgraduate degree (e.g. Masters, MD, PhD, JD)

37%	25%	28%	10%
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Insurance Status

36% Private5% Other47% Medicaid12% Multiple forms

Mode of Delivery	First Baby	Induction	Experienced Complications
70% Vaginal delivery	39% Yes	58% Yes	88% No
30% Cesarean delivery	61% No	42% No	12% Yes

Patient Survey Demographics (with the n's)

Education	n(%)	
High school or less	2,039 (37%)	
Some college	1,381 (25%)	
College degree	1,546 (28%)	
Postgraduate degree	538 (10%)	
Insurance	n(%)	
Private	2,002 (36%)	
Medicaid	2,612 (47%)	
Other government program	300 (5%)	
Multiple forms	670 (12%)	
No coverage	30 (1%)	
First Baby	n(%)	
No	3,473 (61%)	
Yes	2,190 (39%)	
Delivery Method	n(%)	
Vaginal	3,915 (70%)	
Cesarean	1,702 (30%)	

Race/Ethnicity*	n(%)
Hispanic	983 (18%)
NH American Indian/Alaska Native	440 (8%)
NH Asian	148 (3%)
NH Black/African American	341 (6%)
NH Multiracial	458 (8%)
NH Native Hawaiian/Other Pacific Islander	36 (1%)
NH White	3,166 (57%)
Experienced Complications	n(%)
No	4,998 (88%)
Yes	708 (12%)
Induced	n(%)
No	2,287 (42%)
Yes	3,216 (58%)

Mean HCRTS-R and MADM scores by receipt of a TeamBirth huddle during labor

		Health Care Relationship Trust Scale (HCRTS-R) ^a			Mothers /	Autonomy in (MADN	Decision Making 1) ^b
Receipt of a Huddle		M SD 95% CI		95% Cl	М	SD	95% Cl
	Yes	<mark>50.13</mark>	3.88	[50.02, 50.24]	<mark>38.03</mark>	6.35	[37.85, 38.21]
	No	<mark>48.02</mark>	6.65	[47.64, 48.41]	<mark>35.26</mark>	7.31	[34.85, 35.68]

Note. M = Mean, *SD* = Standard Deviation, *Cl* = confidence interval

^aA two-sample t-test was used to compare mean HCRTS-R scores by receipt of a huddle during labor (t(5,951)= -14.02, *p* = <.001). Summary HCRTS-R scores range from 0-52.

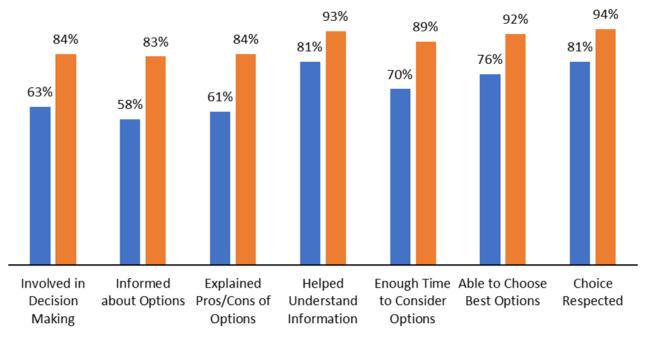
^bA two-sample t-test was used to compare mean MADM scores by receipt of a huddle during labor (t(6,042)= -13.12, **p** = <.001). Summary MADM scores range from 6-42.



Oklahoma TeamBirth Research: Mother's Autonomy in Decision Making

"This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award to the Oklahoma State Department of Health. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS, or the U.S. Government. For more information, please visit <u>HRSA.gov</u>"

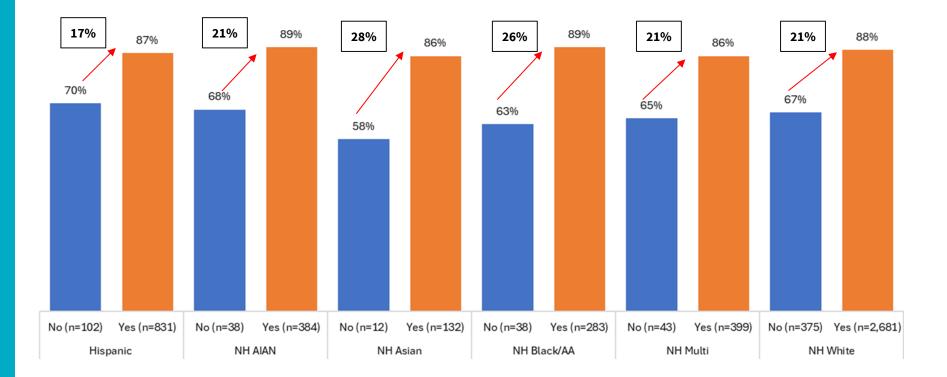
MADM Items 1-7: Percent Strongly or Completely Agree by Huddle Status



No/Not Sure Huddle (n=685)

Yes Huddle (n=5021)

MADM: Patients in "High Autonomy" Quartile by Labor Huddle Status & Race/Ethnicity



*NH = Non Hispanic *Caution when interpreting data for NH Asians due to the small sample size (fewer than 30), which may result in unstable percentages.

Summary of Mean MADM Score Differences Within Race/Ethnicity Groups

	Unadjusted					Adjusted ^a				
Race/Ethnicity Group	M (Exp)	b	SE	р ^в	95% Cl	M (Exp)	b	SE	p^b	95% Cl
NH White	38.31	3.11	.28	<.001	[2.57, 3.66]	38.27	2.96	.33	<.001	[2.27, 3.64]
Hispanic	37.48	1.34	.51	.009	[.34, 2.34]	37.69	1.45	.60	.02	[.21, 2.69]
NH AIAN	38.28	3.14	.78	<.001	[1.62, 4.66]	38.25	2.96	.98	.006	[.95, 4.97]
NH Multiracial	37.77	2.53	.76	.001	[1.03, 4.03]	37.58	1.69	.77	.04	[.12, 3.27]
NH Black	37.85	2.27	.88	.01	[.53, 4.00]	37.84	2.31	1.15	.06	[-0.06, 4.68]
NH Asian ^c	37.73	4.18	1.50	.005	[1.24, 7.12]					
NH Native Hawaiian ^c	35.73	1.11	2.59	.67	[-3.97, 6.19]					

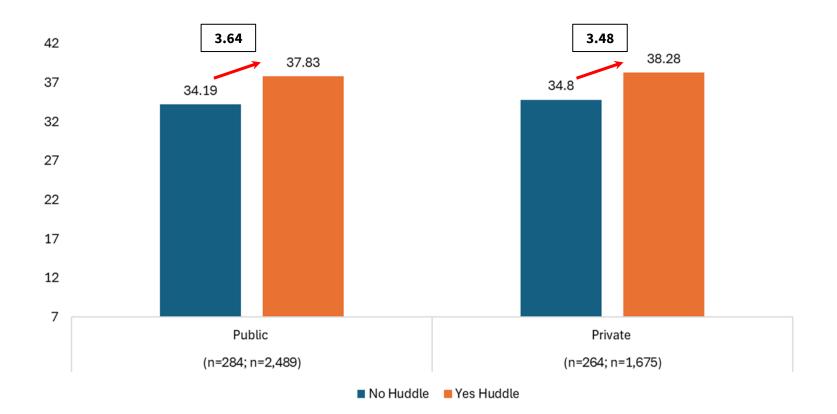
Note. M(Exp)= Mean score of the exposed group, b= Regression Coefficient, SE= Standard Error, CI= Confidence Interval

^a Adjusted for site, patient-reported age, educational attainment, health insurance, parity, delivery method, induction status, medical complications, length of time on the labor and delivery floor, miles traveled to the hospital, and the location of the hospital.

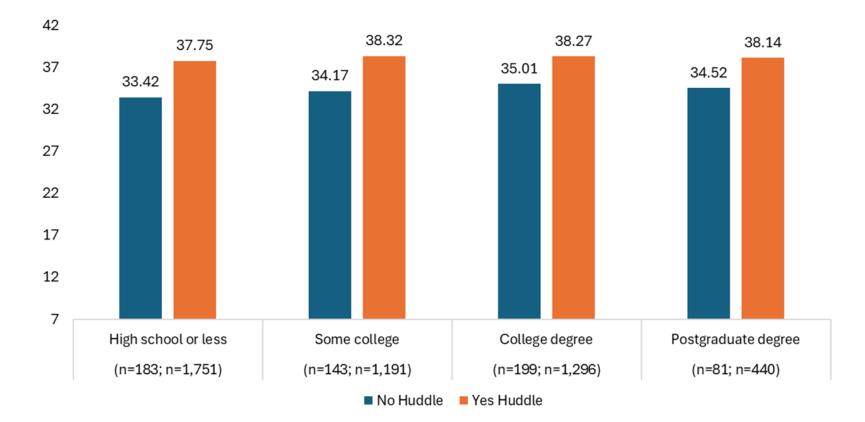
^b *p*-value is for the effect of receiving a huddle.

^cAdjusted coefficients for these groups are not reported due to low sample size.

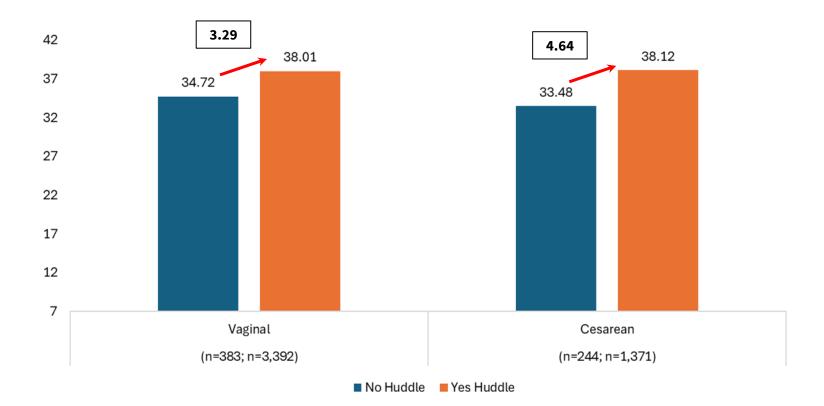
Mean MADM Score (7-42) by Labor Huddle Status & Insurance Type



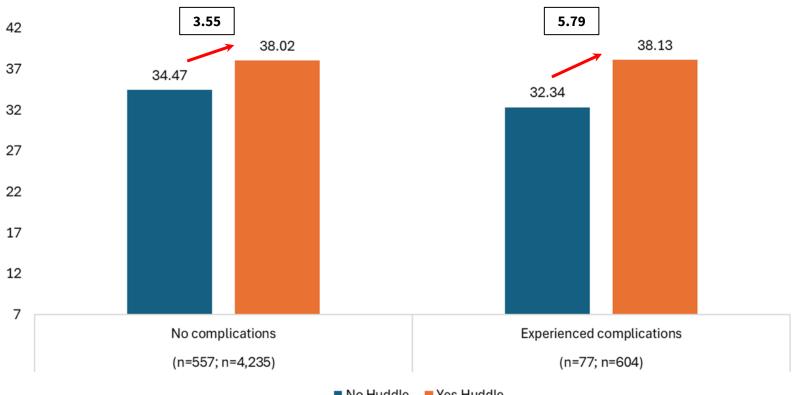
Mean MADM Score (7-42) by Labor Huddle Status & Education Level



Mean MADM Score (7-42) by Labor Huddle Status & Delivery Type



Mean MADM Score (7-42) by Labor Huddle Status & Experience of Complications



No Huddle Yes Huddle



Oklahoma TeamBirth Research: Trust Items (Health Care Relationship Trust Scale-Revised)

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Mean HCRTS-R and MADM scores by receipt of a TeamBirth huddle during labor

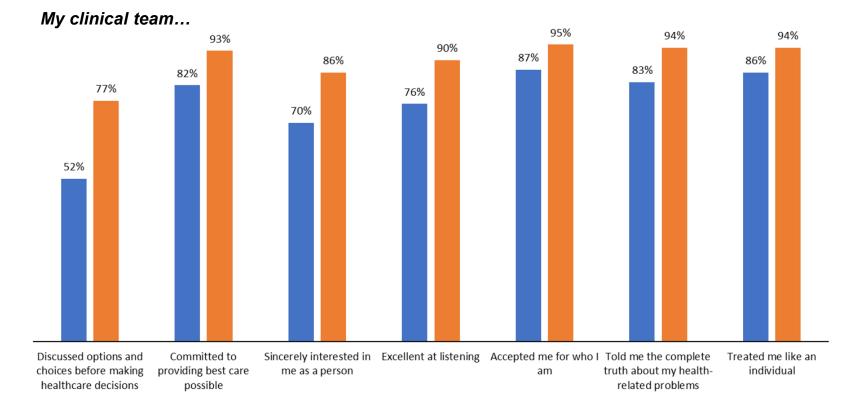
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	No	<mark>48.02</mark>	6.65	[47.64, 48.41]	<mark>35.26</mark>	7.31	[34.85, 35.68]

Note. M = Mean, *SD* = Standard Deviation, *Cl* = confidence interval

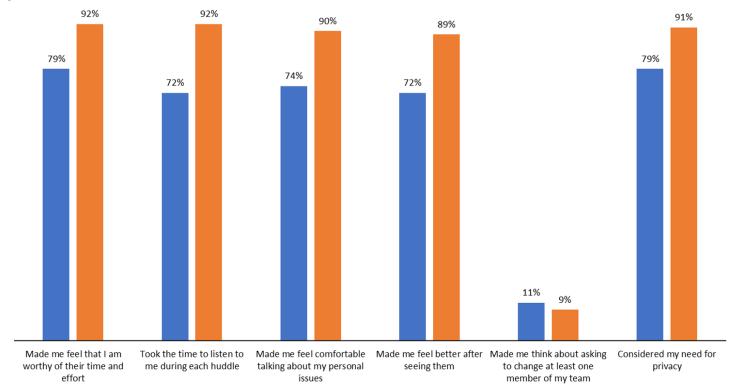
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^bA two-sample t-test was used to compare mean MADM scores by receipt of a huddle during labor (t(6,042)= -13.12, **p** = <.001). Summary MADM scores range from 6-42.

HCRST-R Items 1-7: Percent "All the Time" Responses by Huddle Status



HCRST-R Items 8-13: Percent "All the Time" Responses by Huddle Status



My clinical team...

Summary of mean HCRTS-R score differences by race and ethnicity

Race/Ethnicity Group	Unadjusted					Adjusted ^a				
	M (Exp)	b	SE	p^{B}	95% Cl	M (Exp)	b	SE	p^b	95% CI
NH White	50.37	2.32	.19	<.001	[1.94, 2.70]	50.42	1.98	.21	<.001	[1.55, 2.42]
Hispanic	49.90	.72	.36	.05	[.01 1.43]	50.37	.92	.38	.02	[.14, 1.70]
NH AIAN	50.12	2.36	.55	<.001	[1.28, 3.45]	50.10	1.95	.97	.06	[05, 3.95]
NH Multiracial	49.98	2.29	.53	<.001	[1.26, 3.32]	50.06	1.92	.82	.03	[.24, 3.59]
NH Black	49.88	2.65	.61	<.001	[1.46, 3.85]	50.00	2.02	.55	.001	[.89, 3.15]
NH Asian ^c	48.91	1.38	1.01	.17	[60, 3.36]					
NH Native Hawaiian ^c	49.92	5.78	1.91	.002	[2.04, 9.51]					

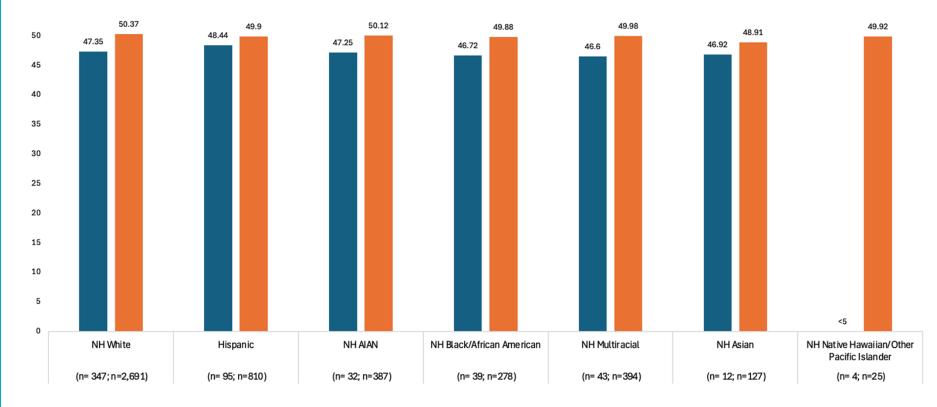
Note. M(Exp)= Mean score of the exposed group, b= Regression Coefficient, SE= Standard Error, CI= Confidence Interval

^a Adjusted for site, patient-reported age, educational attainment, health insurance, parity, delivery method, induction status, medical complications, length of time on the labor and delivery floor, miles traveled to the hospital, and the location of the hospital.

^b *p*-value is for the effect of receiving a huddle.

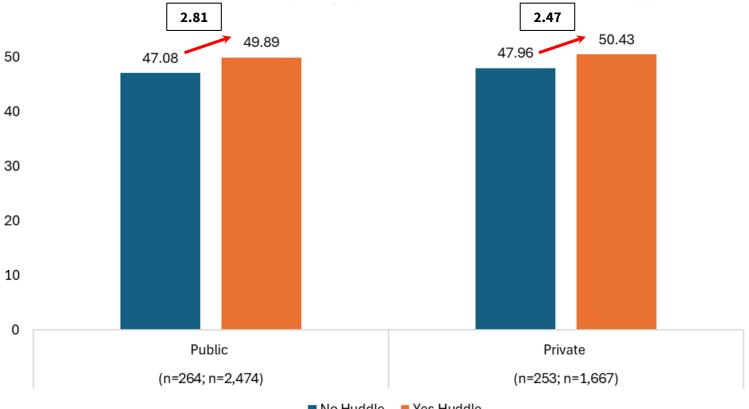
^cAdjusted coefficients for these groups are not reported due to low sample size.

Mean HCRTS-R Score (0-52) by Labor Huddle Status & Race/Ethnicity



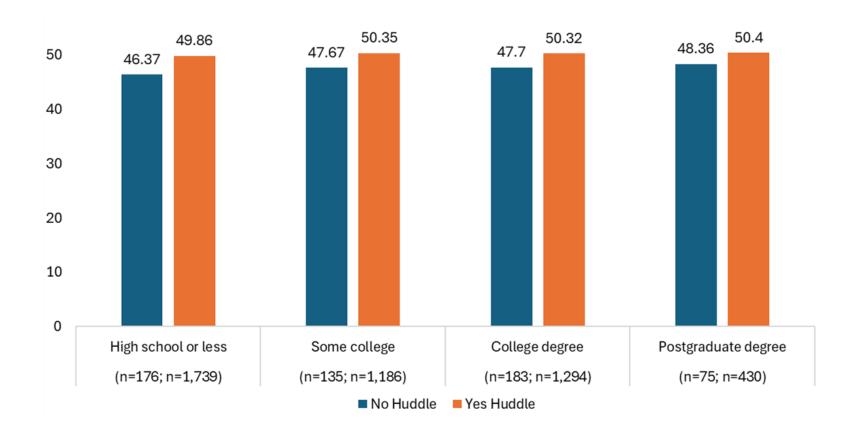
No Huddle Yes Huddle

Mean HCRTS-R Score (0-52) by Labor Huddle Status & Insurance Type

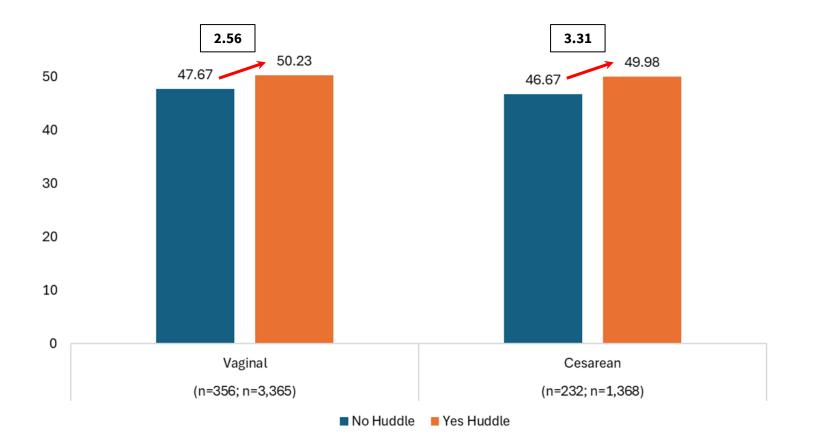


No Huddle Yes Huddle

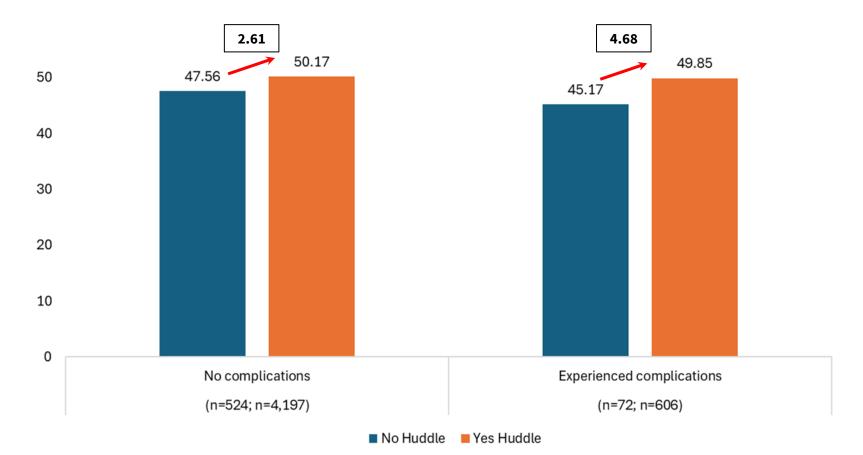
Mean HCRTS-R Score (0-52) by Labor Huddle Status & Education Level



Mean HCRTS-R Score (0-52) by Labor Huddle Status & Delivery Type



Mean HCRTS-R Score (0-52) by Labor Huddle Status & Experience of Complications





Patient Comments

TeamBirth **Patient** Feedback

""I loved my care team. My options throughout the process were clearly explained. Decision milestones were clearly communicated. And my preferences were recalled at the necessary times and acted upon, for example cord clamping after 90 seconds. *My* care afterwards has been great. I have had a very positive birth experience."

I experienced two separate false labors, admitted on one, followed by a very fast delivery on the third trip. **Each time the medical staff were kind, listened to all my needs, and treated me as an individual.**

I loved that **I** shared my birth preferences and was matched to a nurse accordingly. It was an AMAZING experience.

Everything was explained to me and I was **involved in every aspect**. Every doctor/resident/nurse I came in contact with were respectful and professional, **made me feel comfortable and made me feel like I was the only patient there.**

TeamBirth Patient Feedback

66

I loved how everyone I met introduced themselves and explained what they were going to do to ensure the health of me and my baby.

Having a team environment during labor was beneficial in me being comfortable

This was my second urgent C-section but first at this hospital. I felt included in a collaborative effort here instead of a victim of unfortunate circumstances. They made sure I understood every decision and the options I had for my care.

> We loved the huddles and felt very **involved and respected in the decisions** that were made

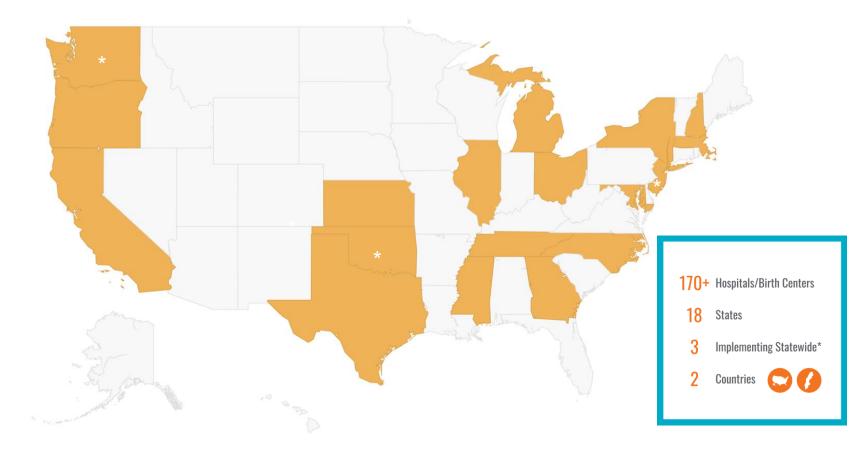
I always felt in the loop and **like I had** an important role in decision making They kept me informed on what was happening and it put me at ease and gave me confidence in the team

Very happy with the team and **how involved they were in including me when my birthing plan changed.**



TeamBirth Partnerships

TeamBirth is **spreading** nationally and globally



TeamBirth Participating Hospitals 2024

CALIFORNIA

Santa Rosa Memorial Hospital

GEORGIA Emory Decatur Emory University Midtown

KANSAS

Stormont Vail Health

MASSACHUSETTS

UMass Memorial UMass Health Alliance South Shore Hospital Baystate Franklin Medical Center Boston Medical Center Brigham and Women's Hospital Cape Cod Hospital Fairview Hospital Mercy Medical Center Sturdy Memorial Hospital St. Vincent Hospital Tufts Medical Center

MICHIGAN

Ascension St. John Hospital Detroit Ascension Providence Hospital Novi Ascension Providence Hospital Southfield Henry Ford Macomb Hospital Hillsdale Hospital McLaren Bay Region Family Birth Place Munson Healthcare Grayling Hospital ProMedica Charles and Virginia Hickman Hospital ProMedica Coldwater Regional Hospital ProMedica Monroe Regional Hospital Sparrow Hospital Trinity Health St. Mary Mercy Livonia Hospital Trinity Health St. Joseph Mercy Ann Arbor Hospital Trinity Health St. Joseph Mercy Oakland Hospital Trinity Health Mercy Health Mercy Campus Trinity Health Saint Mary's Grand Rapids

MISSISSIPPI

Ocean Springs Hospital Pascagoula Hospital

NEW HAMPSHIRE

Exeter Hospital

NEW JERSEY

Capital Health Hackensack University **HMH Jersey Shore** HMH JFK Medical Center Inspira Vineland Mary V. O'Shea Birth Center (MVOS) Mullica Hill + Inspira Elmer Penn Medicine Princeton **RWJ** Cooperman Barnabas **RWJ Jersey City RWJ Monmouth RWJ New Brunswick RWJ** Trinitas St. Peter's Hospital Virtua Midwifery and Wellness Center Virtua Mount Holly Hospital Virtua Our Lady of Lourdes Virtua Voorhees

OKLAHOMA

AllianceHealth Durant Ascension St. John Jane Phillips Ascension St. John Medical Center Ascension St. John Owasso Bailey Medical Center

TeamBirth Participating Hospitals 2024

OKLAHOMA, continued

Cherokee Nation WW Hastings Hospital Chickasaw Nation Medical Center Choctaw Nation Health Care Center Claremore Indian Hospital **Comanche County Memorial Hospital** Duncan Regional Hospital **Great Plains Regional Medical Center** Hillcrest Hospital Claremore Hillcrest Hospital South Hillcrest Medical Center **INTEGRIS Bass Baptist Health Center INTEGRIS Health Baptist Medical Center INTEGRIS Health Canadian Valley Hospital INTEGRIS** Health Edmond Hospital **INTEGRIS Health Grove Hospital INTEGRIS Health Miami Hospital INTEGRIS Health Ponca City Hospital** INTEGRIS Health Southwest Medical Center INTEGRIS Health Woodward Hospital Jackson County Memorial Hospital Lakeside Women's Hospital McAlester Regional Health Center McCurtain Memorial Hospital Mercy Hospital Ada Mercy Hospital Ardmore Mercy Hospital Oklahoma City

Norman Regional Health System - HealthPlex Campus Northeastern Health System OSU Medical Center Saint Francis Hospital Saint Francis Hospital Muskogee Saint Francis Hospital South Southwestern Medical Center SSM Health St. Anthony Hospital - Oklahoma City SSM Health St. Anthony Hospital - Shawnee St. Mary's Regional Medical Center Stillwater Medical Center Oklahoma Children's Hospital at OU Health Weatherford Regional Hospital

OHIO

Ahuja Medical Center Cleveland Clinic Akron General Hospital Cleveland Clinic Hillcrest Hospital Cleveland Clinic Fairview Hospital Geauga Medical Center Grant Medical Center MacDonald Women's Center MacDonald SJMC MacDonald TriPointl

OREGON

Legacy Silverton Medical Center Providence Portland Medical Center Providence Willamette Falls Medical Center Providence St. Vincent Medical Center Randall Children's Hospital at Legacy Emanuel Legacy Good Samaritan Medical Center Legacy Meridian Park Medical Center Legacy Mount Hood Medical Center

TEXAS

Baylor Scott and White All Saints Medical Center John Peter Smith Hospital Methodist Dallas Medical Center Texas Health Alliance Texas Health Arlington Memorial Texas Health Fort Worth Texas Health Harris Methodist Hurst-Euless-Bedford Texas Health Southwest Fort Worth

WASHINGTON

Astria Sunnyside Confluence Hospital Coulee Medical Center EvergreenHealth Forks Community Hospital

TeamBirth Participating Hospitals 2024

WASHINGTON, continued

Island Hospital Jefferson Healthcare **Kittitas Valley Healthcare** Lake Chelan Community Hospital Legacy Salmon Creek Madigan Army Medical Center Mason General Mid-Valley Hospital MultiCare Auburn Medical Center MultiCare Capital Medical Center MultiCare Deaconess Hospital MultiCare Good Samaritan Hospital MultiCare Valley Hospital Spokane MultiCare Yakima Memorial Hospital **Overlake Medical Center** PeaceHealth St John PeaceHealth St. Joseph PeaceHealth SW Medical Center Prosser Memorial Health Providence Centralia Hospital Providence Everett Regional Medical Center Providence Holy Family Hospital Providence Kadlec Providence Mount Carmel Hospital

Providence Sacred Heart Medical Center Providence St. Mary Providence St. Peter Hospital Pullman Regional Hospital Samaritan Healthcare **Skagit Valley Hospital** St. Francis Hospital Swedish Edmonds Swedish First Hill Swedish Issaguah UW Medical Center - Montlake UW Medical Center - Northwest **UW Valley Medical Center** Virginia Mason St Anne Virginia Mason St Michael Whidbey Health Whitman Hospital

TENNESSEE

University of Tennessee Medical Center Ascension Saint Thomas Hospital Midtown Baptist Memorial Hospital for Women - Memphis Regional One Health Hardin Medical Center TriStar StoneCrest Medical Center

SWEDEN

Karolinska University Hospital, Huddinge Karolinska University Hospital, Solna Lund Hospital, Region Skane Karlstad Hospital Halmstad Hospital Ostersund Hospital Varberg Hospital Skane University Hospital Malmo Uppsala University Hospital



WHAT IS TEAMBIRTH

TeamBirth helps you be as involved as you would like in decisions about your pregnancy. labor, delivery, and after delivery. Your plan and preferences can change often during or after your birth. Knowing what's most important to you helps your care team give you the best care.

You will meet with your care team in regular huddles where you will talk about how things are going and what comes next. Huddles will be a time to share what you want, what questions you have, and how you're feeling. What you talk about during those huddles will then be written on a whiteboard in your room.











ARIADNE LABS

DELIVERY DECISIONS INITIATIVE

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