Nevada Department of Health and Human Services
DIVISION OF PUBLIC AND BEHAVIORAL HEALTH

# Maternal and Child Health Advisory Board

## MEETING AGENDA

### DATE: May 7, 2021 TIME: 9:00 AM

Pursuant to Section 1 of the Declaration of Emergency Directive 006, the requirement contained in Nevada Revised Statutes (NRS) 241.023(1)(b) that there be a physical location designated for meetings of public bodies where members of the public are permitted to attend and participate is suspended due to the COVID-19 emergency. The meeting will be held via teleconference only. **Members of the public who wish to attend and participate remotely are strongly encouraged to do so by utilizing the following meeting link or call-in number:**

CALL-IN NUMBER: 1-415-655-0001 ACCESS CODE: 187 234 2201

Video conference link:

https://nvhealth.webex.com/nvhealth/j.php?MTID=m9ed023d2f79a4c74c9dc73901670770c

If calling in using a cell phone, please remember to mute your phone

*Note: Unless a specific time is noted, agenda items may be taken out of order, combined for consideration, and or removed from the agenda at the chairperson's discretion.*

1. **Call to order/roll call – Veronica Galas, RN, BSN; Chair**
   Members: Veronica Galas, RN, BSN (Chair), Tyree G. Davis, D.D.S; Fred Schultz; Marsha Matsunaga Kirgan, MD; Keith Brill, MD; Linda Gabor, MSN, RN; Noah Kohn, MD; Melinda Hoskins, MS, APRN, CNM; and Fatima Taylor, M.Ed.,CPM; Senator Marilyn Dondero Loop; Assemblywoman Daniele Monroe-Moreno

2. **Public Comment**
   No action may be taken on a matter raised under this item unless the matter is included on an agenda as an item upon which action may be taken. The Chair of the Maternal and Child Health Advisory Board will place a five (5) minute time limit on the time individuals addressing the Maternal and Child Health Advisory Board.

3. **FOR POSSIBLE ACTION: Approval of draft minutes from the February 5, 2021 and April 9, 2021 meetings – Veronica Galas, RN, BSN; Chair**

   PUBLIC COMMENT

4. **FOR POSSIBLE ACTION: Presentation and possible recommendations on Nevada Strong Start ECCS-Health Integration Health Resources and Services Administration (HRSA) Grant - Denise Tanata, JD, Nevada Strong Start Early Childhood Comprehensive Systems (ECCS) Director, The Children's Cabinet**

   PUBLIC COMMENT

5. **FOR POSSIBLE ACTION: Presentation and possible recommendations on Maternal and Child Health (MCH) COVID-19 Data and Resources – Jen Thompson, Health Program Manager II, Office of Analytics, Department of Health and Human Services**

   PUBLIC COMMENT

6. **FOR POSSIBLE ACTION: Discussion and possible action to draft letter of recommendation to the Division of Public and Behavioral Health (DPBH) Administrator relating to legislation presently before the 81st (2021) Session of the Nevada Legislature regarding maternal and child health including, but not limited to, AB 119, AB 192, AB 198, AB 256, and AB 287 – Veronica Galas, RN, BSN; Chair**

PUBLIC COMMENT

7. **FOR POSSIBLE ACTION: Discussion and possible recommendations regarding consideration of new appointees and/or to renew expiring terms for MCHAB members and elections for Chairperson and Vice Chairperson. Recommendations will be submitted to the Administrator for consideration of submission to the Nevada State Board of Health for consideration of renewal appointment – Veronica Galas, RN, BSN; Chair**

PUBLIC COMMENT

8. **FOR POSSIBLE ACTION: Updates and possible recommendations on Alliance for Innovation on Maternal Health (AIM) and the Maternal Mortality Review Committee (MMRC) – Vickie Ives, MA, Maternal, Child and Adolescent Health Section Manager, Division of Public and Behavioral Health**

PUBLIC COMMENT

9. **INFORMATIONAL: Discussion on MCH Reports and MCH Updates – Mitch DeValliere, DC, Title V MCH Program Manager, Division of Public and Behavioral Health**

10. **Make recommendation for future agenda items - Veronica Galas, RN, BSN, Chair**

11. **Public Comment**

12. **Adjournment**

**In accordance with Nevada Governor Sisolak's Declaration of Emergency Directive 006 there will not be a physical location for the Maternal and Child Health Advisory Board meeting. The public is strongly encouraged to participate by phone using phone number 1-415-655-0001, Access Code 187 234 2201 and downloading any material provided for the meeting at the website addresses below.**

- As per Nevada Governor Sisolak's Declaration of Emergency Directive 006; Subsection 3: The requirements contained in NRS 241.020 (4) (a) that public notice agendas be posted at physical locations within the State of Nevada are suspended.
- As per Nevada Governor Sisolak's Declaration of Emergency Directive 006; Subsection 4: Public bodies must still comply with requirements in NRS 241.020 (4)(b) and NRS 241.020 (4)(c) that public notice agendas be posted to Nevada's notice website and the public body's website, if it maintains one along with providing a copy to any person who has requested one via U.S. mail or electronic mail.
- As per Nevada Governor Sisolak's Declaration of Emergency Directive 006; Subsection 5: The requirement contained in NRS 241.020 (3)(c) that physical locations be available for the public to receive supporting material for public meetings is suspended.
- As per Nevada Governor Sisolak's Declaration of Emergency Directive 006; Subsection 6: If a public body holds a meeting and does not provide a physical location where supporting material is available to the public, the public body must provide on its public notice agenda the name and contact information for the person designated by the public body from whom a member of the public may request supporting material electronically and must post supporting material to the public body's website, if it maintains one.

**NOTICES OF PUBLIC MEETING HAVE BEEN POSTED AT THE FOLLOWING LOCATIONS:**

**In accordance with Governor Sisolak's Declaration of Emergency Directive 006 suspending state law provisions requiring the posting of public meeting agendas at physical locations, this agenda and supporting materials were posted electronically at the following website addresses:**

The Nevada Division of Public and Behavioral Health website: http://www.dpbh.nv.gov
The Department of Administration's website at https://notice.nv.gov/

We are pleased to make reasonable accommodations for members of the public who are disabled and wish to attend the teleconferenced meeting. If special arrangements are necessary, please notify Desiree Wenzel in writing by email (ddwenzel@health.nv.gov), by mail (Maternal and Child Health Advisory Board, Nevada Division of Public and Behavioral Health, 4150 Technology Way, Suite 210, Carson City, NV 89706) or by calling (775) 684-4235 before the meeting date. Anyone who wants to be on the Maternal and Child Health Advisory Board mailing list must submit a written request every six months to the Nevada Division of Public and Behavioral Health at the address listed above.

If you need supporting documents for this meeting, please notify Desiree Wenzel, Division of Public and Behavioral Health, Bureau of Child, Family and Community Wellness, at (775) 434-9150 or by email at ddwenzel@health.nv.gov. Supporting materials are available for the public on the Nevada Division of Public and Behavioral Health Website at www.dpbh.nv.gov.

This body will provide at least two public comment periods in compliance with the minimum requirements of the Open Meeting Law prior to adjournment. Additionally, it is the goal of the Maternal and Child Health Advisory Board to also afford the public with an item-specific public comment period. No action may be taken on a matter raised under public comment unless the item has been specifically included on the agenda as an item upon which action may be taken. The Chair retains discretion to only provide for the Open Meeting Law's minimum public comment and not call for additional item-specific public comment when it is deemed necessary by the chair to the orderly conduct of the meeting.

Written comments in excess of one (1) typed page on any agenda items which requires a vote are respectfully requested to be submitted to the Maternal and Child Health Advisory Board at the below address five(5) calendar days prior to the meeting to ensure that adequate consideration is given to the material.

**MATERNAL AND CHILD HEALTH ADVISORY BOARD**
**DRAFT MINUTES**
**February 5, 2021**
**9:00 AM**

The Maternal and Child Health Advisory Board (MCHAB) held a public meeting on February 5, 2021, beginning at 9:00 A.M. at the following locations:

Call in Number: 1-415-655-0001
Access Code: 146 537 7912
Video: https://nvhealth.webex.com/nvhealth/j.php?MTID=m90e7f71399d3f36dd5ea2e5dd104d133

**BOARD MEMBERS PRESENT**
Tyree G. Davis, D.D.S
Keith Brill, MD
Melinda Hoskins, MS, APRN, CNM, IBCLC
Linda Gabor, MSN, RN
Fatima Taylor, MEd, CPM
Marsha Matsunaga-Kirgan, MD

**BOARD MEMBERS NOT PRESENT**
Senator Marilyn Dondero Loop
Assemblywoman Daniele Monroe-Moreno
Noah Kohn, MD
Fred Schultz
Chair Veronica (Roni) Galas

**DIVISION OF PUBLIC AND BEHAVIORAL HEALTH (DPBH) STAFF PRESENT**
Karissa Loper, MPH, Deputy Bureau Chief, Child Family and Community Wellness (CFCW)
Vickie Ives, MA, Section Manager, Maternal, Child, and Adolescent Health (MCAH), CFCW
Mitch DeValliere, DC, Program Manager, Title V Maternal and Child Health (MCH), MCAH, CFCW
Evelyn Dryer, Program Manager, Maternal, Infant, and Early Childhood Home Visiting (MIECHV), MCAH, CFCW
Tami Conn, Health Program Specialist II, State Systems Development Initiative (SSDI), MCAH, CFCW
Kagan Griffin, MPH, RD, MCH Epidemiologist and Pregnancy Risk Assessment Monitoring System (PRAMS) Lead Coordinator, MCAH, CFCW
Eileen Hough, MPH, Program Coordinator, Adolescent Health and Wellness, MCAH, CFCW
Yesenia Pacheco, Program Coordinator, Rape Prevention and Education (RPE), MCAH, CFCW
Jazmin Sarmiento, Program Coordinator, Personal Responsibility and Education Program (PREP), MCAH, CFCW
Elizabeth Komito Program Coordinator, MIECHV, CFCW
Vanessa Rauch, Program Coordinator, Account for Family Planning, MCAH, CFCW
Lawanda Jones, Grants and Project Analyst and PRAMS Coordinator, MCAH, CFCW
McKenna Bacon, Administrative Assistant IV, Bureau Office Manager, CFCW
Desiree Wenzel, Administrative Assistant III, Office Manager, MCAH, CFCW
Jonathan Figueroa, Administrative Assistant II, MCAH, CFCW
Stephanie Camacho, Administrative Assistant II, MCAH, CFCW
Madisson Jacobs, Administrative Assistant I, MCAH, CFCW
Lisa Light, Accounting Assistant III, Immunization Program and MCAH, CFCW

**OTHERS PRESENT**
Allyson Juneau-Butler, M.Ed., CPM, LM-Midwives College of Utah/National College of Midwifery
Lezlie Mayville, Governor's Office, Patient Protection Commission

Linda Anderson, JD, Nevada Public Health Foundation
Lea Cartwright. Children's Advocacy Alliance
Antonia Capurro, DMD, MPH, MBA, Nevada State Dental Health Officer, University of Nevada, Las Vegas
Denise Tanata, JD
Dominique Seck, Nevada's Office of Minority Health and Equity
Yarleny Roa-Dugan, RN, Patient Protection Commission
Jennifer Thompson, Health Program Manager II, Office of Analytics, Department of Health and Human Services
Jollina Simpson, IBCLC, President, Kijiji Sisterhood

1. **Call to Order- Roll Call and Introductions**
   Dr. Tyree Davis called the meeting to order at 9:01AM.

   Roll call was taken, and a quorum of the MCHAB was present.

2. **Public Comment**
   Denise Tanata commented about a Health Resources Services Administration grant opportunity benefitting prenatal to three-year-old children. She encouraged MCHAB members to provide input. She would like to give a presentation at the next MCHAB meeting.

3. **Approval of draft minutes from November 6, 2020, meeting – Tyree G. Davis D.D.S**

   **MELINDA HOSKINS ENTERTAINED A MOTION TO APPROVE THE NOVEMBER 6, 2020 MEETING MINUTES. LINDA GABOR SECONDED THE MOTION WHICH PASSED UNANIMOUSLY**

4. **Presentation and approval of possible recommendations on Oral Health: A Maternal and Child Health Priority- Antonina Capurro, DMD, MPH, MBA, Nevada State Dental Health Officer, University of Nevada, Las Vegas**

   Dr. Davis indicated women over age twenty-one (21) need to receive periodontal care during pregnancy and added many patients think it is normal to lose teeth during pregnancy, but it is not normal. Vertical transmission transfers bacteria to the infant/child. Dr. Davis stated it's sad there are many dentists afraid to work with pregnant women. Communication with Obstetrician-Gynecologist (OB-GYN) providers is necessary in case of complications, and noted dentists want to work with OB-GYNs. Dr. Davis stated that dentists want to work on pregnant clients, but their doctors know the patient better than the dentist. Dentists also want to communicate with the OB-GYNs if any medication is needed.

   Dr. Keith Brill stated he has never refused a patient to receive dental treatment during pregnancy. There is a standard form in his office indicating all the medications safe to use during pregnancy. Dr. Brill stated he could not think of any reason to refuse dental treatment.

   Dr. Capurro stated there is a referral pad for the OB-GYN to check off which medications are allowed, and the patient can take the form to their dentist. With Medicaid, time is essential, so the patient needs to get the service done during pregnancy, or Medicaid will not cover the services. Dr. Capurro wants to investigate a way to get this resource out to the public.

Dr. Davis stated dentists want to make sure there is nothing to be concerned about with the patient. Dentists need to know about the pregnancy and not create any patient problems. He suggests that a better education process needs to be done by the dental profession.

Dr. Marsha Matsunaga-Kirgan stated as an OB-GYN, she strongly supports dental disease treatment. She also thinks Dr. Capurro's referral slip allowing the patient to go to the dentist is a great way to bypass barriers mentioned earlier by Dr. Brill.

Dr. Capurro stated that she could share the information with the Board.

Dr. Davis stated this is an action item. He asked Dr. Capurro if she had any questions for the Board or anyway the Board could help her.

Dr. Capurro suggests help getting the word out to children across the state about "Sip and Flip" would be beneficial. Children are coming into dental offices with more emergencies. There is a need to get the flyers disseminated and get the word out to the community and resources for the rural Nevada project.

Dr. Davis stated there is a mobile clinic for the rural areas.

Dr. Davis asked for any public comment.

Jollina Simpson stated she heard a lot of parent shaming in the presentation. She said it is essential to educate without shaming when it comes to community action. Ms. Simpson also indicated it is important to address poverty as a co-conspirator when families seek care and miss work. She said spoken words affect the community.

Dr. Davis stated that we need to focus on the education process. It's how you say something, and not just what you say.

Allyson Juneau-Butler stated it's crucial to include midwives to get the message out to all.

Dr. Davis asked how they would like dentists to help as dentists are always looking for a way to educate patients.

Dr. Capurro encouraged Ms. Butler to reach out if she has any questions.

**5. Presentation and approval of possible recommendations on MCH Epidemiologist report on Pregnancy Risk Assessment Monitoring System (PRAMS) Data, Low Birth Weight and Periodontal Disease – Kagan Griffin, MPH, RD, MCH Epidemiologist, Division of Public and Behavioral Health**

Dr. Davis indicated there is a problem with the educational aspect of going to the dentist, and it is the dental profession's problem. He stated it is difficult to know when it is the right time to educate about going to the dentist since the dentist doesn't know when someone will become pregnant.

Dr. Davis indicated that this is an action item if Ms. Griffin had any questions for the Board.

Ms. Griffin stated no but encouraged promoting the PRAMS study.

Tami Conn stated they could mail out brochures to their offices to promote the PRAMS survey. It is important to let patients know that PRAMS is a legitimate survey.

Melinda Hoskins asked if there could be a campaign like the "Go Before You Show" campaign to have people respond to the PRAMS survey.

Ms. Conn stated the program has done social media and radio campaigns.

Dr. Brill stated there are many offices in Nevada, but only a certain number of places deliver babies. He asked if we could get in touch with all labor and delivery floors and birthing centers to give them brochures.

Ms. Conn stated that each mom who has a baby receives a "pink packet" which contains a brochure.

Dr. Marsha Matsunaga-Kirgan stated when the patients go home, they have plenty of paperwork, but most families will not go through the paperwork with a newborn. If the health care providers and post-partum nurses point this out, it will help, and she was pretty sure a meeting could be arranged with the nursing staff at UMC and staff could ask their participation in speaking to the patients.

Ms. Conn indicated that would be great.

Ms. Hoskins stated that it's not a good time to do a lot of teaching for the mothers at the hospital.

Dr. Davis stated mothers have so much going on during that time. He suggested pediatric check-ups might be where moms are more open to education.

No Public Comment

**6. Presentation and approval of possible recommendations on Maternal and Child Health (MCH) COVID-19 Data and Resources – Jennifer Thompson, Health Program Manager II, Office of Analytics, Department of Health and Human Services**

Dr. Davis stated he continues to see the positive rate in ages 20-39. He has concern over super spreader events, and he hopes people will take COVID-19 more seriously.

Dr. Davis indicated this is an action item if anyone has any comments or questions.

Ms. Thompson stated no.

Dr. Davis stated he was alarmed about the increase in deaths but was excited to hear about the vaccine getting out to the public. He encouraged those eligible to receive the vaccine to do so as soon as possible.

Vickie Ives stated the long-haul data requested in the last MCHAB meeting was not currently being collected per Office of Analytics and there might be routes through other data sources in the future.

Dr. Davis stated he has seen that there is difficulty collecting data.

Dr. Brill asked if the state has rapid testing. He stated getting everyone tested more frequently might get the rates under control, and vaccines are also a priority at this point.

Dr. Davis stated people getting tested more often will help keep the spread of COVID-19 down.

Ms. Ives indicated she is more than happy to follow up to see if we could get a response about rapid testing.

Dr. Brill stated that pushing widespread testing at a federal level and in Nevada would be helpful.

No Public Comment

**7. Presentation and approval of possible recommendations on Alliance for Innovation on Maternal Health (AIM) and the Maternal Mortality Review Committee (MMRC) – Vickie Ives, MA, Maternal, Child and Adolescent Health Section Manager, Division of Public and Behavioral Health**

Ms. Ives presented on the Alliance for Innovation on Maternal Health (AIM) and the Maternal Mortality Review Committee (MMRC). She was pleased to announce they are very close to finalizing AIM's data system. Once the AIM leads approve, staff will move forward for planning outreach to birthing hospitals on implementing the patient safety bundle to prevent maternal mortality and severe maternal morbidity. She noted the release of the MMRC report and the Office of Analytics maternal mortality and severe maternal morbidity reports.

Ms. Simpson stated that several members have a strong interest in improving maternal health in Nevada.

Dr. Brill stated he is not on the MMRC but deals with ACOG. He believes the regional ACOG MMRC semiannual meeting will be in March.

Ms. Ives stated MMRC support staff plan participate. She also noted the ACOG Region in which Nevada is located has a preventable maternal mortality percentage of 80% as opposed to 60 to 64% nationally.

Ms. Simpson stated the support of the Board helps with these cases. Not speaking to the community has a significant impact on the medical staff.

Dr. Davis asked if there was a specific ask since it is an action item.

Ms. Ives stated no.

No Public Comment

**8. Updates and approval of possible recommendations on selected MCH related Bill Draft Requests(BDRs) of the 81st Legislative Session – Mitch DeValliere, DC, Title V MCH Program Manager, Division of Public and Behavioral Health**

Dr. Davis asked if Dr. DeValliere could provide the website where people can go to look up the BDRs.

Dr. DeValliere stated that he would provide the link for the members to check the BDRs.

Dr. Davis stated this is an action item. During the previous legislative session, the MCHAB created a legislative subcommittee where MCHAB members reviewed and decided which bills needed to be identified to make recommendations. He highly encouraged this to happen this session. He stated he was willing to accept a motion for the legislative subcommittee.

**DR. BRILL ENTERTAINED A MOTION TO APPROVE THE LEGISLATIVE SESSION SUBCOMMITTEE. LINDA GABOR SECONDED THE MOTION WHICH PASSED UNANIMOUSLY**

Ms. Gabor stated last time we had a meeting to get feedback on topics of focus. Ms. Gabor asked if they would consider the meeting again this session.

Dr. Davis stated yes.

Ms. Gabor stated that if she remembered correctly, the MCHAB prioritized which of the BDR's to include recommendations.

Ms. Ives stated the Chair could call a meeting at any time and noted if the motion passes with the voice vote, they can move forward with the subcommittee.

Dr. Davis asked for the motion to be reread.

Ms. Ives stated there was a motion on formation of a subcommittee to review bills and BDR's for a possible letter to the Administrator with recommendations.

Dr. Davis stated motion carried.

Dr. Davis asked if any Board members would like to participate.

Ms. Hoskins stated she would serve again.

Ms. Gabor stated she would serve again.

Dr. Brill stated he would help.

Ms. Simpson stated she would be happy to help.

No Public Comment

9. **INFORMATIONAL: Discussion on MCH Reports and MCH Updates – Mitch DeValliere, DC, Title V MCH Program Manager, Division of Public and Behavioral Health**

Dr. DeValliere highlighted key points related to the MCH updates.

Dr. Davis asked for any additional comments

No Public Comment

10. **Make recommendations for future agenda items**

Dr. Davis stated Denise Tanata would present at the next meeting for the ECCS. Other agenda items include COVID data update, MCH reports, MMRC, and BDR updates. Dr. Davis reminded the MCHAB they could submit any additional agenda items before the next meeting on May 7, 2021.

Dr. Davis asked for any additional comments.

No public comment.

11. **Adjournment**

**DR. MATSUNAGA-KIRGAN ENTERTAINED A MOTION TO ADJOURN. MELINDA HOSKINS SECONDED THE MOTION WHICH PASSED UNANIMOUSLY**

Meeting adjourned at 11:02AM.

**MATERNAL AND CHILD HEALTH ADVISORY BOARD**
**DRAFT MINUTES**
**April 9, 2021**
**9:00 AM**

The Maternal and Child Health Advisory Board (MCHAB) Subcommittee held a public meeting on April 9, 2021, beginning at 9:00 A.M. at the following locations:

Call in Number: 1-415-655-0001
Access Code: 187 454 7821
Video: https:
https://nvhealth.webex.com/nvhealth/j.php?MTID=mf2b1076ee5838d8df12135e4feb3bcb8

**BOARD MEMBERS PRESENT**
Tyree G. Davis, D.D.S.
Melinda Hoskins, MS, APRN, CNM, IBCLC
Linda Gabor, MSN, RN
Jollina Simpson, IBCLC, President, Kijiji Sisterhood

**BOARD MEMBERS NOT PRESENT**
Keith Brill, MD

**DIVISION OF PUBLIC AND BEHAVIORAL HEALTH (DPBH) STAFF PRESENT**
Vickie Ives, MA, Section Manager, Maternal, Child, and Adolescent Health (MCAH), Child, Family and Community Wellness (CFCW)
Mitch DeValliere, DC, Program Manager, Title V Maternal and Child Health (MCH), MCAH, CFCW
Amber Hise, RD, Program Coordinator, Maternal and Infant Health, MCH, MCAH, CFCW
Yesenia Pacheco, Program Coordinator, Rape Prevention and Education (RPE), MCAH, CFCW
Jazmin Sarmiento, Program Coordinator, Personal Responsibility and Education Program (PREP), MCAH, CFCW
McKenna Bacon, Administrative Assistant IV, Bureau Office Manager, CFCW
Desiree Wenzel, Administrative Assistant III, Office Manager, MCAH, CFCW
Stephanie Camacho, Administrative Assistant II, MCAH, CFCW

**OTHERS PRESENT**
Lezlie Mayville, Governor's Office, Patient Protection Commission
Denise Tanata, JD
Dominique Seck, Nevada's Office of Minority Health and Equity
Jennifer Vanderlaan, PhD, MPH, CNM, FNP, Assistant Professor, University of Nevada, Las Vegas (UNLV)

1. **Call to Order- Roll Call and Introductions**
   Dr. Tyree Davis called the meeting to order at 9:04 AM.

   Roll call was taken, and a quorum of the MCHAB Subcommittee was present.

2. **Public Comment**
   No Public Comment.

3. **Discussion of the purpose and operation of the subcommittee as outlined in the draft minutes from the February 5, 2021 meeting of the Maternal Child and Health Advisory Board.**

Dr. Davis stated the minutes from the February 5, 2021 meeting and agenda item eight mention approval of possible recommendations on the bill draft requests (BDRs) for the 81st Legislative Session. He also mentioned two years ago the committee reviewed the BDR's and highlighted the most important ones to review.

Dr. Davis noted the subcommittee went through the lists to prioritize and met at the next meeting to decide which ones were the most important to choose. The subcommittee drafted a letter to the Division of Public and Behavioral Health.

Dr. Davis stated he has taken on a new position and is not sure when he will be able to take time off. He asked if someone could step in as the chair of the subcommittee in the meantime?

Linda Gabor volunteered to be the chair of the subcommittee.

**JOLLINA SIMPSON ENTERTAINED A MOTION TO APPROVE LINDA GABOR AS THE CHAIR OF THE SUBCOMITTEE, MELINDA HOSKINS SECONDED THE MOTION WHICH PASSED UNANIMOUSLY**

Chair Gabor asked for any public comment.

No Public Comment

4. **For Possible Action: Highlights of Bill Draft Requests (BDRs) and Bill of the 81st Legislative Session relating to Maternal and Child Health topics for discussion and possible recommendations including, but not limited to:**

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|---|---|
| AB 59 | Revises various provisions relating to tobacco |
| AB 119 | Revises provisions governing the Maternal Mortality Review Committee. |
| AB 164 | Establishes provisions relating to the dispensing of certain contraceptives |
| AB 189 | Provides for presumptive Medicaid eligibility for pregnant women. |
| AB 191 | Requires Medicaid coverage of services provided by community health workers. |
| AB 192 | Revises provisions governing the testing of pregnant women for sexually transmitted infections. |
| AB 193 | Revises provisions governing Medicaid coverage for pregnant women. |
| AB 198 | Revises provisions governing health care for women. |
| AB 224 | Provides for access to feminine hygiene products. |
| AB 228 | Provides for the Children's Advocacy Center. |
| AB 256 | Provides for Medicaid coverage for doulas. |
| AB 269 | Authorizes licensed dentists, dental hygienists, and dental therapists to administer vaccines and makes certain other changes related to the practice of dentistry. |
| AB 274 | Revises provisions governing fertility preservation for men and women. |
| AB 287 | Revises provisions governing women's health. Freestanding Birth Centers |

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|---|---|
| AB 387 | Revises provisions governing women's health. Midwives |
| SB 5 | Makes changes relating to telehealth. |
| SB 36 | Revises provisions relating to plans for responses to crises, emergencies, and suicides by schools. |
| SB 69 | Revises provisions relating to behavioral health. |
| SB 86 | Requires the State Plan for Medicaid to include coverage for donor breast milk and certain related products. |
| SB 96 | Makes various changes relating to services provided to persons with autism spectrum disorders. |
| SB 189 | Revises provisions relating to the eligibility of children for Medicaid. |
| SB 190 | Provides for the dispensing of contraceptives. |
| SB 211 | Establishes requirements relating to testing for sexually transmitted diseases |
| SB 215 | Revises provisions relating to competency-based education. |
| SB 271 | Provides for the licensing of professional midwives. |
| SB 341 | Makes changes concerning disparities in health care, including, without limitation, disparities relating to services to support mental health and emotional well-being. |
| SB 391 | Dentists and teledentistry |
| BDR 40-102 | Revises provisions governing blood testing for pregnant women. |

Dr. Davis stated Senate Bill (SB)SB 269 authorizes licensed dentists, dental hygienists, and dental therapists to administer vaccines, and make changes related to the practice of dentistry. This authorization would not only include the COVID vaccines, but would also include other vaccines like human papillomavirus (HPV). He also stated there has been strong support for SB 269. Dr. Davis asked if there are any bills in jeopardy and said those are some of the things they need to think about.

Ms. Gabor agreed and asked Dr. Davis if there were any other bills in which he is interested.

Dr. Davis mentioned SB 391 regarding dentists and teledentistry. He stated he used teledentistry for the first time last week, and it was nice for the patient because they were unable to come in for an in-person office visit. Dr. Davis stated SB 269 and SB 391 are the only two specific to him, and as a Maternal and Child Health Advisory Board member, he thinks the focus needs to on the ones they feel are more specific to this board.

Jollina Simpson stated AB 387 directly affects maternal health, as does AB 287 and SB 271 and the doula bill, AB 256.

Dr. Davis asked what a doula does.

Ms. Simpson stated a doula is a professional who supports childbearing people throughout prenatal care, the birthing process, and postpartum care, giving emotional, informational, and educational support where and when needed.

Dr. Davis asked if this is in conjunction with midwives.

Ms. Simpson stated a doula works with any care provider, and they are there to provide support to the family, specifically.

Dr. Davis asked if they are looking for reimbursement through Medicaid.

Ms. Simpson stated doulas are not licensed in Nevada, and they are looking to create a path for those interested in billing Medicaid and providing services to low-income families unable to afford these services.

Melinda Hoskins stated doulas are wanting to create a registration system with Medicaid rather than an actual license. She also stated, doulas help reduce the rates of those needing a Caesarean delivery (C-section) and reduce the risk for postpartum depression due to their added emotional support.

Dr. Davis stated AB 193 provides Medicaid coverage for women noting two years ago, they picked out a few of the bills, researched them to find out more details, to then came back later to see which ones to support.

Dominique Speck mentioned another bill which the Office of Minority Health and Equity follows, AB 119.

Vickie Ives stated this would be helpful to note again in public comment.

Ms. Gabor asked if Ms. Hoskins was interested in any specific bills.

Ms. Hoskins stated AB 193 and AB 189 were combined by the committee and passed at the Assembly.

Ms. Gabor asked Ms. Hoskins for any other bills she would like to discuss further.

Ms. Hoskins stated AB 196 requires the courthouse to provide lactation rooms for the public and was amended to add funds for small courts unavailable to afford it. AB 198 requires genetic testing to be paid for by Medicaid. AB 198 would require Medicaid to provide coverage for genetic testing to detect birth defects in the fetus.

Ms. Gabor asked for clarification on AB 198 and if genetic testing was not specifically for special populations or women over 40.

Ms. Hoskins stated genetic testing is used for any client and the American College of Obstetricians and Gynecologists (ACOG) recommends testing should be available to all pregnant persons.

Ms. Ives mentioned, it did initially use the 40-year-old age, but 35 is the standard for ACOG on an advanced maternal age for pregnancy. Ms. Ives asked Dr. DeValliere to bring up AB 198 to see if there was an amendment.

Ms. Gabor mentioned the committee added an amendment to the bill to clarify AB 198 has nothing to do with abortions.

Dr. Davis asked if there is an amendment for the 40 years of age or older portion.

Ms. Hoskins stated the letter of support had quoted the ACOG recommendations, and screening should be discussed and offered to all patients early in pregnancy regardless of maternal age or baseline risk. Cell-Free DNA testing is the most sensitive and specific screening test for common fetal aneuploidies.

Ms. Hoskins mentioned as a committee; they encourage Medicaid should provide screening for all women regardless of age or risk factors. The Cell-Free DNA screening is very sensitive, with no other screen necessary to identify risks, which means no further tests are required. This will allow a directed diagnosis for the majority of the population.

Dr. Davis asked if there would be any financial concerns for the state to test those over 40 years old instead of all ages of women and if this would be a factor in determining whether the bill will pass due to the expense of allowing all women.

Ms. Hoskins stated there are several different ways to look at risk. She said women over 40 are more at risk, but, most persons who give birth to a child with trisomy 21 are younger because younger persons are the ones having babies.

Ms. Gabor asked about what most private health insurance providers are covering in the form of genetic screenings.

Ms. Hoskins mentioned every insurance except Medicaid is paying for screening.

Ms. Gabor asked if private insurances pay for all women or just certain age groups.

Ms. Hoskins stated they pay for all women, and ACOG recommends this regardless of any risk. The Cell-Free DNA is the most sensitive and specific screening test for the common fetal aneuploidies.

Ms. Ives mentioned a letter of recommendation from MCHAB to address the Division of Public and Behavioral Health Administrator. If the subcommittee and the MCHAB members choose to move forward, they can recommend a specific bill noting the subcommittee can also suggest the additional content to align with the ACOG recommendations as part of the letters to the Administrator, if they so choose.

Ms. Gabor asked if anyone is interested in drafting a letter for the next subcommittee meeting.

Ms. Simpson stated she would be happy to draft the letter.

Dr. Davis stated the last letter they drafted, they kept the content straightforward and to the point. One paragraph per bill and a few bullet points, stating the legislators look for one-page letters.

Ms. Gabor stated for the sake of the meeting, trying to get a consensus of what bills the subcommittee picks for the letter. The funding is concerning for AB 198, the fact private insurance covers testing, but Medicaid does not.

Dr. Davis mentioned AB 198 is one of the bills to consider.

Ms. Gabor asked about any other bills.

Ms. Hoskins stated AB 287 concerns the licensing and regulation of free-standing birthing centers and how AB 387 revised provisions licensing certified professional midwives.

Dr. Davis stated the board has been focusing on midwives for the past few years and asked if AB 387 and

SB 271 are two bills the board should consider.

Ms. Hoskins mentioned the committee heard recommendations regarding AB 387. As of April 8, 2021, SB 271 has not been scheduled.

Dr. Davis asked if anyone recalled the presentations having issues or concerns regarding licensing for professional midwives.

Ms. Simpson states AB 387 is to create a board for certified professional midwives. Certified professional midwives are different from nurse-midwives; licensure is through the North American Registry of Midwives. The committee, statute, and regulations for AB 387 are around having licensure for midwives. Some of the language for the current bill provides minimal pathways for certified professional midwives under SB 387. There is a workgroup today to go through the finer points and amendments; the public doesn't want them to mention other midwives at all. Ms. Simpson stated the expectation is if they have legislation for certified professional midwives, they do so in a way which does not diminish other midwives' autonomy.

Ms. Gabor asked for any further discussion on bill AB 387.

Ms. Gabor mentioned AB 192 about sexually transmitted diseases (STD) testing for pregnant women.

Dr. Davis asked if it was bill AB 211.

Ms. Gabor stated AB 211 is explicitly asking people if they are interested in STD testing, while AB 192 concerns the high rates of congenital syphilis in Nevada. It is essential to reiterate the importance of early and third trimester STD testing. Ms. Gabor would like to move AB 192 forward.

Ms. Hoskins stated AB 192 has been through the Assembly.

Ms. Gabor asked if anyone would like to discuss any other specific bills.

Ms. Simpson asked on point number two when it states they are deleting the part where it mentions they will not be charged and if what this they will be charged?

Ms. Hoskins states further down the document it states it will require private insurance to pay for it or Medicaid; it does not say anything about those who do not have funds.

Ms. Hoskins mentioned the original bill states it would be sent to the state health lab and no additional charge.

Dr. Davis asked if this would be another bill of focus.

Ms. Gabor stated the bill is moving forward. Ms. Gabor asked if there is any interest in adding testing for stillborn infants over 20 weeks of gestation.

Dr. Davis asked if it is part of this bill or another bill.

Ms. Gabor stated it is not part of the bill; however, she wondered if it could be an amendment to recommend. If a stillborn is over 20 weeks gestation, and the mother was not treated for congenital syphilis, then there is the risk of her having another pregnancy with the fetus exposed to syphilis.

Ms. Ives mentioned up to 40% of fatality rates in utero or fetal demise is due to congenital syphilis.

Ms. Gabor stated it is a concern working with the Fetal Infant Mortality Review (FIMR) program because if something is not recognized, you are at risk of repeating the problem. Ms. Gabor would be interested in proposing, if there is an agreement in the committee, she would like to move forward.

Dr. Davis asked if there is something like an amendment which the committee can propose. His only concern is the timing of getting out the letter. Dr. Davis wondered if they would be able to do this before the life of this bill travels to the end. Dr. Davis stated he agrees the subcommittee should support it.

Ms. Hoskins mentioned if the Assembly passes the bill, it still must go to the Senate, and at the time, the committee can propose their amendment.

Ms. Ives stated in other years, the subcommittee happened to choose to make a motion to move forward with drafts, and they then brought the drafts to the full committee. The full committee then made amendments or picked up the bills they wanted and made recommendations.

Ms. Gabor asked for clarification on time for the committee to move a potential amendment forward.

Ms. Ives stated if the subcommittee were to choose to recommend bills to go to the quarterly meeting, an MCHAB meeting is scheduled for May 7, 2021. Drafts could be part of the packet and moved to the full board. The board members could edit or agree on what they wanted to go forward. It is a route used before when there was a concern about a bill letter needing to be approved by the full board. The legislative calendar indicates deadline dates when everything would have to be out of the second house in terms of the amendments.

Ms. Gabor asked if the committee drafts together a packet before the May 7th deadline to the meeting the committee may be able to include the more specific bills.

Ms. Ives stated it would gain time and depending on how it syncs with the legislative calendar, noting, the Chair can call a meeting other than the May 7th meeting.

Ms. Hoskins mentioned the first committee passage is April 9, 2021. The first house passage is April 20, 2021. The second committee passage is May 14, 2021, and the second house passage is May 21, 2021.

Ms. Gabor asked before moving onto any other specific Assembly or Senate bills the committee discusses recommendation for draft letters.

Dr. Davis asked if we have bills AB 198 and AB 192?

Ms. Gabor stated this is correct, and she asked Dr. Davis if he has any interest in providing additional information on AB 269 or SB 391.

Dr. Davis mentioned he feels comfortable about where these bills are going based upon all the information and support. The dental board is supporting this, and the Nevada Dental Association is also supportive. He thinks people understand the role dentists, hygienists, and dental therapists play in the pandemic. Dr. Davis believes it is an important part as we grow in telemedicine and telehealth this is something that could work. Dr. Davis stated he could find out more information depending on when we have the next subcommittee meeting. He does not want to delay if the committee feels other items are more important. While Dr. Davis thinks this is important, he thinks other bills are more critical than teledentistry. Dr. Davis can find more information if necessary.

Ms. Gabor mentioned SB 190 and AB 164 and the questions concerning hormonal contraceptives provided by pharmacists. She asked if there any comments regarding those two bills.

Ms. Hoskins asked for the number for the pharmacist dispensing.

Ms. Gabor stated AB 164 and SB 190 establish provisions relating to dispensing certain contraceptives such as hormonal contraceptives.

Ms. Hoskins stated midwives have had quite a discussion regarding this and agreed it was appropriate. Many women have reported difficulty getting contraceptive prescriptions. The bill requires the pharmacist to address specific warning signs and review the woman's history regarding risk factors, resulting in a person not being a good candidate.

Ms. Gabor stated it requires specific training by the pharmacist to prescribe hormonal birth control.

Ms. Hoskins mentions the committee is discussing additional actions for AB 192 and AB 198 and any other areas the committee would like to present to the Administrator of the Division of Public and Behavioral Health.

Dr. Davis mentioned bill AB 119 regarding provisions governing the Maternal Mortality Review Committee. Dr. Davis stated they often provide reports to them, and it is something the subcommittee needs to look at.

Ms. Simpson stated she would like to look at bill AB 119.

Ms. Gabor stated the original text on AB 119 did have a recommendation to increase the specificity of the reporting for race, ethnicity, age of mothers, geographical region of mothers, and any other variables the Maternal Mortality Review Committee identified.

Dr. Davis mentioned AB 119 had a lot to do with data and reporting, and there is no fiscal impact.

Ms. Ives stated the types of data called out as crucial for the Maternal Mortality Review Committee (MMRC) are about equity and disparity. Those data points are part of the CDC data system, and the MMRC staff do case extraction. The bill originally intended to add infant deaths but amended as not being part of the scope of MMRCs.. In addition to calling out the importance of equity and disparity data in the reporting of the MMRC, the addition of the Advisory Board of Nevada Office of Minority Health and Equity to collaborate on reporting and recommendations was added with no exposure of any confidential data or case review.

Ms. Gabor asked how specific the data can be if the reporting is every two years.

Ms. Ives stated the data must not be identifiable. As the MMRC reviews more cases, there will be broader recommendations which will be discussed and reported. She also indicated the information could not be identifiable. The MMRC members see de-identified information because of location and all the regular suppression issues must be respected in reporting.

Ms. Gabor asked if anyone had any further recommendations on this or if they felt additional information is needed in the letter?

Dr. Davis stated the amendment looks like it addresses quite a few of the things discussed. The beginning is specific to the various breakdowns relating to disparity and confidentiality sections. Dr. Davis asked if anyone has taken the time to look at the amendment portion.

Ms. Gabor asked for any other bills anyone in the group would like to discuss.

Ms. Simpson stated AB 287 and AB 387 presented with a significant number of amendments, and there has been a lot of movement on them. Knowing where it is would be helpful. Not knowing where it is right now might be because of the number of recommended changes.

Dr. DeValliere asked Ms. Simpson if she was discussing AB 287 or AB 387.

Ms. Simpson stated AB 387 had a lot of changes and amendments. She would also like to go over AB 287.

Dr. DeValliere shared the proposed amendment on bill AB 387.

Dr. Davis stated the group needs to consider the process for looking at specific bills the committee wants to recommend to the board and then put in a letter of support. The next meeting is on May 7th, and this may allow having another subcommittee meeting to pick a couple of bills the committee may want to review.

Ms. Simpson asked if the letter is to make recommendations on what the committee agrees, or if the letter should mention areas of disagreement.

Dr. Davis stated what the committee did in the past was to take items to the Board on issues they think should be included. It is up to the entire Board to decide.

Ms. Gabor asked about the rules for open meeting law; if any additional bills are not on this meeting agenda, would they need to bring them forward in another meeting?

Dr. Davis stated this is correct. When this goes to the Board, they might have an additional topic they would like to discuss. Not just the subcommittee, the Board can adjust as well. The subcommittee is just making recommendations.

Dr. DeValliere asked if there was another portion of AB 387 Ms. Simpson would like to see.

Ms. Simpson stated she did not. Ms. Simpson mentioned there are so many exhibits and just wanted to see if there were any additional amendments.

Ms. Hoskins stated AB 387 is scheduled for a meeting later this afternoon at the Chair's call, so they will probably add more information.

Dr. Davis stated he would propose the committee wait on bill AB 387 until there is more information.

Ms. Hoskins agreed.

Ms. Gabor asked if there are any other bills to discuss.

Dr. Davis mentioned SB 189 talks about revised provisions relating to eligibility for children on Medicaid which talk about children covered through age 19. He thought they are eligible until age 21 for dental care and asked if they reduced the coverage for children? Dr. Davis also wondered if this is similar to what other states are doing. The age has been 21 for so long, so he is curious why it is different now.

Dr. Davis asked about any laws and regulations on free-standing birthing centers.

Ms. Gabor stated the law defines an obstetrics center. The purpose of this bill is to identify and redefine what a free-standing birth center is. It is defined differently than an obstetrics center.

Ms. Hoskins stated the obstetric center in statute is defined as a health care facility. The Division interpreted this as meaning the obstetric center should meet specific guidelines set by the functional guidelines institute, making it more like an ambulatory center. Most birthing centers in the country are more like a residential area, more like someone's home. Most patients are healthy women who do not have risk factors, so there is not the need for extensive medical-type facilities, but more like a home with some medical equipment and skilled providers.

Dr. Davis asked if they are concerned with the issues regarding women who have not been so healthy at birthing centers. Dr. Davis mentioned he is trying to figure out why there need to be regulations, not saying it is good or bad.

Ms. Hoskins mentioned she spent the last five years trying to get a center open in Northern Nevada. One active applicant for an obstetrics center in Las Vegas has been at it since 2017. The applicant has met repeated requirements from different agencies who provide a certificate of occupancy. The applicant must get an expensive generator that is supposed to provide electricity in case of an outage. In a birthing center, there is very little that requires electricity. No equipment needs to be running. Lighting can be provided in many ways, and often is because some women prefer to have a darker environment while in labor. It has added many costs to getting the center open. This bill seeks to define a birthing center to be more like a residential facility than a medical facility.

Ms. Simpson asked if this bill defines who can practice in the birthing center because regulations for an obstetrics center indicate certified nurses or midwives. She also wondered if the bill on the floor regarding Certified Professional Midwives (CPMs) changes the definition.

Ms. Hoskins stated it does not define certified midwives as individuals who can work there because they are not listed in the regulations. It is the intent of the bill writer for both the birth center and the CPM licensure bills to allow certified midwives to own and operate free-standing birth centers.

Dr. Davis stated they include it in the same category as a hospital or obstetrics.

Ms. Hoskins asked Dr. DeValliere if he could bring up AB 287 workshop from Wednesday, April 7th meeting as it gives an overview of how the bill is intended to work. One of the requirements is regulation aligned with the American Associations of Birthing Centers, a body which has been around for the last 40 years and has successfully provided standards which have resulted in a good outcome and reduced maternal morbidities, including C-sections and hospitalizations.

Ms. Simpson asked if they recommend to the Board, bill AB 287 is worth supporting if others agree.

Ms. Hoskins stated she agrees.

Dr. Davis stated he agrees.

Ms. Gabor asked the group if there are any other bills they would like to discuss. She wondered if anyone could bring this forward in the next MCHAB meeting?

Ms. Hoskins mentioned she would act in that capacity.

Ms. Gabor asked if there are any other Assembly or Senate bills to address to move forward.

Dr. Davis asked to clarify which bills the committee agreed on: AB 192, AB 198, AB 287. Dr. Davis mentioned the committee decide to wait on AB 387 until further information.

Ms. Ives asked if AB 119 is supposed to be on the list?

Dr. Davis stated it should also be on the list.

Ms. Gabor stated she feels strongly about showing our support.

Ms. Hoskins mentioned she agrees to show support for something as it is a function we should serve. Making recommendations about changes or enhancements is an important role.

Ms. Gabor stated two years ago, the committee forwarded a bill like SB 86 requiring the state to include donor milk and other similar products, noting it might be something else they could look at.

Ms. Hoskins stated this bill causes quite a bit of controversy among various lactation breastfeeding supporters because it promotes a commercial product manufactured in Henderson, Nevada. The product, in many ways, does not have as high of benefits as the current product being used. It also changes the status of breast milk supplementation of donor breast milk which the hospitals provide by purchasing it from a milk bank in San Jose. This changes what is done by turning it into a prescription product being paid for by Medicaid. The status is the hospital buys it and provides it to babies with very

low birth weight and any other baby with risk factors such as one that has had an episode of necrotizing enterocolitis. At this point, it appears the bill has not been heard in the meeting.

Ms. Gabor asked if the product from the donor bank in San Jose is filling the need without going through these hoops that would end up in a less helpful product?

Ms. Hoskins stated this is correct.

Ms. Gabor stated she is ok to move on unless anyone has any further comments.

**5. For Possible Action: Make recommendation on future agenda items.**

Ms. Gabor asked if there are other recommendations for further agenda items from the subcommittee.

Dr. Davis stated bill AB 387 may need to be reviewed a little more for a future amendment. SB 189 can be put on the agenda for now if the committee chooses not to look at it again; at least it is on the agenda.

Ms. Gabor asked for any other recommendations for future agenda items or public comments. The next step would be defining a plan for moving forward and developing a timeline for getting information together.

Dr. Davis stated SB 189 could be discussed at a future meeting. April 23rd is two weeks away, giving the subcommittee time before the board meeting. He also stated they can draft a letter for further agenda items.

Ms. Gabor asked if anyone is interested in doing a letter of support for AB 198 genetic testing?

Dr. Davis stated he would refrain from letters of support and stick to bullet points, and have the subcommittee put together the letter of all the items gathered.

Ms. Gabor is willing to put together bullet points on bill AB 192.

Ms. Hoskins said she would make bullet points on AB 287.

Ms. Gabor stated she would be happy to do AB 119 unless someone else is interested.

Dr. Davis mentions he is willing to help with bullet points on AB 119.

Ms. Gabor asked if anyone is interested in bullet points for AB 198 on genetic testing?

Ms. Hoskins said she could do accommodate this.

Ms. Gabor asked if everyone could have bullet points available for the next subcommittee meeting and asked Ms. Hoskins what day of the week is best for her.

Ms. Hoskins stated she must juggle her office schedule, but she can usually accommodate.

Ms. Gabor asked if Fridays are best for Dr. Brill and the subcommittee needs another member to have a quorum. She wondered if Desiree Wenzel could send out a doodle poll for April 23rd.

Ms. Wenzel stated she could send out a doodle poll.

Ms. Gabor mentioned mornings or afternoons work for her.

Ms. Hoskins stated she could accommodate mornings or afternoons.

Ms. Simpson states mornings are better for her.

Ms. Gabor asked for any other public comments.

Ms. Ives stated as a point of order, a formal motion, a second, and a vote as to the actual action item is needed on agenda item 4.

Ms. Hoskins asked are we making an actual item, or are we confirming dates or just working on assignments to bring to the next meeting?

Ms. Ives stated they are working on assignments, an actual action item moving forward on the bills they have chosen to address and potentially revisit is needed.

**LINDA GABOR ENTERTAINED A MOTION TO BRING TO THE NEXT SUBCOMMITTEE MEETING INFORMATION FOR A POSSIBLE LETTER ON AB 119 BY Dr. DAVIS, AB 192 BY Ms. GABOR, AB 198 BY Ms. HOSKINS, AB 287 BY Ms. HOSKINS. TYREE DAVIS SECONDED THE MOTION WHICH PASSED UNANIMOUSLY**

Ms. Hoskins asked if they wanted to have something about AB 256.

Ms. Simpson mentions they did not discuss bill AB 256.

Ms. Gabor asked if someone would like to put together bullet points for AB 256 for consideration at the next subcommittee meeting.

Ms. Simpson stated she would provide bullet points for AB 256.

**MS. GABOR ENTERTAINED A MOTION TO INCLUDE AB 256 BY Ms. SIMPSON. Ms. SIMPSON SECONDED THE MOTION WHICH PASSED UNANIMOUSLY**

Ms. Gabor asked for any public comment.

Dr. Davis mentioned they need to vote.

Ms. Gabor asked can we have a vote, all in favor, say yes.

Dr. Davis agreed.

Ms. Hoskins agreed.

Ms. Simpson agreed.

Ms. Gabor stated the passed by unanimous vote. She asked for any additional public comment.

No public comment

## 6. Public Comment

No Public Comment.

## 7. Adjournment

11:16 AM

# NV Strong Start ECCS-Health Integration HRSA Grant


Denise Tanata

Early Childhood Comprehensive Systems Director

The Children's Cabinet

# HRSA ECCS Grant

***2021 Early Childhood Comprehensive Systems: Health Integration Prenatal to Three (ECCS) Program***

- HRSA-21-078
- Grant Due: March 15, 2021
- Amount: ~$255K per year for 5 years

U.S. Department of Health and Human Services
HRSA
Health Resources and Services Administration

# HRSA ECCS Grant

## Purpose Statement

*To build **integrated maternal and early childhood systems of care** that are equitable, sustainable, comprehensive, and inclusive of the health system, and that promote early developmental health and family well-being and increase family-centered access to care and engagement of the prenatal-to-3 year old (P-3) population.*

*A maternal and early childhood system of care brings together health, early care and education, child welfare, and other human services and family support program partners – as well as community leaders, families, and other stakeholders – to achieve agreed-upon goals for thriving children and families.*

# HRSA ECCS Grant

## Partner Agencies and Organizations

- DHHS – DPBH (MIECHV, Title V, WIC)
- DHHS – DHFP (Medicaid/CHIP)
- DHHS – DWSS (Child Care & Development)
- NDE – OELD (PreK, Head Start)
- Governor's Office of New Americans
- NV Early Childhood Advisory Council
- Rural NV Health Network
- NV Community Health Worker Association
- Family TIES
- NV Institute for Children's Research & Policy, UNLV
- Children's Advocacy Alliance
- NV Statewide Coalition Partnership

# HRSA ECCS Grant

## Goals & Objectives

**GOAL 1:** Increase state-level infrastructure & capacity in NV to stregthen statewide maternal & early childhood systems of care.

- ECCS Director Position
- ECCS Parent Engagement Coordinator Position
- Establishment of the Governor's Office of Early Childhood
- Establishment of an Early Childhood Cabinet

# HRSA ECCS Grant

## Goals & Objectives

**GOAL 2:** Increase coordination & alignment between maternal and child health and other statewide systems that impact young children & families to advance a common vision for early developmental health and family well-being in Nevada.

- NV Cross Sector Needs Assessment Analysis
- NV Cross Sector Fiscal Mapping Analysis
- NV Unified P-3 Strategic Plan

# HRSA ECCS Grant

## Goals & Objectives

**GOAL 3:** Increase the capacity of health and early childhood systems in NV to deliver and effectively connect families to a continuum of services that promote early developmental health and family well-being, beginning prenatally.

- Coordinated Intake & Referral System (CIRS)
- Expansion of Community Health Workers (CHWs)

# HRSA ECCS Grant
# Goals & Objectives

**GOAL 4:** Identify and implement policy and financing strategies that support the funding and sustainability of multigenerational, preventive services and systems for the P-3 population in Nevada.

- P-3 Fiscal Analysis & Assessment
- P-3 Policy Analysis & Assessment
- Incorporation of Strategies in P-3 Strategic Plan

# HRSA ECCS Grant
# Goals & Objectives

**GOAL 5:** Increase state-level capacity to advance equitable and improved access to services for underserved P-3 populations.

- Health Equity Data Analysis
- Enhanced Collection & Utilization of Cross Sector Data (disaggregated)
- Parent Leadership Integration

# HRSA ECCS Grant

Request for Support:

- MCHAB Representation & Coordination
- Integration of MCHAB Priorities in P-3 Strategic Plan
- Communications and Outreach
- Data Collection & Analysis
- Policy & Fiscal Alignment

# HRSA ECCS Grant

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***Governor***

**Richard Whitley**
***Director***

State of Nevada

# Department of Health and Human Services

Update on COVID-19 (Coronavirus) within the Maternal Child Health Population

Office of Analytics

Jen Thompson

4/30/2021

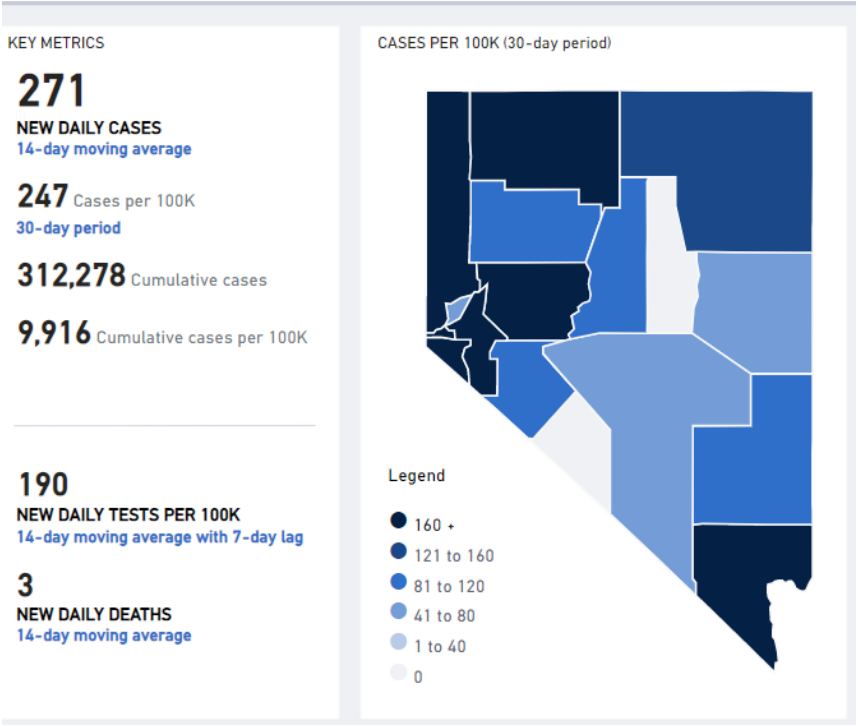
*Helping people. It's who we are and what we do.*

# Technical Notes/Disclaimer

- All data within this presentation are subject to change.
- Small counts have been suppressed.
- Similarly to other states nationally, a significant number of Nevada records are missing demographic information such as, but not limited to Race/Ethnicity, age and gender.

# Nevada COVID-19 Data

- Nevada's first COVID-19 case was diagnosed on March 5, 2020
- As of 4/23/21 there were 312,278, confirmed cases of COVID-19 statewide.
- This information is updated daily at https://nvhealthresponse.nv.gov.



# Nevada COVID-19 Data

- As of 4/23/21 there were 3,136,968 COVID-19 tests done statewide.

KEY METRICS

**193**
**DAILY TESTS PER 100K**
14-day moving average with 7-day lag

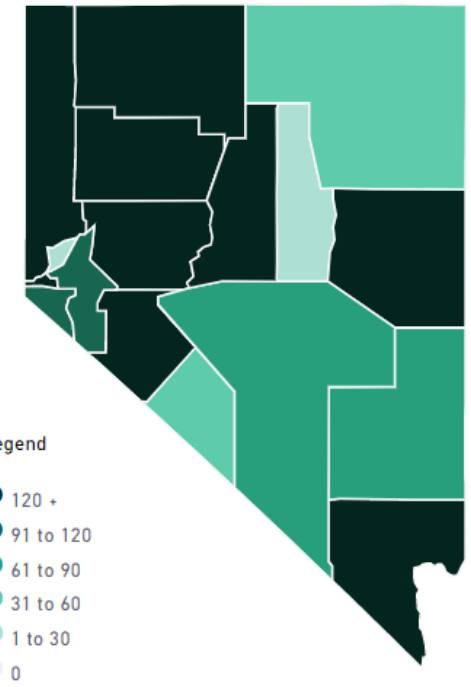
**5.8 %** Test Positivity Rate
14-day period with 7-day lag

**3,136,964** Cumulative Tests

**270**
**NEW DAILY CASES**
14-day moving average

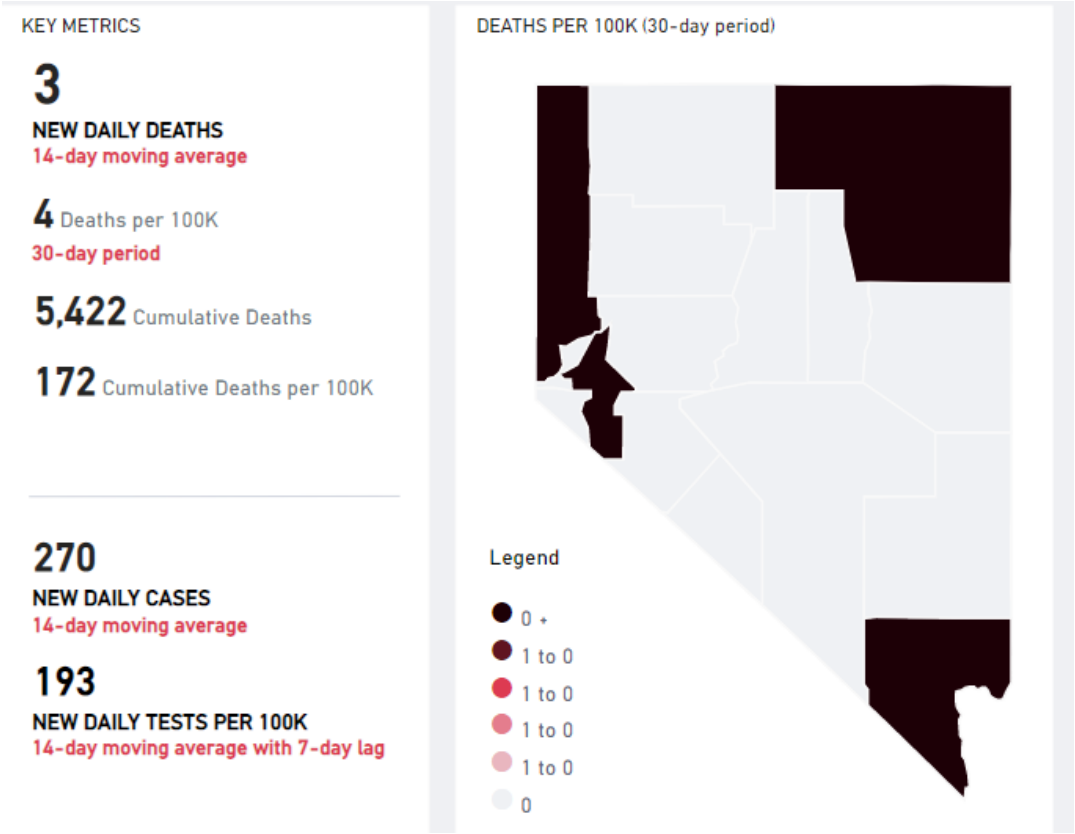
**3**
**NEW DAILY DEATHS**
14-day moving average

DAILY TESTS PER 100K (14-day moving avg, with 7-day lag)



# Nevada COVID-19 Data

- As of 4/23/21 there were 5,422 COVID-19 deaths statewide.



# Nevada COVID-19 Data

- As of 4/23/21 there were 1,077,248 COVID-19 vaccinations administered statewide.

KEY METRICS

**1,745,071** Total Doses Reported as Administered

**55,413** Doses Reported as Administered per 100K

**1,077,248** Total Vaccinations Reported as Initiated+ (includes completed vaccinations)

**34,207** Vaccinations Reported as Initiated per 100K

**34.21 %** % of Population that Initiated Vaccination

**43.09 %** % of Population 16 Years and Older that Initiated Vaccination

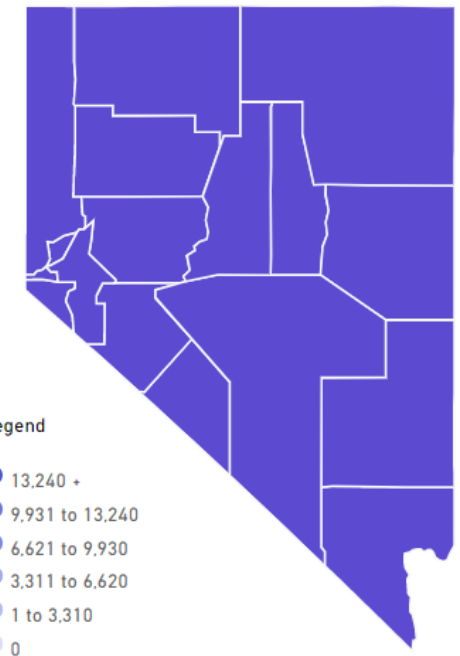
**731,051** Total Vaccinations Reported as Completed

**23,214** Vaccinations Reported as Completed per 100K

**23.21 %** % of Population Vaccinated

**29.24 %** % of Population 16 Years and Older Vaccinated

VACCINATION DOSES ADMINISTERED PER 100K



# Demographics for Confirmed Cases

| Group | CUMULATIVE CASES | CASES % |
|---|---|---|
| **AGE** | | |
| <10 | 12,212 | 4.0% |
| 10-19 | 30,577 | 10.0% |
| 20-29 | 61,497 | 20.1% |
| 30-39 | 56,668 | 18.5% |
| 40-49 | 50,104 | 16.4% |
| 50-59 | 44,239 | 14.5% |
| 60-69 | 27,752 | 9.1% |
| 70+ | 22,468 | 7.4% |
| **GENDER** | | |
| Female | 157,393 | 51.8% |
| Male | 146,466 | 48.2% |
| **RACE/ETHNICITY** | | |
| Hispanic | 90,035 | 37.3% |
| Non-Hispanic American Indian or Alaska Native | 1,275 | 0.5% |
| Non-Hispanic Asian/Pacific Islander | 20,247 | 8.4% |
| Non-Hispanic Black | 18,677 | 7.7% |
| Non-Hispanic Other Race | 22,970 | 9.5% |
| Non-Hispanic White | 88,032 | 36.5% |

# Demographics for Deaths

| Group | CUMULATIVE DEATHS | DEATHS % |
|---|---|---|
| **AGE** | | |
| <10 | 2 | 0.0% |
| 10-19 | 7 | 0.1% |
| 20-29 | 26 | 0.5% |
| 30-39 | 75 | 1.4% |
| 40-49 | 247 | 4.6% |
| 50-59 | 549 | 10.2% |
| 60-69 | 1,100 | 20.4% |
| 70+ | 3,393 | 62.8% |
| **GENDER** | | |
| Female | 2,045 | 37.9% |
| Male | 3,347 | 62.1% |
| **RACE/ETHNICITY** | | |
| Hispanic | 1,233 | 24.0% |
| Non-Hispanic American Indian or Alaska Native | 43 | 0.8% |
| Non-Hispanic Asian/Pacific Islander | 607 | 11.8% |
| Non-Hispanic Black | 474 | 9.2% |
| Non-Hispanic Other Race | 5 | 0.1% |
| Non-Hispanic White | 2,780 | 54.1% |

# Demographics for Vaccinations

| Group | CUMULATIVE VACCINES INITIATED | VACCINES INITIATED % (includes completed) |
|---|---|---|
| **AGE** | | |
| <10 | 8 | 0.0% |
| 10-19 | 29,300 | 2.7% |
| 20-29 | 113,372 | 10.5% |
| 30-39 | 142,772 | 13.3% |
| 40-49 | 159,791 | 14.8% |
| 50-59 | 187,542 | 17.4% |
| 60-69 | 208,169 | 19.3% |
| 70+ | 236,292 | 21.9% |
| **GENDER** | | |
| Female | 581,676 | 54.0% |
| Male | 494,803 | 46.0% |
| **RACE/ETHNICITY** | | |
| Hispanic | 188,049 | 20.6% |
| Non-Hispanic American Indian or Alaska Native | 5,197 | 0.6% |
| Non-Hispanic Asian/Pacific Islander | 105,301 | 11.5% |
| Non-Hispanic Black | 51,184 | 5.6% |
| Non-Hispanic Other Race | 130,368 | 14.3% |
| Non-Hispanic White | 432,209 | 47.4% |

# Women of Childbearing Age (15-44)

- As of 1/19/21 there are 65,558 confirmed COVID-19 cases of women within childbearing age.
- There have been forty-three (43) reported COVID-19 related deaths within this population.
- Data are from investigations and may be incomplete for many records.

| Race/Ethnicity | N | % |
|---|---|---|
| AI/AN non-Hispanic | 279 | 0.3% |
| Asian non-Hispanic | 3,566 | 4.5% |
| Black non-Hispanic | 4,259 | 5.3% |
| Hispanic/Latino | 28,935 | 36.2% |
| NHPI non-Hispanic | 717 | 0.9% |
| Other/Unknown | 26,584 | 33.2% |
| White non-Hispanic | 15,660 | 19.6% |
| Total | 80,000 | 100.0% |

| Age Group | N | % |
|---|---|---|
| 15-19 | 9,585 | 12.0% |
| 20-29 | 30,775 | 38.5% |
| 30-39 | 27,283 | 34.1% |
| 40-44 | 12,357 | 15.4% |
| Total | 80,000 | 100.0% |

| Hospitalized | N | % |
|---|---|---|
| No | 52,513 | 65.6% |
| Yes | 1,606 | 2.0% |
| Unknown | 25,881 | 32.4% |
| Total | 80,000 | 100.0% |

# Pregnant Women

- As of 1/19/21 there are 1,246 confirmed cases of pregnant women with COVID-19 in Nevada.
- There have been one (1) reported deaths related to COVID-19 within this population.
- Data are from investigations and may be incomplete for many records.

| Race/Ethnicity | N | % |
|---|---|---|
| AI/AN non-Hispanic | 6 | 0.3% |
| Asian non-Hispanic | 90 | 5.1% |
| Black non-Hispanic | 136 | 7.8% |
| Hispanic/Latino | 797 | 45.5% |
| NHPI non-Hispanic | 28 | 1.6% |
| Other/Unknown | 309 | 17.7% |
| White non-Hispanic | 384 | 21.9% |
| Total | 1,750 | 100.0% |

| Age Group | N | % |
|---|---|---|
| 10-19 | 69 | 3.9% |
| 20-29 | 846 | 48.3% |
| 30-39 | 733 | 41.9% |
| 40-49 | 80 | 4.6% |
| 50-59 | 11 | 0.6% |
| 60-69 | 11 | 0.6% |
| Total | 1,750 | 100.0% |

| Hospitalized | N | % |
|---|---|---|
| No | 1,485 | 84.9% |
| Yes | 180 | 10.3% |
| Unknown | 85 | 4.9% |
| Total | 1,750 | 100.0% |

# Children 0-19

- As of 1/19/21 there are 34,780 confirmed cases of COVID-19 in children ages 0-19 in Nevada.
- There have been seven (7) reported deaths related to COVID-19 in this population.
- Data are from investigations and may be incomplete for many records.

| Gender | N | % |
|---|---|---|
| Female | 21,235 | 50.0% |
| Male | 20,967 | 49.4% |
| Unknown | 228 | 0.5% |
| Total | 42,430 | 100.0% |

| Race/Ethnicity | N | % |
|---|---|---|
| AI/AN non-Hispanic | 160 | 0.4% |
| Asian non-Hispanic | 1,474 | 3.5% |
| Black non-Hispanic | 1,960 | 4.6% |
| Hispanic/Latino | 18,615 | 43.9% |
| NHPI non-Hispanic | 381 | 0.9% |
| Other/Unknown | 12,902 | 30.4% |
| White non-Hispanic | 6,938 | 16.4% |
| Total | 42,430 | 100.0% |

| Age Group | N | % |
|---|---|---|
| <1 | 977 | 2.3% |
| 1-5 | 6,067 | 14.3% |
| 6-10 | 7,998 | 18.8% |
| 11-15 | 11,594 | 27.3% |
| 16-19 | 15,794 | 37.2% |
| Total | 42,430 | 100.0% |

| Hospitalized | N | % |
|---|---|---|
| No | 29,546 | 69.6% |
| Yes | 420 | 1.0% |
| Unknown | 12,464 | 29.4% |
| Total | 42,430 | 100.0% |

# MIS-C

## Multisystem inflammatory syndrome in children (MIS-C)

MIS-C is a serious inflammatory syndrome in children, including some teenagers. This syndrome is rare, but there appears to be an emerging link between children, MIS-C and COVID-19. This link is being researched nationally and there remains a lot to be learned about the connection.

- Prior to the COVID-19 global pandemic, MIS-C symptoms have been monitored via syndromic surveillance within Nevada hospitals, and an MIS-C diagnosis must be reported to the State.

- Between October 27 and December 28, 2020, there have been sixteen (16) diagnosed MIS-C cases in Nevada. Eleven (11) of the diagnosed MIS-C cases also tested positive for COVID-19.

- There were no reported diagnosed cases of MIS-C in 2019.

# Comorbidities/Disabilities

- Many states, including Nevada, are struggling to better identify people with disabilities and pre-existing medical conditions within confirmed cases of COVID-19.
- Below is information a disease investigator may ask around pre-existing conditions during the investigation process.
- To date, pregnancy is the most utilized field.

| Pre-existing medical conditions? | | | | ☐ Yes ■ No ☐ Unknown |
|---|---|---|---|---|
| Chronic Lung Disease (asthma/emphysema/COPD) | ☐ Yes | ■ No | ☐ Unknown | |
| Diabetes Mellitus | ☐ Yes | ■ No | ☐ Unknown | |
| Cardiovascular disease | ☐ Yes | ■ No | ☐ Unknown | |
| Chronic Renal disease | ☐ Yes | ■ No | ☐ Unknown | |
| Chronic Liver disease | ☐ Yes | ■ No | ☐ Unknown | |
| Immunocompromised Condition | ☐ Yes | ■ No | ☐ Unknown | |
| Neurologic/neurodevelopmental/intellectual disability | ☐ Yes | ■ No | ☐ Unknown | (If YES, specify) _____ |
| Other chronic diseases | ☐ Yes | ■ No | ☐ Unknown | (If YES, specify) _____ |
| If female, currently pregnant | ☐ Yes | ■ No | ☐ Unknown | |
| Current smoker | ☐ Yes | ■ No | ☐ Unknown | |
| Former smoker | ☐ Yes | ■ No | ☐ Unknown | |

# Next Steps in Data Collection

- Improved data completeness.
- Better identification of comorbidities through the disease investigation process of confirmed COVID-19 cases.
- Identification on the best way to continually monitor and display comorbidity information within confirmed COVID-19 cases.
    - This may include incorporating comorbidities in existing dashboards as other states have.
        - Georgia: https://dph.georgia.gov/covid-19-daily-status-report
    - Creation of separate and specific dashboards.

# Current Data Resources

- Nevada Health Response:  https://nvhealthresponse.nv.gov/
- Nevada COVID-19 Facilities Dashboard
- CDC COVID-19 Data Tracker
- HRSA COVID-19 Information
- John Hopkins Coronavirus Resource Center

# Questions?

# Contact Information

Jen Thompson

Health Program Manager

jlthompson@health.nv.gov

For data requests please email us directly at data@dhhs.nv.gov or visit our website at http://dhhs.nv.gov/Office_of_Analytics.

## Thank you!

Maternal and Child Health Advisory Board

Assembly Bill 119

**Assembly Bill 119; Revises provisions relating to the Maternal Mortality Review Committee. (BDR 40-740)**

**Whereas:**
Maternal deaths are a serious public health concern and the related health disparities need to be identified, reviewed and reports.

**Whereas:**
Those health disparities need to be identified and reviewed by analyzing factors such as race, ethnicity, age of the mothers, geographic region of the mother's residence and other variables.

**Whereas:**
The Advisory Committee of the Office of Minority Health and Equity may not access confidential information pursuant to NRS 442.774 while collaborating with the Maternal Mortality Committee in developing the reports.

**Be it resolved that**:
The MCHAB recommends supporting the revisions to Assembly Bill 119, as it relates to the Maternal Mortality Review Committee.

Maternal and Child Health Advisory Board

Assembly Bill 192

**Assembly Bill 192; Revises provisions governing the testing of pregnant women for sexually transmitted diseases (STDs)**

Whereas:

Cases of congenital syphilis in Nevada have increased from 8 cases in 2015 to 41 cases in 2019

Department of Health and Human Services
Office of Analytics

Congenital Syphilis Counts by Vital Status and Year
Nevada Residents, 2015-2020*

**2020 data are preliminary and subject to changes.*

| Year | Vital Status | | | |
|---|---|---|---|---|
| | Alive | Stillborn | Unknown | Total |
| 2015 | 8 | 0 | 0 | 8 |
| 2016 | 11 | 0 | 1 | 12 |
| 2017 | 21 | 0 | 0 | 21 |
| 2018 | 34 | 0 | 0 | 34 |
| 2019 | 39 | 2 | 0 | 41 |
| 2020 | 39 | 1 | 1 | 41 |

Congenital syphilis is an entirely preventable disease, however the incidence of congenital syphilis in the United States (U.S.) has nearly quadrupled between 2015 and 2019, leading to an increase in severe health consequences and fetal deaths (www.ncsddc.org/new-cdc-data-show-number-of-babies-born-with-syphilis-nearly-quadrupled-in-the-last-5-years/ ).

Whereas:

Gaps in testing and treatment during the mother's pregnancy occurred in more than three-fourths (77%) of the cases in the U.S. in 2019 (www.ncsddc.org/new-cdc-data-show-number-of-babies-born-with-syphilis-nearly-quadrupled-in-the-last-5-years/ )

Whereas:

Nearly two-thirds (65%) of all babies born with congenital syphilis in the U.S. were Black or Hispanic, accentuating significant disparities in testing and treatment (www.ncsddc.org/new-cdc-data-show-number-of-babies-born-with-syphilis-nearly-quadrupled-in-the-last-5-years/ )

Whereas:

Other sexually transmitted diseases such as chlamydia, gonorrhea, hepatitis B and hepatitis C are also known to contribute to a variety of poor pregnancy outcomes and medical complications for infants if left untreated. This underscores the importance of increasing access to maternal prenatal STD testing and treatment, especially for populations experiencing health inequities.

Be it resolved that:

The MCHAB recommends supporting the revisions to Assembly Bill 192 as it relates to provisions governing the testing of pregnant women for certain STDs including syphilis.

Maternal and Child Health Advisory Board

AB287. Providing for the Licensure and Regulation of Freestanding Birthing Center

Whereas:
Reduction of premature birth and maternal morbidity associated with cesarean section are public health goals in Nevada,

Whereas:
Midwifery care in a residential-like facility (a maximized home, not a mini-hospital) has been the established pattern of care endorsed by the American Association of Birth Centers since their inception,

Whereas:
Midwifery care in freestanding birthing centers has been shown to reduce premature birth among childbearing individuals,

Whereas:
Midwifery care in freestanding birthing centers has been shown to reduce the need for surgical intervention during labor and birth,

Whereas:
Midwifery care in freestanding birthing centers has been shown to reduce Medicaid expenses for pregnant participants receiving care in freestanding birthing centers,

Whereas:
The American Association of Birth Centers (AABC) has set evidence-based standards for freestanding birth centers since 1985 and these standards, which are regularly re-evaluated based on ongoing research into outcomes at freestanding birthing centers, have resulted in the excellent outcomes cited above

Whereas:
Accreditation by the Commission for the Accreditation of Birth Centers (CABC) has since 1985 assured that an accredited facility consistently meets the Standards for Birth Centers

Be it resolved that:
The MCHAB recommends supporting AB287 as amended (Amendment 209) for licensing freestanding birthing centers in Nevada.

# Frequently Asked Questions about Birth Centers

## 1. What is a freestanding, independent, birth center?

- Independent birth centers are facilities designed to provide care to women with low risk pregnancies who want a choice between a hospital and home birth and want to participate in their own care; they are separate from and not owned by hospital organizations
- They have established partnerships to work collaboratively with near-by hospitals and physicians for mothers who need their services before or during labor, or after childbirth
- They provide prenatal and postpartum care, labor and birth services, and may also provide childbirth education, annual exams, birth control, and fertility counseling

## 2. What is the difference between an independent birth center and one that is in a hospital?

- Hospitals often call their labor and delivery units "birth" or "birthing" centers, especially after they remodel their facilities to be more "home-like"; they may also hire midwives to provide care
- Birth centers provide individualized care centered around the woman's goals and the latest research
- Hospitals are larger, often with protocols and less flexibility, and a greater focus on efficiency

## 3. What is the midwifery model of care?

- The midwifery model of care is based on the belief that childbirth is a natural, physiologic process that does not require interventions without evidence of a problem; it produces high satisfaction, lower incidence of birth injury, trauma, complications, cesarean sections and higher rates of breast feeding
- Pain management is offered through natural means including water births, nitrous oxide, massage, and certain medications
- Nurse midwives may practice independently in many states and often have admitting privileges to hospitals. This allows them to continue to care for their patients who transfer from a birth center to a hospital during labor and have partnerships with physicians for patients who need their services

## 4. How can I know if a birth center is safe and provides high quality care?

- Birth centers require state licensure and, if accredited by CABC, must demonstrate they practice according to rigorous, evidence based, standards designed specifically for birth centers
- Midwives are licensed by each state and specialized training in midwifery

## 5. Are there any birth centers near me?

Some communities have more birth centers than others depending on state regulations, insurance coverage, the number of midwives available, and other factors.

Find the birth centers in your area with the birth center locator on BirthCenters.org (www.birthcenters.org/search/custom.asp?id=2926)

## 6. Are birth centers covered by insurance?

Maybe, check with your health plan to see if they include free-standing birth centers in their network; if not, some birth centers may help you request coverage from certain insurance companies

## 7. Why is the number of birth centers growing in the United States?

- There is a growing awareness, among Millenials, of alternatives to hospital births
- Women want care that focuses on natural birth in a home-like environment
- The Listening to Mothers III: New Mothers Speak Out survey found two-thirds of mothers planning more children would consider a birth center separate from a hospital; birth centers provide an option for those not wanting a hospital or home birth

## 8. How do I learn more about birth centers?

- The American Association of Birth Centers (AABC) information "For Parents"
- The Childbirth Connection provides in depth information about childbirth including choosing a caregiver, labor support, evidence based care, surveys of mothers and other maternity related information
- The Commission for the Accreditation of Birth Centers (CABC) lists accreditation requirements for birth centers and identifies accredited birth centers
- Local birth center websites provide information about their services, facilities, and staff
- The Leapfrog Group provides data on the quality of maternity care in hospitals



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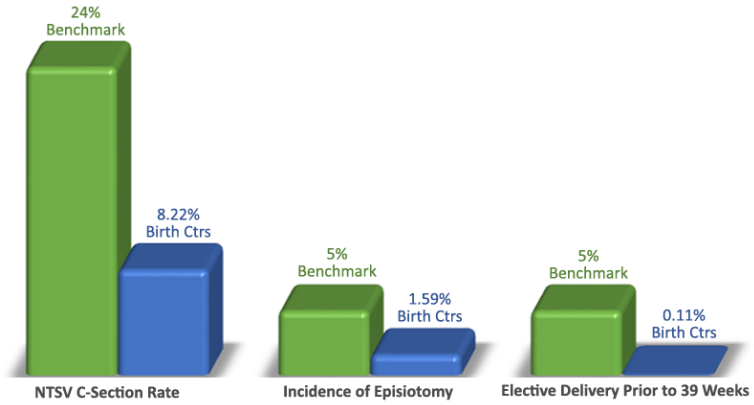
# Supporting Midwife-led Independent Birth Centers Makes Sense

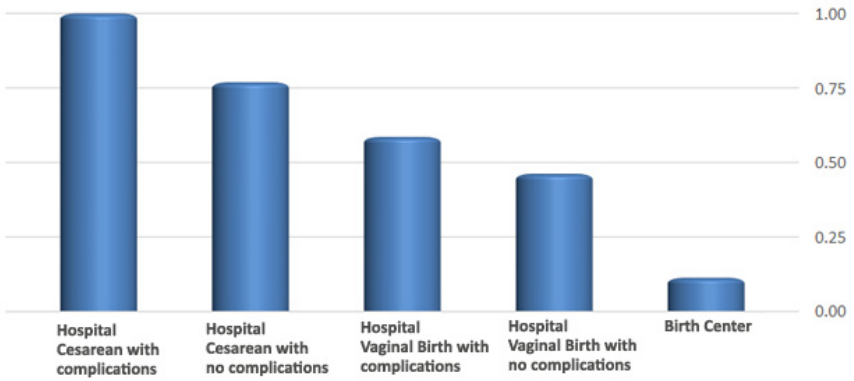
## Independent Birth Centers offer "Low Hanging Fruit" to Increase Value for Employers

- ✓ Childbirth is the single largest hospital expense for employers[1]
- ✓ Hospitals report tremendous variation in maternal cost, quality and outcomes[2]
- ✓ Maternity outcomes worsen with more interventions[3]
- ✓ Midwife-led, independent birth centers produced better outcomes than hospitals on all quality measures for low risk moms in 2015 (see chart below)
- ✓ One in three women still deliver by c-section in the hospital. Rates rose from 21% in 1996 to 33% in 2011 with no decrease in maternal or neonatal morbidity or mortality[4]
- ✓ Birth centers' average c-section rate is 6% vs. the U.S. average of 24% for the same low-risk moms in the hospital setting[5,6]
- ✓ The World Health Organization recommends a c-section rate of 15%[7]
- ✓ National average charges are $9,248 lower per birth at birth centers[8,9]

## Birth Centers Exceed Quality Benchmarks [6,10,11]




## Birth Center Facility Fees are Less[12,13]




## The Birth Center Business is Maturing

- ✓ Independent birth centers offer a safe, alternative choice, "in-between" home and hospital; a facility designed to support natural labor and delivery, supported by highly trained midwives and skilled staff, offering a family-centered, relaxed, calm, non-institutional experience
- ✓ Birth centers are recognized as a basic level of maternity care in the newly defined (2015) Levels of Maternal Care by the American College of Obstetrician & Gynecologists (ACOG) and the Society for Maternal-Fetal Medicine (SMFM)[14]
- ✓ The number of independent birth centers has grown 62% since 2010 due to increased demand from more informed and connected Millennials[15]
- ✓ The number of midwife-attended births is increasing steadily and in 2013 was 9% of all births in the U.S.[16,17]
- ✓ 82% of states license birth centers.[18] State and federal policymakers show a growing interest in the birth center model to improve maternity care outcomes[19]
- ✓ The Affordable Care Act (ACA) includes several provisions supporting midwives and birth centers[20]
- ✓ The number of birth centers seeking and obtaining accreditation by the Commission for the Accreditation of Birth Centers (CABC) has grown from 45, five years ago, to 105 today[21]
- ✓ Private equity firms, physicians and midwives are investing in birth centers and see it as a growth industry



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# Payers and Employers Can Realize the Benefits of Increasing the Use of Birth Centers

By increasing the number of births at independent, midwife-led birth centers, payers and employers can realize cost savings from 1) reducing the number of c-sections, 2) reducing costs of normal deliveries, and 3) reducing complications after delivery for both the mom and baby. To realize this opportunity, payers should:

1. Establish uniform national policies and procedures for birth center contracting, benefit plan design, wellness programs and member communications
2. Assure access for members, nationally and regionally, by contracting with licensed, accredited, independent birth centers
3. Reimburse birth centers at sustainable rates that both support their costs and provide capital to grow, innovate, and enhance services
4. Offer benefit packages with enhanced coverage for birth centers
5. Include information about birth centers as a choice in wellness programs, maternity, and childbirth education
6. Report birth center costs and quality on member transparency tools and websites
7. Publicize the addition of birth centers to employers with high maternity costs, who in turn can promote them to their members

## For more information contact:

Kate Bauer, Executive Director American Association of Birth Centers | katebauer@birthcenters.org| 215-234-8068

[1] "The Cost of Having a Baby in the United States," *Truven Health Analytics*, January 2013. Available at: http://transform.childbirthconnection.org/reports/cost/
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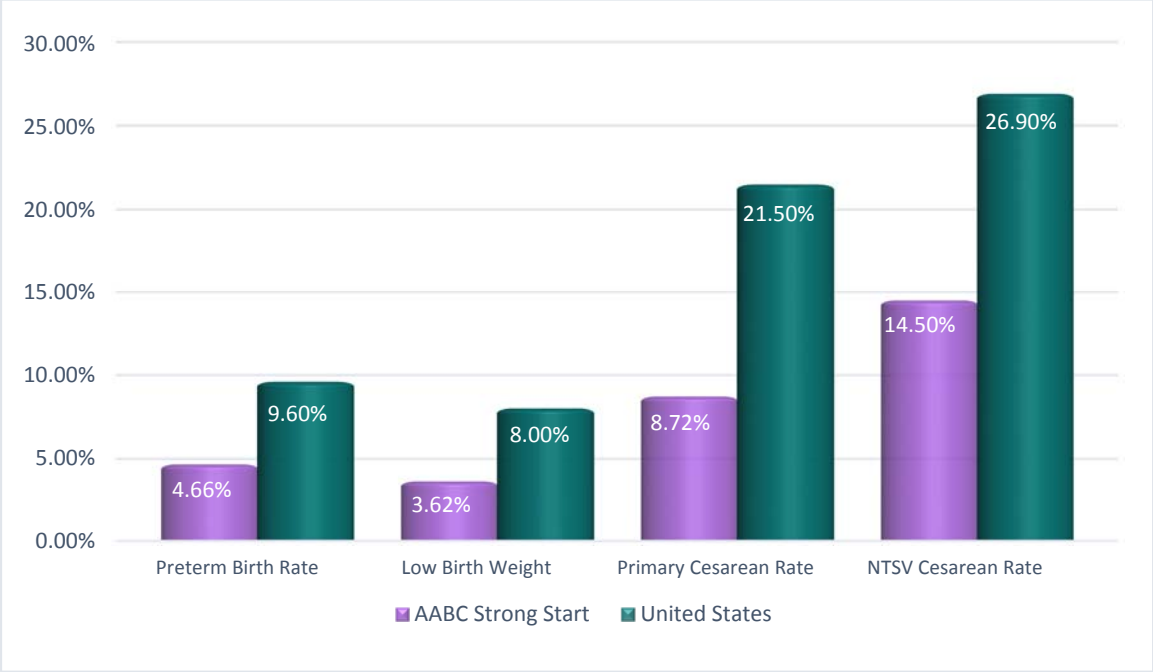
# Strong Start Birth Centers
# Decreasing Cost and Improving Quality of Pregnancy Care

Strong Start is a project sponsored by the Center for Medicare and Medicaid Innovation (CMMI) to study methods of prenatal care designed to lower preterm birth rates and improve other outcomes of pregnancy.[1] The American Association of Birth Centers (AABC) was approved to convene a group of 45 freestanding birth centers to measure outcomes for women with Medicaid or CHIP insurance receiving enhanced birth center prenatal care. Freestanding birth centers are health care facilities that are not hospitals, where women receive comprehensive, family-centered maternity care.

Preliminary data show that prenatal care provided in birth centers gives women better support, more information and decreases rates of complications of pregnancy.[2] Women in the AABC Strong Start program demonstrated a similar sociodemographic and medical risk profile as in national data during the study time period.[3]

## Comparisons of Preterm Birth Rates, Cesarean Rates, Low Birth Weight[2,4,5,6]

Outcomes of care for Strong Start birth center Medicaid beneficiaries are far better than national rates:




## Vaginal Births, Breastfeeding, Client Satisfaction

Strong Start participants were very satisfied with their birth center care. At the end of prenatal care, 97.7%[7] were moderately, very, or extremely satisfied with their care. After their births, over 88.9% of participants were moderately, very, or extremely satisfied with their care in the birth center.

Medicaid recipients at Strong Start birth centers exclusively breastfed their infants 88.9% of the time, leading to better short and long term health for their infants.

## Cost Savings with Higher Utilization of Birth Center Care

### Cesarean Savings

For every 10,000 births to women in birth centers compared to 10,000 hospital births, we could expect approximately 75% fewer cesareans which would lead to significant savings (expect 600 sections for birth center clients and 2400 in hospital).

Using the financial model in Stapleton et al. (2013), savings would be almost $5 million in facility charges alone for the cesareans prevented. This does not include savings from decreased morbidity and avoidance of further complications with longer hospital stays.

### Preterm Birth Savings

Every preterm birth has an average lifetime cost of $50,000. (IOM, 2007)

The national preterm birth rate varies with populations but averaged 9.6% for 2014 births. For some populations and areas of the US, rates are much higher than this. The preterm birth rate for Medicaid beneficiaries in Strong Start birth centers was 4.75% for >4000 births, which is 50% of the national average.

If 10,000 women who are Medicaid beneficiaries had prenatal care in the birth center rather than usual care, this could potentially save 485 preterm births or > $24 million.

## What Makes Birth Center Care Different?

Prenatal care as provided in the birth center has many components that make it different from traditional prenatal care in the physician's office. Birth center care is provided by midwives who take the time to listen and get to know the clients they serve. Visits are typically 30 minutes in length to provide time needed for enhanced care services. Women with social or economic risks, or poor support benefit from the supportive and educational time spent together at prenatal visits.

The outcomes of this care are clear in the data cited above. Investing in freestanding birth centers is an investment in the future health of this county. Birth center care for Medicaid beneficiaries will result in cost savings and significant improvements in quality measures.

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Journal of Midwifery & Women's Health www.jmwh.org
Review

# Maternal Outcomes in Birth Centers: An Integrative Review of the Literature

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**Introduction:** The birth center, a relatively recent innovation in maternity care, is an increasingly popular location of birth. The purpose of this integrative literature review is to assess the research on maternal outcomes from birth center care.

**Methods:** Using methods by Whittemore and Knafl, we conducted an integrative review of studies of birth centers published in English since 1980. Twenty-three quantitative sources and 9 qualitative sources describing maternal outcomes of birth center care were reviewed and synthesized.

**Results:** Outcomes for women receiving birth care were positive. Spontaneous vaginal birth rates and perineal integrity were higher for women beginning care in a birth center compared to women in hospital care. Rates of cesarean birth were also lower for women planning birth center care. Transfer rates are difficult to compare across studies, but antepartum transfer rates ranged from 13% to 27.2%. Intrapartum transfer rates ranged from 11.6% to 37.4%, and from 11.6% to 16.5% in studies published from 2011 to 2013. Nulliparous women had higher rates of transfer than multiparous women. Few severe maternal outcomes and no maternal deaths were reported in any studies. Women were satisfied with the comprehensive, personalized care that they received from birth centers.

**Discussion:** Quantitative studies reviewed included more than 84,300 women. The heterogeneity of the studies and variations of practice limit generalization of findings. However, even with multisite studies enrolling a variety of birth centers and practice changes over time, the consistency of positive outcomes supports this model of care. Policy makers in the United States should consider supporting the birth center model as a means of improving maternal outcomes.
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## INTRODUCTION

The number of US births in freestanding birth centers grew by more than 75.8% from 9620 in 2004 to 16,913 in 2013, which is a 87% increase in the proportion of US births that take place in birth centers.[1,2] As part of national and international calls to improve maternal health, the birth center model of care has gained widespread attention as a location of birth for low-risk women.[3,4] Birth centers are a fairly recent location for birth, with the first studies on this model published in the 1980s.[5,6] However, there is a growing body of useful literature on this model of care. The purpose of this integrative review is to assess and summarize the current literature on maternal outcomes in birth centers to provide clear information for clinicians, administrators, and policy makers.

Although birth centers exist across the globe, the definition of this model is not standardized. With a broad definition, *birth centers* are locations for birth. As described in the literature, a birth center can be a discrete floor, a set of rooms within the hospital environment,[7,8] or a freestanding facility devoted solely to low-risk perinatal care.[9–12] Nearly all birth centers identify as a place of birth for low-risk women that is integrated within the health care network.[4]

There are a variety of official definitions of birth centers within the United States. The federal definition of a freestanding birth center is "a health facility that is not a hospital or physician's office, where childbirth is planned to occur away from the pregnant woman's residence that is licensed or otherwise approved by the state to provide prenatal labor and delivery or postpartum care and other ambulatory services that are included in the plan."[13] The American Association of Birth Centers (AABC) further defines a freestanding birth center as "a home-like facility existing within a health care system with a program of care designed in the wellness model of pregnancy and birth."[14] *Standards for Birth Centers* were developed in 1985 and are maintained by AABC to provide guidance for quality and safety in this model.[15]

Licensure and accreditation of birth centers varies. In the United States, freestanding birth centers are licensed or recognized by statute, regulation, or Medicaid in 42 states.[14] In 7 states, birth centers may operate without licensure.[14] Only in North Dakota are birth centers not a legal option for perinatal care.[14] Currently, 2 organizations in the United States accredit birth centers: the Commission for the Accreditation of Birth Centers and The Joint Commission. The Commission for Accreditation of Birth Centers requires centers to adhere to the AABC standards.[14] As of January 2015, there were 310 known birth centers in the United States, 82 of which were accredited by the Commission for the Accreditation of Birth Centers.[16] In addition, there are many birth centers that adhere to the AABC standards but are not accredited.

The birth center model of care is increasing in popularity. Clear information on the maternal benefits and risks of this model are needed for women, clinicians, administrators, and policy makers as the United States and other countries work to improve maternal perinatal outcomes while maintaining a patient-centered and compassionate approach to care. This integrative review will provide a comprehensive assessment of

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## Quick Points

- The number of US births in freestanding birth centers grew by more than 75% from 9620 in 2004 to 16,913 in 2013.
- This integrative review of maternal outcomes in birth centers includes 23 quantitative and 9 qualitative articles from studies performed in the United States and internationally.
- The birth center model of care is associated with greater rates of spontaneous vaginal birth and lower rates of assisted vaginal and cesarean birth when compared to hospital care. Severe adverse maternal outcomes were very rare, and no maternal deaths were reported.
- These data, including outcomes from more than 84,000 women, clearly support that birth centers are a safe model of care for low-risk women when associated with a health system able to provide higher-level care.
- Policy makers in the United States should consider supporting the birth center model to improve local, state, and national maternal outcomes; and health plans should ensure that women have access to birth centers.

the literature on the birth center model of care for low-risk women.

## METHODS

Integrative reviews are summaries of original research on a specific subject to provide a comprehensive understanding of the topic.[17] The methodology outlined by Whittemore and Knafl was chosen for this review and includes: problem identification, literature search, data evaluation, data analysis, and presentation of review findings.[17] In this review, we have combined data analysis and presentation of review findings in the Results section.

### Problem Identification

Walsh and Downe published a systematic review of birth center care in 2004.[18] Since this review was published, several data-based studies have been released. These new studies, especially the Stapleton et al study of more than 15,000 women, require reassessment of the literature on birth center care.[12] Although there is no recent integrative or systematic review of the literature of maternal outcomes in birth centers, there have been several recent studies of neonatal outcomes for out-of-hospital births that have generated controversy, and interested readers are referred directly to these articles.[19–23] Therefore, we focused on maternal outcomes in recognized, accredited, or licensed birth centers in the developed world.

### Literature Search

In November of 2014, we conducted a search in Google Scholar, PubMed, and CINAHL databases using the search terms: "birth center"/"birthing center" and "outcomes." We limited the search to articles published in English after 1980. More than 2000 articles were located through Google Scholar; 22 articles through CINAHL, and 115 applicable publications through PubMed. The title and abstract of all articles in the CINAHL and PubMed searches were reviewed, and articles published in peer-reviewed journals containing data on maternal outcomes were obtained. Thirty-nine studies were obtained for full review. After obtaining articles, ancestry searches located 4 additional sources.

### Data Evaluation

After an initial review, 11 studies were eliminated. Four were studies of in-hospital birth centers that did not define their birth center practice model,[24–27] and 7 studies focused only on one aspect of care[28,29] or cost[30–32] and did not provide comprehensive data about maternal outcomes.[28,29]

Not all studies provided clear information on the location of the birth center. We excluded studies that specifically stated the birth center was located within an obstetric hospital unit because this is not reflective of US standards, but we retained studies that did not clearly stipulate the birth center location. We retained 4 articles from 2 international studies set in birth centers nestled within clinics or very small hospitals that did not provide surgical obstetric services as these studies clearly stated the birth center was designed for low-risk women.[8,33–35] We also included a series of articles from one randomized controlled trial conducted on a separate floor of a hospital because the birth center standards were clearly outlined and matched AABC standards.[7,36,37] Qualitative studies were included if they reported the woman's perspective of care in the birth center, antepartum or intrapartum.

## RESULTS

### Data Sets

After careful evaluation and screening, 23 quantitative publications representing 14 data sets (Table 1) and 9 qualitative publications (Table 2) were included in the integrative review. Data from one research study was often reported in several articles. Those with overlapping data sets include: 1) the Rooks et al articles,[9,38–40] 2) Waldenström and Nilsson publications,[7,36,37] 3) Jackson et al[10] and Nguyen et al,[41] 4) Brocklehurst et al[11] and Rowe et al,[42] and 5) Overgaard et al.[8,33,34]

### Study Settings

#### *Country*

Of the 32 sources reviewed, 18 were from the United States[5,9,10,12,20,38–41,43–51]; 3 from England[11,42,52]; 3 from Sweden[7,36,37]; 3 from Denmark[8,33,34]; 2 from Australia[53,54];

**Table 1.** Quantitative Studies of Birth Center Care Published in Peer-Reviewed Articles

| First Author, Publication Date, Data Collection, Location | Design/Setting/Sample | Results |
|---|---|---|
| Scupholme[5] | Matched pair cohort | **Transfer rate after admission to FBC** |
| 1986, 1982-1984 | Outcomes from an urban, FBC using CNMs to provide care were compared | IP: 21% (women transferred intrapartum/women presenting in labor) |
| Florida, United States | with a tertiary care hospital with obstetricians providing care. | PP: 1.5% (appears to be women transferred/women giving birth at FBC) |
| | 250 women who were admitted to the birth center in labor matched after birth | **Mode of birth** |
| | with 250 women in standard care with same risk factors and demographics. | SVB: FBC 92%; hospital 83%[a] |
| | Birth center group was more educated than control group. | AVB: FBC 2%; hospital 3% |
| | Birth center group race/ethnicity: 52% white, 17% black, 31% Hispanic | Cesarean: FBC 6%; hospital 14% |
| | | **Pharmacologic pain relief** |
| | | Narcotic analgesia: FBC 31%; hospital 41%[a] |
| | | **Length of labor:** significantly longer labors in the FBC group[a] |
| | | First stage: |
| | | 13-24 hours: FBC 55%; hospital 69% |
| | | >24 hrs: FBC 6%; hospital 2%[a] |
| | | Second stage > 2 hours: FBC 5.4%; hospital 2.4% |
| | | Oxytocin use in labor: FBC (after transfer) 12.4%; hospital 24%[a] |
| | | **Postpartum hemorrhage** |
| | | FBC 5%; BC hospital 1.4% |
| Scupholme[43] | Matched cohort | **Transfer rate** |
| 1987, 1984-1985 | Outcomes from an urban FBC using CNMs to provide care were compared | AP: 20% of women receiving prenatal care were transferred for medical reasons |
| Florida, United States | with a tertiary care hospital with obstetricians providing care. | (women transferred/women in prenatal care) |
| | 494 women gave birth in a FBC during the study period. Women who | IP: assigned 24%; self-selected 26% (women transferred/women admitted to FBC in |
| | self-selected FBC care were matched with women who were assigned to the | labor) |
| | birth center related to relieve hospital overcrowding. Attempt was made to | **Mode of birth** |
| | match groups for age, parity, financial status, and level of education. | SVB: assigned 93%; self-selected 90% |
| | Sample was 148 women assigned to birth center care compared to 148 women | Overall cesarean rate: 5% (assigned 5%; self-selected 5%) |
| | who selected BC care. The assigned group had significantly younger and less | **Pharmacologic pain relief** |
| | educated women and more women who were black or of Hispanic ethnicity. | Analgesia use: assigned 39%; self-selected 43% |
| Feldman[44] | Retrospective matched cohorts from women who chose either FBC or | **Transfer rate for FBC group after 37 weeks' gestation** |
| 1987, 1981 | hospital care | AP: 8% (women transferred between 37 weeks' gestation and labor/number of |
| New York City, United States | Outcomes from an urban FBC in New York, United States, using CNMs to | women in study at 37 weeks' gestation) |
| | provide care were compared with a tertiary care hospital with obstetricians | IP: 14% (number of women transferred at any point in labor/number of women in |
| | providing care. | study at 37 weeks' gestation) |

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**Table 1.** Quantitative Studies of Birth Center Care Published in Peer-Reviewed Articles

| First Author, Publication Date, Data Collection, Location | Design/Setting/Sample | Results |
|---|---|---|
| | 77 women planning birth center birth at 37 weeks' gestation matched to low-risk group of 72 women with hospital births<br>FBC group had significantly more white and college-educated women. Hospital group had significantly more women of Hispanic ethnicity. | **Mode of birth**<br>SVB: FBC 93.5%; hospital 88.7%<br>Forceps: FBC 5.6%; hospital 43.7%[a]<br>Cesarean: FBC 6.5%; hospital 11.3%<br>**Pharmacologic pain relief**<br>Epidural: FBC 2.7%; hospital 47.6% ($P < .0001$)<br>Demerol: FBC 19.5%; hospital 26.8%<br>**Length of labor**<br>1st stage > 12 hours: FBC 26.1%; hospital 1.6%[a]<br>2nd stage > 2 hours: FBC 18.8%; hospital 4.8%[a]<br>**Oxytocin use in labor**<br>Induction: FBC 1.3%; hospital 4.2%[a]<br>Augmentation: FBC 9.1%; hospital 59.5%[a]<br>**Perineal integrity**<br>Episiotomy rate: FBC 47.2%; hospital 78.1%[a]<br>Intact perineum: FBC 25%; hospital 6.3%[a]<br>**Third stage**<br>Manual removal of the placenta: FBC 1.4%; hospital 9.5%[a]<br>Postpartum hemorrhage: FBC 2.7%; hospital 1.6% |
| Rooks[9,b]<br>1989, 1985-1987<br>United States | Prospective cohort, observational study<br>Women admitted for labor in 84 FBC birth centers in 35 states<br>Care providers within the birth centers included CNMs, SNMs, obstetrician-gynecologists, licensed or lay midwives, and registered nurses.<br>1,1814 women admitted in labor to 84 FBCs<br>Compared to 1986 birth certificate data, women choosing birth center care were more likely to be white and of Hispanic ethnicity than the general population. They were also more likely to have finished college. | **Transfer rate**<br>AP (including medical and nonmedical reasons): 33.8% (number of women transferred prior to admission to FBC in labor/number of women enrolled in study<br>IP: 11.9% (number of women transferred prior to birth/number of women admitted in labor)<br>PP: 0.8% (number of women transferred after birth but prior to discharge/women admitted to birth center in labor)<br>Timing after admission to center unknown: 1.4%<br>**Mode of birth**<br>SVB: not clearly reported for women admitted in labor<br>AVB: not clearly reported for all admitted women; forceps and vacuum were applied within the birth center in 0.6% of births<br>Cesarean: 4.4% overall; 9.9% for nulliparous women |

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| First Author, Publication Date, Data Collection, Location | Design/Setting/Sample | Results |
|---|---|---|
| | | **Pharmacologic pain relief**<br>Analgesia or sedative IP: 24% of nulliparas; 6.2% of multiparas<br>PP analgesia beyond local lidocaine: 3%<br>**Oxytocin use in labor**<br>Augmentation with oxytocin at the birth center: 1.4% (not acceptable by current standards)<br>**Perineal integrity**<br>Episiotomy rate: 17.6%<br>Intact perineum: 34%<br>**Third stage**<br>Postpartum hemorrhage requiring transfer: 0.5%<br>**Severe adverse maternal outcomes**<br>0.01% PP eclampsia satisfaction:<br>94% would use center again<br>98.9% would recommend to a friend<br>Of women transferred:<br>83.3% would use center again<br>96.9% would recommend BC |
| Rooks[38,b]<br>1992, 1985-1987<br>35 states in the United States | Prospective cohort, observational study<br>Women seeking prenatal care or admitted for labor in 84 FBCs in 35 states within the United States. Care providers within the FBCs included CNMs, SNMs, obstetrician/gynecologists, other licensed or lay midwives, and registered nurses.<br>1,7856 women who received care from 84 birth centers<br>1,1814 women admitted in labor to FBC. | **Transfer rates**<br>AP (including medical and nonmedical reasons): 28.8% (women transferred prior to admission/women enrolled in study who had complete information)<br>Prenatal complication: 13.8%<br>Nonmedical reason: 4.2%<br>Desired hospital birth: 4.1%<br>Spontaneous or induced abortion: 2.08%<br>Fetal death: 0.3%<br>Lost to follow-up/other: 3.2%<br>**Characteristics of women admitted in labor to the FBC**<br>92% married or living with partner<br>90% of women aged 18-35 years<br>69.1% of midlevel socioeconomic status<br>39.3% nulliparous |

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**Table 1.** Quantitative Studies of Birth Center Care Published in Peer-Reviewed Articles

| First Author, Publication Date, Data Collection, Location | Design/Setting/Sample | Results |
|---|---|---|
| Rooks[40,b]<br>1992, 1985-1987<br>35 states in the United States | Prospective cohort, observational study<br>Women admitted for labor in 84 FBC in 35 states<br>Care providers for labor within the FBCs included CNMs (76% of admitted women), registered nurses (7.7% of admitted women), obstetrician/gynecologists (7.4% of admitted women), licensed or lay midwives (3.8% of admitted women), SNMs (3% of admitted women), and family practice physicians (2.5% of admitted women).<br>1,1814 women admitted in labor to FBCs. | **Transfer rate for women admitted for intrapartum care**<br>IP: 12.4% (number of women transferred after admission/women admitted to birth centers for intrapartum care)<br>PP: 3.4% (number of women transferred after birth/number of women admitted to birth center)<br>**Mode of birth for women giving birth within the FBC**<br>SVB: 99.4%<br>AVB: Vacuum 0.4%; low forceps 0.2%<br>**Pharmacologic pain relief**<br>Central nervous system (CNS) depressants including narcotics: 13.1%<br>Nulliparous women 3 times more likely than multiparous women to use CNS depressants for pain<br>Anesthesia (only stated for women giving birth within the FBC, not all admitted women):<br>None: 44%<br>Local anesthesia only: 52.9%<br>Paracervical block: 1.7%<br>Pudendal block: 1.3%<br>Inhalation anesthesia: 0.02%<br>Epidural, caudal, or spinal anesthesia: 0.01%<br>39 women were transferred solely for inadequate pain relief<br>**Induction of labor for those admitted for intrapartum care**<br>Castor oil: 8.7%<br>Amniotomy prior to contractions: 1%<br>Oxytocin: 0.4%<br>**Augmentation of labor for those admitted to birth center**<br>Amniotomy: 51%<br>Nipple stimulation: 12.7%<br>Oxytocin: 1.5%<br>**Perineal integrity for women giving birth in the FBC**<br>Intact perineum: 34%<br>Episiotomy rate: 23% |

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| First Author, Publication Date, Data Collection, Location | Design/Setting/Sample | Results |
|---|---|---|
| Rooks[39,b]<br>1992, 1985-1987<br>35 states in the United States | Prospective cohort, observational study<br>Women seeking prenatal care or admitted for labor in 84 FBCs in 35 states within the United States. Care providers within the FBCs included CNMs, SNMs, obstetrician/gynecologists, licensed or lay midwives, and registered nurses.<br>1,7856 women who received care from 84 birth centers<br>1,1814 women admitted in labor to FBCs with a focus on women and newborns experiencing complications within the birth center itself. Maternal complications following transfer were not included. | **Antepartum transfer:** 1/3 of women seeking care were transferred.<br>More than half of antepartum transfers were nonmedical.<br>14% of women seeing birth center care were referred prior to labor.<br>90% of referrals were during the third trimester, and postterm pregnancy was most frequent reason (number of women transferred prior to admission in labor/women enrolled in study).<br>**Transfers after admission to the FBC** 12.4% of women admitted to the FBC (women transferred before birth/women admitted to birth center)<br>**78% of transfers occurred intrapartum**<br>First stage:<br>9.5% of all women admitted for FBC in labor<br>59.8% of all transfers<br>Second stage:<br>2.2% of all women admitted for FBC in labor<br>14.1% of all transfers<br>**22% of maternal transfers occurred postpartum**<br>0.9% of all women admitted for FBC in labor<br>5.4% of all transfers<br>**Intrapartum complications at the FBCs**<br>Failure to progress in the first stage of labor:<br>8.3% of women admitted in labor<br>43.2% of transfers after intrapartum admission<br>Fetal distress in first stage:<br>7.8% of women admitted in labor<br>2.9% of transfers after intrapartum admission<br>Postpartum hemorrhage: 6.2% of women giving birth in the FBC<br>**Women experiencing complications:** authors categorized complications as none, minor, intermediate, and serious. However, the perceived seriousness of complications may be different than current perceptions. Therefore, only the categories of no and serious complications are reported.<br>Labor complications for women admitted to FBC: none 60.8%; serious 5.7% |

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|---|---|---|
| | | Birth complications for women birthing in FBC: none 76.1%; serious 0.2%<br>Immediate postpartum complications for women who gave birth in FBC: none 48.3%; serious 0.5% |
| Waldenström[7,c]<br>1993, 1989-1992<br>Sweden | Randomized, controlled trial<br>1230 nonsmoking, Swedish-speaking women without complications randomly assigned to in-hospital birth center care (n = 617) or the control group of standard care in the hospital (n = 613)<br>The same team of midwives were the primary care provider for both groups. | Main outcome measure was satisfaction with care.<br>**Transfer rates for birth center group**<br>AP including medical and nonmedical reasons: 17% (women leaving birth center care before labor/women in study group)<br>IP: 37.3% (women transferred in labor/women in study group)<br>PP: 1.1% (women transferred after birth/women in study group)<br>**Satisfaction**<br>Women assigned birth center care were more satisfied ($P < .001$) with their prenatal, intrapartum, and postpartum care than the control group of standard hospital care.<br>More women in the birth center group felt AP care raised self-esteem (63% BC; 18% hospital; $P < .001$)<br>More women assigned to the birth center group would use the same model in the future[a] (88% BC; 46% hospital). |
| Waldenström[36,c]<br>1994, 1989-1992<br>Sweden | Randomized controlled trial<br>1230 nonsmoking, Swedish-speaking women without complications randomly assigned to in-hospital birth center care (n = 617) or the control group of standard care in the hospital (n = 613)<br>The same team of midwives were the primary care provider for both groups. | Main outcome measures were use of labor analgesia and experience of pain in labor. Groups were analyzed as intent-to-treat beginning with group allocation.<br>**Transfer rates for birth center group**<br>Withdrawal from study: primiparas 2.3%; multiparas 4.5%<br>AP (medical reasons): primiparas 1.8%; multiparas 9.4%<br>IP: primiparas 27.3%; multiparas 4.5%<br>PP: primiparas 1.1%; multiparas 1.1%<br>**Pharmacologic pain relief**<br>Epidural:<br>Primiparas: BC 16.9%; hospital 22.5%[a]<br>Multiparas: BC 1.6%; hospital 2.3%<br>Pethidine:<br>Primiparas: BC 4.2%; hospital 20.1%[a]<br>Multiparas: BC 1.6%; hospital 7.0%[a] |

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| First Author, Publication Date, Data Collection, Location | Design/Setting/Sample | Results |
|---|---|---|
| | | Nitrous oxide:<br>Primiparas: BC 18.4%; hospital 54.4%[a]<br>Multiparas: BC 3.5%; hospital 32.9%[a]<br>Pudendal block:<br>Primiparas: BC 0.3%; hospital 2.15%[a]<br>Multiparas: BC 0.4%; hospital 4.3%[a]<br>Paracervical block:<br>Primiparas: BC 0.3%; hospital 2.1%[a]<br>Multiparas: BC 0%; hospital 0.4%[a]<br>Sterile water:<br>Primiparas: BC 16%; hospital 11.7%[a]<br>Multiparas: BC 5.5%; hospital 5%<br>**Experience of pain at 2 months postpartum**<br>Rating of pain intensity: no significant difference between BC and hospital groups<br>Women's attitudes to labor pain as positive or negative: no significant difference between BC and hospital groups<br>**Experiences of birth at 2 months postpartum**<br>Women's overall experience of childbirth: no difference between BC and hospital groups<br>Anxiety during birth: no statistically significant difference between BC and hospital groups<br>Support from husband: no statistically significant difference between BC and hospital groups |

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|---|---|---|
| | | **Experiences of care at 2 months postpartum** |
| | | Support from midwife: significantly greater for BC group |
| | | Freedom to express feelings in labor: significantly greater for BC group |
| | | Satisfied with achievement during birth: significantly greater for BC group |
| Waldenström[37,c] | Randomized controlled trial | Main outcome measures were medical interventions and outcomes. Groups were analyzed as intent-to-treat beginning with group allocation. Women were permitted to have birth center care with a previous cesarean if their last birth was vaginal. |
| 1997, 1989-1993 | 928 Swedish-speaking women without complications randomly assigned to in-hospital birth center care and 932 to standard care in hospital | |
| Sweden | The same team of midwives were the primary care provider for both groups. | |
| | | **Transfer rates** |
| | | AP: 13% (women transferred before labor/women in study group) |
| | | IP: 19% (significantly different between primiparous women and multiparous women) |
| | | (51% of primiparous women assigned to the BC group gave birth in the BC) |
| | | PP: 1.8% |
| | | **Length of labor from start of contractions to birth**[a] |
| | | BC 15 hours; hospital 14 hours[a] |
| | | **Pain relief** |
| | | Epidural: BC 12.1%; hospital 15.1%[a] |
| | | Pethidine: BC 3.7%; hospital 13.4%[a] |
| | | Nitrous oxide: BC 14.3%; hospital 46.6%[a] |
| | | Pudendal block: BC 3.4%; hospital 5.6%[a] |
| | | Local analgesia postpartum: BC 4.2%; hospital 20.1%[a] |
| | | **Mode of birth** |
| | | SVB: not reported |
| | | Vacuum: BC 3.9%; hospital 4.4% |

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| First Author, Publication Date, Data Collection, Location | Design/Setting/Sample | Results |
|---|---|---|
| | | Forceps: BC 3.9%; hospital 4.4%<br>Cesarean: BC 7.1%; hospital 8.9%<br>(Author noted that low baseline cesarean rate decreased power to see group differences)<br>**Oxytocin use in labor**<br>Induction of labor: BC 2.7%; hospital 4.6%[a]<br>Augmentation with oxytocin<br>1st stage: BC 15.6%; hospital 39.3%[a]<br>2st stage: BC 17.9%; hospital 29.5%[a]<br>**Perineal integrity**<br>Episiotomy rate: BC 7.8%; hospital 8.3%<br>**Third stage**<br>Postpartum hemorrhage > 600 mL: BC 12.5%; hospital 12.7%<br>Postpartum hemorrhage with transfusion: BC 0.7%; hospital 0.6%<br>**Severe adverse maternal outcomes**<br>One in each group with no residual effects |
| Fullerton[51]<br>1997<br>1993-1994 & 1985-1987<br>California, United States | Comparison of transfer data from 2 birth centers (women enrolled prospectively) is compared with data from a large, multi-site prospective trial.<br>Data from women admitted to 2 FBCs were compared with the National Birth Center Study.[9,38–40] The Birthplace had 1698 admitted women, and the Irvine center had 515 participants. The Irvine center allowed low-dose oxytocin to be administered, which is not consistent with current national standards.<br>CNMs were the intrapartum care provider in the 2 California birth centers, and the National Birth Center Study had diverse providers as described above. | **Transfer rates**<br>AP: (women transferred antepartum/women enrolling in prenatal care)<br>Total: birthplace 28.3%; Irvine 19.1%; national study 28.8%<br>Nonmedical reasons: birthplace 10.2%; Irvine 8.6%; national study 15.1%<br>Medical reasons: birthplace 18.1%; Irvine 10.5%, national study 13.8%<br>IP: 19% (women transferred intrapartum/women admitted in labor)<br>birthplace 25.1%; Irvine 20%; national study 12.4%<br>Percent of women transferred IP who were nulliparous:<br>birthplace 75%%; Irvine 71.8%; national study 79.1%<br>Most common reasons for IP transport across studies: failure to progress, prolonged rupture of membranes, thick meconium, elevated blood pressure<br>PP (women transferred after birth/women giving birth in the FBC):<br>birthplace 1.1%; Irvine .97%; national study 1% |

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| First Author, Publication Date, Data Collection, Location | Design/Setting/Sample | Results |
|---|---|---|
| David[56]<br>1999, 1992-1994<br>Berlin, Germany | Retrospective cohort with hospital comparison group selected from women with no risk factors and spontaneous labor.<br>The birth center group consisted of women admitted into labor (n = 801) at 2 Berlin birth centers compared with a control group of hospital births in Berlin meeting birth center admission criteria (n = 3271). All women were citizens of Germany, the US, or Northern and Central European countries.<br>Midwives (of unspecified type) were the care provider for the birth centers, and midwives and obstetricians were care providers at hospital births. No data on the percent of midwife-attended births in hospital was reported. | The birth center group was formed on admission to the birth center in labor and then analyzed using an intent-to-treat approach.<br>**Transfer rates**<br>IP: 18.2% (women transferred intrapartum/women admitted in labor)<br>PP: 3.6% (women transferred after birth/women admitted in labor)<br>**Mode of birth**<br>SVB: FBC 91.4%; hospital 84.3%[a]<br>AVB: FBC 5%; hospital 11%[a]<br>Cesarean: FBC 3%; hospital 4.6%<br>Primiparous cesarean rate: FBC 4%; hospital 6.6%[a]<br>**Perineal integrity**<br>Episiotomy rate: FBC 15.7%; hospital 54.8%[a]<br>Intact perineum: FBC 30%; hospital 22%[a]<br>**Third stage**<br>No significant differences in complications<br>**Serious adverse maternal outcomes**<br>FBC, none; hospital, one maternal death |
| Roberts[45]<br>2001, 1997-1999<br>Utah, United States | Retrospective cohort of women admitted to FBC<br>231 women evaluated at FBC over 2 years, 220 admitted in labor. Nurses or CNMs perform the initial labor evaluation and CNMs are the primary care provider for laboring women.<br>96% of admitted women were white and non-Hispanic. | The birth center group was formed on admission to the FBC and an intent-to-treat approach was used for data analysis.<br>**Transfer rates**<br>IP:<br>2% admitted to hospital after initial evaluation.<br>8.2% transfer rate after admission in labor<br>PP: 0.5% (women transferred after birth/women admitted in labor)<br>**Mode of birth for women admitted to the birth center**<br>SVB: not clearly stated; appears to be 97%<br>AVB: 1% vacuum; 1% forceps<br>Cesarean: 1%<br>**Pharmacologic pain relief**<br>Narcotics: IP 16%<br>Epidural: not clearly stated, but 1.8% of women were transferred due to desire for epidural |

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**Table 1.** Quantitative Studies of Birth Center Care Published in Peer-Reviewed Articles

| First Author, Publication Date, Data Collection, Location | Design/Setting/Sample | Results |
|---|---|---|
| | | **Oxytocin use in labor:** stated as 0.5% in one location, but 4.5% of admitted women were transferred due to arrest of labor |
| Jackson[10,d]<br>2003, 1994-1996<br>California, United States | Prospective cohort with concurrent comparison group<br>Birth center group self-selected to FBC care (n = 1808). The comparison group was recruited from local prenatal care clinics.<br>Low-income women were the target population; women with private or military insurance were excluded.<br>86.3% of the FBC group was white, Hispanic compared with 61.2% of the hospital group. The FBC group had a significantly lower proportion of white, African American women.<br>Care providers at the birth center were CNMs and obstetricians. The hospital group was cared for by obstetricians or obstetric residents. | The birth center group formed at the beginning of prenatal care and outcomes analyzed using an intent-to-treat approach. Women attempted a trial of labor after one cesarean were permitted in the FBC group. (Adjusted Wald estimates of 95% CIs are used to determine significant differences between groups because *P* values were not presented.)<br>**Transfer rates**<br>Prior to study admission 6.6% of women choosing FBC care were excluded from study; and 14.7% of women choosing hospital care were excluded from the study.<br>AP: medical 27.2%; nonmedical 8.5%<br>IP: 18.5% (women transferred after admission in labor/women in study group)<br>Of women choosing FBC care; 45.3% of women remained low risk to give birth at the FBC.<br>**Mode of birth**<br>SVB: FBC 80.9%; hospital 62.9%[a]<br>AVB: FBC 8.4%; hospital 18.1%[a]<br>Cesarean: FBC 10.7%; hospital 19.1%<br>**Pharmacologic pain relief**<br>Narcotic: FBC 29.2%; hospital 33.2%<br>Epidural: FBC 29.8%; hospital 68.6%[f]<br>**Oxytocin use in labor**<br>Induction with oxytocin/prostaglandin FBC 8.4%; hospital 14.7%[a]<br>Augmentation with oxytocin: FBC 15.8%; hospital 26.5%[a]<br>**Perineal integrity**<br>Episiotomy rate: FBC 13.1%; hospital 37.8%<br>**Postpartum maternal readmission:** FBC 0.4%; hospital 1%<br>Of women choosing FBC care, 45.7% of women remained low risk to give birth at the FBC. |

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**Table 1.** Quantitative Studies of Birth Center Care Published in Peer-Reviewed Articles

| First Author, Publication Date, Data Collection, Location | Design/Setting/Sample | Results |
|---|---|---|
| Nguyen[41,d]<br>2009, 1994-1996<br>California, United States | Targeted multivariate predictive analysis of transfer data from a prospective longitudinal study<br>This study used the dataset described in Jackson et al, 2003, but only analyzed information from the subset of women planning to give birth within the FBC (n = 1808).<br>Of these, only women who were low risk with complete chart data were included in the analysis (n = 1028). Only antepartum and intrapartum transfers were studied.<br>Care providers at the birth center were CNMs and obstetricians. Women with a previous cesarean birth were accepted into birth center care. | **Transfer rates**<br>AP: 37.6% of women desiring birth center birth<br>(defined as women presenting to the hospital in labor)<br>Of AP transfers: medical 66.6%; nonmedical 23%; unknown 10%<br>IP: 19.6% of women desiring birth center birth<br>(defined as women who present to the birth center in labor but give birth at the hospital and women with preterm labor or rupture of membranes)<br>Of IP transfers: medical 96.9%; maternal choice 2.3%; unknown 0.8%<br>Of women choosing FBC care: 45.3% of women remained low risk to give birth at the FBC.<br>**Risk factors associated with overall (medical and nonmedical) transfer**<br>History of cesarean birth (2.2 times greater risk)<br>Nulliparity (1.8 times greater risk)<br>History of previous hospital birth (1.5 times greater risk) |
| Wax[20]<br>2010<br>2006 birth certificate data<br>19 states in United States | Retrospective cohort-based study of 2006 birth certificate data from low-risk births from the 19 states using the 2003 revised birth certificate<br>745,690 births: 97% in hospital (n = 733143); 0.6% in a birth center (n = 4661), and 0.9% at home (n = 7427). This sample represents 49% of US births in 2006. | Data were analyzed by location of birth with FBC births and home births being compared (as one group) with hospital births.<br>Women having out-of-hospital births are more likely to be older,[a] multiparous,[a] and white[f] than mothers giving birth in the hospital in these states.<br>FBC and home births had less frequent chorioamnionitis, fetal intolerance of labor, and meconium staining.[a] |

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**Table 1.** Quantitative Studies of Birth Center Care Published in Peer-Reviewed Articles

| First Author, Publication Date, Data Collection, Location | Design/Setting/Sample | Results |
|---|---|---|
| | Physicians, CNMS, "other midwives" and "not stated" were care providers. Data was analyzed by location of birth, not care provider. | Women giving birth in FBC and at home more often had prolonged[a] and precipitous[a] labors than women giving birth in the hospital. |
| Overgaard[8,f]<br>2011<br>2004-2008<br>Rural Denmark | Prospective cohort with matched control group<br>839 women admitted to 2 midwifery units within a hospital that had an intensive care unit but no obstetric service (due to the rural hospital location) were matched with 839 low-risk women receiving care at an urban obstetric unit who had similar demographic characteristics.[e]<br>96% of the women were Nordic or of Western European ancestry in both groups.<br>Care in the BC was provided by midwives with 2 years of experience and advanced training in vacuum birth. | The birth center (a midwifery unit within a rural hospital without an obstetric service) and hospital cohorts were formed on admission to the units in labor and then analyzed with an intent-to-treat approach.<br>**Transfer rate**<br>Transfers intrapartum and up to 2 hours postpartum: 14.8% (number of women transferred/women admitted in labor)<br>Primipara: 36.7% of primiparous women admitted were transferred<br>Multipara: 7.2% of multiparous women admitted were transferred<br>IP: 11.6% (women transferred intrapartum/women admitted in labor)<br>PP: 4.7% (number of women transferred to the hospital prior to discharge/women admitted in labor)<br>**Mode of birth**<br>SVB: BC 94.9%; hospital 89.5%[a]<br>AVB: BC 3.0%; hospital 7.8%[a]<br>Cesarean: BC 2.3%; hospital 4%[a]<br>**Pharmacologic pain relief**<br>Epidural: BC 4.2%; hospital 10.3%[a]<br>**Oxytocin use in labor**<br>Augmentation: BC 8.2%; hospital 18.6%[a]<br>**Perineal integrity**<br>Intact perineum: BC 61.3%; hospital 55.5%[a]<br>Perineal suturing: BC 35%; hospital 43.6%[a]<br>3r[d]- and 4th-degree lacerations: BC 2.3%; hospital 2.9%<br>**Third Stage**<br>Postpartum hemorrhage >500 mL: BC 3.5%; hospital 8.1%[a]<br>**Readmission or outpatient visit within 28 days:** BC 2.9%; hospital 4.8%<br>**Severe adverse maternal outcomes:** none in the BC group, one in the hospital group; low numbers preclude significance testing |

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**Table 1.** Quantitative Studies of Birth Center Care Published in Peer-Reviewed Articles

| First Author, Publication Date, Data Collection, Location | Design/Setting/Sample | Results |
|---|---|---|
| Brocklehurst[11,e]<br>2011, 2008-2010<br>England | Prospective national cohort study commonly known as the Birthplace Study<br>Data were collected from: 142 home birth practices (97% of the total in England), 53 birth centers (95% of the total in England), 43 alongside midwifery units within the hospital (84% of the total in England), and 31 hospital obstetric units.<br>64,538 low-risk women were included in one of 3 groups by their planned location of birth at the beginning of labor: home, freestanding midwifery unit (noted here as BC for birth center), alongside midwifery unit in hospital, or obstetric unit in hospital.<br>Midwives were the primary care provider in all settings except the hospital obstetric units. | Groups for analysis formed by the woman's choice of birth location at the beginning of labor: home, freestanding midwifery unit (BC), alongside midwifery unit within the hospital, or within obstetric unit within the hospital. All groups were compared with the obstetric hospital unit to determine statistical differences. (Adjusted Wald 99% CIs were used to determine statistical significance.)<br>Women planning to give birth in freestanding midwifery units were 3 times more likely to have no complicating conditions at the start of labor when compared with women planning hospital births.[a]<br>**Transfer rate for freestanding midwifery units**<br>IP: 16.5%; nulliparous women 29.6%; multiparous women 5.3% (women transferred in labor/women planning to birth in BC)<br>PP: 4.8%; nulliparous women 5.9%; multiparous women 3.9% (women transferred postpartum/women planning to birth in BC)<br>Timing after transfer unknown: 0.5%<br>**Mode of birth for women planning birth in freestanding midwifery units**<br>Spontaneous vertex birth: BC 90.7%; hospital 73.8%[a]<br>Vacuum: BC 2.7%; hospital 8.1%[a]<br>Forceps: BC 2.9%; hospital 6.8%[a]<br>Cesarean: BC 3.5%; hospital 11.1%[a]<br>**Pharmacologic pain relief**<br>Epidural anesthesia: BC 10.6%; hospital 30.7%[a]<br>General anesthesia: BC 0.5%; hospital 1.5%[a]<br>**Oxytocin use in labor:**<br>Augmentation with oxytocin: BC 7.1%; hospital 23.5%<br>**Perineal integrity**<br>Episiotomy rate: BC 8.6%; hospital 19.3%[a]<br>3r[d]- and 4th-degree lacerations: BC 2.3%; hospital 3.2%<br>**No active management of third stage:** BC 22.1%; hospital 6.1%[a]<br>**Blood transfusion:** BC 0.5%; hospital 1.2%[a]<br>**Transfer to a higher level of care:** BC 0.2%; hospital 0.6%[a] |

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**Table 1.** Quantitative Studies of Birth Center Care Published in Peer-Reviewed Articles

| First Author, Publication Date, Data Collection, Location | Design/Setting/Sample | Results |
|---|---|---|
| Overgaard[33,f]<br>2012, 2004-2008<br>Rural Denmark | Mailed questionnaire to a subset of a larger prospective cohort with matched control group study<br>Women who were admitted to one of 2 midwifery units within a hospital that had an intensive care unit but no obstetric service (due to the rural hospital location) (n = 185) completed questionnaires along with an equal number of low-risk women with planned hospital births (n = 190) who had been matched to BC participants by demographic characteristics.<br>Midwives are the primary care providers in the BCs. The primary hospital care provider was not specified, though midwifery care of women across birth centers was reported as common in Denmark. | Women were included in the BC group as long as they had been admitted to a BC in labor, regardless of eventual birth location. The questionnaire used had been pilot tested by the authors and had sufficient internal reliability scores, but had not been previously validated. The level of significance difference between questionnaire scores was set at $P < .0025$ after the Bonferroni correction.<br>**Response rates:** BC 85%; hospital 87%<br>Women admitted to BCs had significantly more positive assessment of:<br>Overall birth experience[a]<br>Satisfaction with care[a]<br>Support from midwife[a]<br>Midwife present when wanted[a]<br>Attention to psychosocial needs[a]<br>Feeling listened to[a]<br>Level of information provided[a]<br>Participation in decision making[a]<br>Consideration of birth wishes[a]<br>Staff support for partner[a]<br>**The was no significance difference between the BC and hospital groups in:**<br>Suggestions for pain relief<br>Undisturbed contact with newborn<br>Support provided by partner<br>Loss of control over labor or staff actions |
| Overgaard[34,f]<br>2012, 2004-2005<br>Rural Denmark | Secondary analysis of data from a prospective cohort with matched control group<br>839 women admitted to 2 midwifery units within a hospital that had an intensive care unit but no obstetric service (due to the rural hospital location) were matched with 839 low-risk women receiving care at an urban obstetric unit who had similar demographic characteristics. | The primary outcome measure was whether birth interventions, pain relief, upright position for birth, and perinatal outcomes differed by level of social disadvantage as operationalized as no college education. The birth center (a midwifery unit within a rural hospital without an obstetric service) and hospital cohorts were formed on admission to the units in labor and then analyzed with an intent-to-treat approach.<br>Combined IP and PP transfer rate of participants admitted to the BC in labor: 14.8% |

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**Table 1.** Quantitative Studies of Birth Center Care Published in Peer-Reviewed Articles

| First Author, Publication Date, Data Collection, Location | Design/Setting/Sample | Results |
|---|---|---|
| | Secondary analysis of data from a prospective cohort with matched control group<br>96% of the women were Nordic or of Western European ancestry in both groups.<br>Care in the BC was provided by midwives with 2 years of experience and advanced training in vacuum birth. When women were transferred the BC midwife remained with the woman and continued to assist in her care in conjunction with an obstetrician. Midwives were the primary care provider for low-risk women giving birth in the hospital. | There were significant differences between the birth center and hospital groups as reported above in Overgaard.[8] However, no measures showed significant differences by educational level of the mother. |
| Stapleton[12]<br>2013, 2007-2010<br>33 states in the United States | Prospective cohort<br>15,574 women planning birth in one of 79 FBCs and eligible for FBC care at onset of labor<br>Participating women were:<br>77.4% white, non-Hispanic; 11.2% white, Hispanic<br>80% were married<br>53.5% had private insurance<br>71.8% had some amount of college education with 51.8% having 16 or more years of education.<br>Women attempting a trial of labor after previous cesarean were included in some FBCs.<br>Two types of midwives provided intrapartum care including CNMs (80%), licensed midwives (14%), and teams consisting of a variety of types of midwives (6%).<br>The majority (63%) of participating FBCs were accredited by the Commission for Accreditation of Birth Centers | Data were collected on 22,403 women seeking care at 79 FBCs and the antepartum transfer rates noted below. Women seeking FBC care at the onset of labor (n = 15,575) formed the sample for the remainder of the study and data on their outcomes analyzed in various ways, such as outcomes of women admitted to the birth center or giving birth in the center.<br>**Transfer rates**<br>AP<br>Nonmedical: 15.1% (women leaving FBC/women entering prenatal care at FBCs)<br>First trimester pregnancy loss: 4.2% (women having loss/women entering prenatal care at FBCs)<br>Medical: 13.7% (women requiring antepartum referral/women establishing care at FBCs)<br>IP<br>Transfer during labor but prior to FBC admission: 4.5% (women transferred after initial evaluation on labor but prior to admission/women planning FBC birth at the beginning of labor)<br>Transfer rate for women admitted to the FBC: 12.4% (women transferred after admission/women admitted)<br>Nulliparas accounted for 81.6% of the intrapartum transfers<br>PP transfer rate for women giving birth at the FBC: 2.4% (women transferred after birth but prior to discharge/giving birth in FBC) |

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**Table 1.** Quantitative Studies of Birth Center Care Published in Peer-Reviewed Articles

| First Author, Publication Date, Data Collection, Location | Design/Setting/Sample | Results |
|---|---|---|
| | | **Mode of birth for all women planning a FBC birth at labor onset (n = 15,575)** |
| | | SVB: 92.8% (including 0.3% VBACs) |
| | | AVB: 1.2% |
| | | Cesarean: 6.1% |
| | | **Third stage:** |
| | | Postpartum hemorrhage requiring transfer: 36/67 emergency transfers Postpartum hemorrhage was 68% of postpartum complications. |
| | | **Severe adverse maternal outcomes:** no maternal deaths |
| Benatar[46] | Retrospective cohort comparison using propensity score modeling and instrumental variable analysis | Women who received at least 2 prenatal visits at one FBC are compared with all women giving birth in Washington, DC, during the study time frame who meet propensity score analysis to match the low-risk criteria of the FBC. Groups were set by the presence of 2 visits at the birth center (regardless of intended birth location) and analyzed with an intent-to-treat approach. |
| 2013 | | |
| 2005-2008 birth certificates | Women who had at least 2 prenatal visits at one FBC and gave birth to a singleton newborn at ≥ 24 weeks' gestation (n = 872) are compared with women who gave birth in the District of Columbia between 2005-2008 and who meet propensity score analysis to match with birth center risk factors (n = 42,987). | |
| Washington, DC | | |
| United States | | |
| | Intended birth site was not a study consideration. Approximately 70% of women seeking care at this FBC choose hospital birth. | **Transfer rates:** unavailable related to study design |
| | | **Mode of birth** |
| | 85% of women included were of black, non-Hispanic race/ethnicity. | AVB: FBC 2.1%; hospital 4.4%[a] |
| | CNMs provided prenatal, intrapartum, and postpartum care at the FBC. Women in the control group had a variety of provider-types. | Cesarean: FBC 19.7%; hospital 29.4%[a] |
| | | Vaginal birth after cesarean: FBC 26.7%; hospital 9.4%[a] |
| | | **Preterm birth rate (≤ 36 weeks' gestation):** FBC 7.9%; hospital 11%[a] |
| Rowe[42,e] | Secondary analysis of data from national prospective cohort study, known as the Birthplace Study | Primary outcome measures were transfer time from FBCs and homes and reasons for transfer, reported by parity |
| 2013, 2008-2010 | | |
| England | Women planning to birth at home or in an FBC at the beginning of labor (n = 27,842) as described in the National Perinatal Epidemiology Unit study or Birthplace study | **Characteristics of women transferred from FBCs** |
| | | Nulliparous: 78% of women transferred |
| | | one previous pregnancy: 16.6% |
| | | 2 previous pregnancies: 4.8% |
| | FBC participants were 91% white and 97% fluent in English. | 3 or more previous pregnancies: 1.8% |
| | Midwives were the primary intrapartum care provider. | **Timing of transfer from FBC for all women admitted** (statistics separate nulliparous and multiparous women, but the denominator is all women planning FBC birth at beginning of labor regardless of parity): |
| | | IP: nulliparous 26.9%; multiparous 4.9% |

(*Continued*)

**Table 1.** Quantitative Studies of Birth Center Care Published in Peer-Reviewed Articles

| First Author, Publication Date, Data Collection, Location | Design/Setting/Sample | Results |
|---|---|---|
| | | PP: nulliparous 6.0%; multiparous 3.9%<br>Timing after admission to center unknown: nulliparous 1.5%; multiparous 0.5%<br>**Reasons for transfer**<br>Nulliparous:<br>Failure to progress in the 1st stage<br>Meconium staining<br>Failure to progress in the 2nd stage<br>Multiparous:<br>Retained placenta<br>Failure to progress in the 1st stage<br>Postpartum hemorrhage<br>**Urgency of Transfer** (statistics separate nulliparous and multiparous women, but the denominator is all women planning FBC birth regardless of parity)<br>Potentially urgent intrapartum: nulliparous 9.5%; multiparous 1.5%<br>Nonurgent intrapartum: nulliparous 10.3%; multiparous 1.5%<br>Potentially urgent postpartum: nulliparous 0.7%; multiparous 0.9%<br>Urgency unknown: nulliparous 14%; multiparous 5.3%<br>**Overall transfer time (time from decision until evaluation by a provider at the receiving hospital)**<br>Overall transfer time regardless of indication: 60 minutes<br>Potentially urgent IP transfers: 50 minutes<br>Nonurgent IP transfers: 60 minutes<br>Potentially urgent PP transfers: 60 minutes<br>Increasing distance to the transferring hospital unit was associated with increased transport time, although statistical correlation was not performed. |

Abbreviations: AP, antepartum; AVB, assisted AVB vaginal birth; BC, in-hospital birth center meeting criteria; CI, confidence interval; CNM, certified nurse-midwife; FBC, freestanding birth center; IP, intrapartum; PP, postpartum; SVB, spontaneous vaginal birth.

[a] $P < .05$.

Several articles use the same data set or participants:

[b] Report on data from The National Birth Center Study.

[c] Report on data from the Stockholm Birth Center Trial.

[d] Data from the San Diego Birth Center Study.

[e] Report on data from the Birthplace Study.

[f] Report on data collected in one geographic area as part of a multifaceted study.

**Table 2.** Qualitative Studies of Birth Center Care Published in Peer-Reviewed Articles

| Author, Publication Date, Data Collection | Study Design | Participants and Research Context | Themes |
|---|---|---|---|
| Annandale[55]<br>1987 | Longitudinal qualitative research, involving 18 months of participant observation, repeated focused participant interviews, attendance at prenatal visits, and association of data with quantitative information from the medical record<br>Exploration of patient desires for control and the extent and meaning of patient control | 46 pregnant and postpartum women getting care at a FBC<br>The birth center was located "on the campus of a community hospital." And nurse-midwives were the primary care providers. Obstetricians provided care at the hospital following transfer.<br>Scotland | Women made a deliberate decision to choose birth center care for reasons including: a reaction against hospitals, hospital practice, and reaction against the lack of control in the hospital environment.<br>Women had some ambivalence about the birth setting due to concerns of health risks and conflict between the birth center and the hospital, especially over the management of post-date pregnancies.<br>The meaning of control during birth was also a theme and included facets of balance, health maintenance, and control of self. |
| Chamberlain[35]<br>1997<br>1995-1997 | Semi-structured interviews assessed perceptions of the birth center on the community.<br>Only preliminary results reported, no subsequent publication with full results | 45 individuals including women who had been consumers of birth center care: male consumers, nurses, midwives, community health workers, regional health staff, and community members<br>The birth center is housed within a health center with an onsite laboratory and basic blood bank. It was created to provide local care to birthing women to decrease women leaving the community to birth<br>Care in the birth center was provided by midwives and a maternity worker.<br>Rural Northwest Territories, Canada | Women who gave birth in the birth center were satisfied with their birth and midwifery care.<br>Women who received midwifery care but gave birth in hospital, away from the community, were satisfied with midwifery care but not with hospital.<br>Women who gave birth outside the community, in the hospital, were dissatisfied with being away and felt they had few choices at the time of birth. |
| Esposito[47]<br>1999<br>1991-1992 | Ethnography with open-ended interviews and participant observation of the immediate neighborhood, birth center daily activities, and births | 29 women receiving care at the FBC, 5 midwives, and 6 staff members participated in interviews. Only comments from interviews of women who had previous hospital births are included in the article.<br>Nurse-midwives were the care providers at the center which is located in an inner-city neighborhood where residents are 50% African American, 21% of European American, and 12.4% of Hispanic ethnicity. The racial identification of participants is not identified.<br>Washington DC, United States | Women mentioned the accessibility of the center and the intimacy of the connections developed with the CNMs. At the beginning of care, not all of their perceptions of the center were positive. However, women who had a previous hospital birth disliked the hospital setting even more, especially the lack of control and racial stereotyping. Over time, the women learned more about the centers and became very comfortable with the people and the model of birth center care and valued their intimate connection with the staff. |

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**Table 2.** Qualitative Studies of Birth Center Care Published in Peer-Reviewed Articles

| Author, Publication Date, Data Collection | Study Design | Participants and Research Context | Themes |
|---|---|---|---|
| Coyle[53,54]<br>2001<br>1996-1997 | Qualitative semi-structured interviews analyzed with a modified Straus & Corbin grounded theory method | 17 women (16 Caucasian and one Maori) who gave birth at one of 3 FBCs in Australia. Inclusion criteria included continuity of care components and at least one previous hospital birth.<br>Care at the birth centers were provided by midwives.<br>Western Australia | **Beliefs about pregnancy and birth**<br>Birth as a normal life event including birth as a natural process, carer's non-interventionist approach<br>Birth as a disease process in the hospital including birth being viewed as an illness and the carer's interventionist approach that results in physical interference with birth processes<br>**Nature of the care relationship**<br>Collaborative relationship in the birth center including equality with carers and pregnant women as the primary decision-makers<br>Provider dominated relationship in previous hospital care that included health professional superiority and pregnant women as passive participants<br>**Care interactions**<br>Cumulative interactions including the women feeling comfortable with the carers and being known as individuals was compared with<br>Noncumulative interactions that result in a lack of rapport with providers and women being unknown to the care provider<br>**Care structures**<br>Woman-tailored care was provided in the birth center.<br>Personalized care was provided by the midwives. |

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**Table 2.** Qualitative Studies of Birth Center Care Published in Peer-Reviewed Articles

| Author, Publication Date, Data Collection | Study Design | Participants and Research Context | Themes |
|---|---|---|---|
| Pewitt[48]<br>2008<br>(Data collection dates not provided) | Semi-structured interviews analyzed with Sandelowski's qualitative descriptive method | 7 adult, primiparous Caucasian postpartum women with insurance who gave birth in one FBC<br>Rural Tennessee, United States | Empowerment – the women felt their experienced increased their confidence in their capacity to handle challenges.<br>Sense of motherhood – although the women had anxieties about parenthood, the care improved their confidence.<br>Establishing and strengthening relationships – Participants stated they grew new connections and relationships throughout their perinatal care.<br>Participants attributed their satisfactory experiences to close, caring relationships to care providers. |
| Walsh[52]<br>2006<br>(No dates of data collection provided) | Ethnographic study using unstructured interviews and participant observation of births and the clinic environment | Interviews were conducted with 10 midwives, 5 maternity care assistants, and 30 women who had given birth in the birth center.<br>The birth center was located within a small hospital that did not have an obstetric service. Midwives were the care providers within the birth center and obstetricians and midwives provided care at the referral hospital.<br>England | The turn to birth environment and setting – women used previous experiences and the recommendation of family and friends to find the birth center.<br>Effect of the first visit – women enjoyed the friendliness of the staff.<br>Nesting responses – women felt the staff created an emotional environment that made them feel safe.<br>Vicarious nesting – staff worked to create a physical environment that comforted the woman.<br>Care as mothering – the staff cared for patients as individuals and provided care tailored to their needs, as a mother would. |

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**Table 2.** Qualitative Studies of Birth Center Care Published in Peer-Reviewed Articles

| Author, Publication Date, Data Collection | Study Design | Participants and Research Context | Themes |
|---|---|---|---|
| Palmer[49]<br>2009<br>2007 | Comparative case studies from 3 models of care delivery using semi-structured interviews, structured observation, and focus groups | Interviews of 9 women receiving prenatal care in an obstetric clinic associated with a large teaching hospital, 7 women in FBC care; 9 women in federally-qualified health center. Focus groups were conducted with women receiving care in the birth center and the health center. Structured observation was also conducted at the FBC and the health center.<br>District of Columbia, United States | Compared with other groups, women receiving care at the birth center perceived care as very comprehensive that included more personal attention compared to previous care experiences in other locations (eg, CNMs called them to check on them).<br>Participants' suggestions for improvement focused on improvements in clinical care and space for the 2 clinics, whereas comments for the FBC focused on administrative concerns. |
| Phillippi[50]<br>2014<br>2011 | Qualitative descriptive study using semi-structured interviews and demographic questionnaires | 29 women receiving prenatal care in an FBC were interviewed about facilitators of prenatal care access.<br>Nurse-midwives were the care providers in the birth center.<br>Rural Tennessee, United States | **Facilitators of prenatal care**<br>Access to Medicaid and other insurance coverage<br>**Provider attributes**<br>Provision of personalized care in an unrushed prenatal visit, having questions answered, birth center setting, family friendly and relaxing atmosphere<br>**Clinic attributes**<br>Participants commented that the clinic had an alternative approach to care, a relaxing, family-friendly environment, a wide range of appointment times, and short waits for appointments. |

Abbreviations: CNM, certified nurse-midwife; FBC, freestanding birth center.

and one each was from Canada,[35] Scotland,[55] and Germany.[56] Eight of the studies specified locations in rural settings[8,33–35,48,50,52]; 9 in urban settings[5,41,43,44,46,47,49,51,56]; and 15 were not specified, or they included multiple sites.

### *Providers of Care*

There was a diversity of providers in the studies. Twelve of the articles stated that certified nurse-midwives (CNMs) were the primary providers of intrapartum care.[5,43–51,55,56] Thirteen articles stipulated that midwives provided intrapartum care within the birth center but did not specifically outline the midwife's prior education.[7,8,11,33–37,42,52–54] A mix of intrapartum providers including physicians, CNMs, and other legally practicing midwives were reported in 7 articles drawing from 4 datasets.[9,10,20,38–41]

### *Differences in Practice (Time and Geography)*

Data for the studies were collected from the early 1980s through 2011, and maternity care varied greatly over time. For example, baseline rates of episiotomy decreased in all locations over time, whereas epidural analgesia and cesarean rates increased. Geographic location also affected results; the Waldenström and Nilsson study was one of the few without significantly lower rates of cesarean birth for women in the birth center, in part because of low statistical power to detect differences from the hospital's 8.9% cesarean rate, which is a typical rate in Sweden.[37] This heterogeneity makes rigid statistical comparisons difficult but provides insight into larger trends in maternity care.

## Samples

### *Race/Ethnicity*

Thirteen of the quantitative articles and 4 qualitative articles included information on race, ethnicity, or cultural identity of participants.[7,8,12,20,33–40,42–46,49,53,54] These sources varied in the populations served, but the majority of women receiving care in birth centers were identified as white or Caucasian.[7,8,12,20,33,34,36–40,42–44,53,54] A large number of participants in 4 studies were white women with Hispanic ethnicity.[9,10,12,43] The majority of participants in 2 studies were black women,[46,49] and a single study involved Inuit women.[35]

### *Educational Level*

Women in birth center care were typically more educated than the general population.[5,9,12,43,44] The multisite study of Stapleton et al found that 71.8% of women admitted to freestanding birth centers had attended college, and 51.8% were college graduates.[12]

### *Socioeconomic Status*

Three studies targeted women with lower socioeconomic status and compared women in birth center care to women in hospital care.[10,34,47]

## Study Design

The most common study design was a matched cohort comparison. Eleven of the reviewed articles compared a cohort of women planning or beginning labor in the birth center with a similar group of women in the hospital.[5,8,10–12,20,33,34,42–46,56] Six articles (4 from analyzing a single dataset) reported cohort studies of freestanding birth center care that did not employ a matched comparison group.[9,38–40] Cohort studies used a prospective design in 13 articles based on 7 datasets.[5,8,10–12,33,34,38–40,43] There were 5 retrospective cohort studies.[20,44–46,56] Although a Scupholme study allocated women to the birth center due to hospital overcrowding,[43] only Waldenström and Nilsson randomized participants to the birth center or hospital care.[7,36,37]

## Study Samples and Statistical Analysis

The number of women entering and establishing care at a birth center is related to the centers' clinical practice guidelines and when initial screening for low-risk status takes place. For instance, at some birth centers all woman are seen for an initial visit, whereas at others a receptionist is asked to perform a basic screening for risk factors prior to booking an appointment. Once women enter care, birth centers use varying guidelines to determine if a center birth is appropriate, and they refer women who need a higher level of care. At the beginning of labor, care providers again determine if a woman is an appropriate candidate to give birth out of the hospital, and women who need additional care are referred. Once admitted, care providers closely monitor the mother and newborn and transport women or newborns if they no longer meet low-risk criteria. Over time, these referrals gradually reduce the number of women receiving birth center care. Researchers handle this attrition in a variety of ways. Researchers can use an intent-to-treat analysis that allocates groups at a fixed point and retains the original groups throughout the study. The intent-to-treat approach has limitations, especially when there is a large amount of crossover from one group to another prior to the event of interest. For instance, it is minimally helpful to know the postpartum referral rate for all women entering birth center prenatal care because nearly half of those women would have been referred to the hospital prior to giving birth. With fairly high transfer rates from one group to another, it can be useful to know outcomes for women in smaller subsets of the original group, for instance, the postpartum transfer rate for women who gave birth in the center. This approach provides more clinically applicable information and greater statistical power to detect differences between groups. Therefore, many researchers perform subgroup analyses to provide more relevant information. However, subgroup analyses can be problematic because they increase the influence of confounding variables, and the lack of standardized approaches to group formation makes comparison across studies difficult. For clarity, we have noted the denominator for all transfer rates in Table 1.

## Outcomes of Care

### *Mode of Birth*

Mode of birth was an outcome variable in 13 articles, and the majority of these categorized the mode of birth as

spontaneous vaginal, assisted vaginal, or cesarean.[5,8–12,37,40,43–46,56] In 4 studies, assisted births were further divided into forceps and vacuum.[11,37,40,45] Spontaneous vaginal birth rates were higher for women beginning care in a birth center when compared with women receiving care in hospitals in all studies. Five studies with groups of women in birth center care matched with low-risk women in hospital care had significantly higher rates of spontaneous vaginal birth.[5,8,10,11,56] Studies without comparison groups examined vaginal birth rates in birth center cohorts compared to national averages.[9,12,38–40]

Although forceps and vacuum devices cannot be used within birth centers accredited by the Commission for the Accreditation of Birth Centers, they can be used following transfer to a hospital. Women who begin care at a birth center had significantly lower rates of assisted vaginal births when compared with women initially admitted to hospitals in 6 studies.[8,10,11,44,46,56] One additional study also found a lower rate of assisted birth that failed to reach statistical significance.[5]

Corresponding to higher rates of spontaneous vaginal birth, rates of cesarean birth were decreased in women planning birth center care. All of the studies with comparison groups found lower rates of cesarean births among women in birth center care compared to women in standard hospital care.[5,10,37,44,56] Three of the studies found significantly lower cesarean birth rates for women beginning labor at a birth center as compared to a hospital.[8,11,46] Low baseline hospital cesarean rates in 2 European studies decreased the statistical power to detect a significant change, but the women beginning labor in birth centers did have a lower cesarean rate.[37,56] In cohort (observational) studies without comparison groups, cesarean birth rates for women seeking birth center care were low compared to national rates for low-risk women.[9,12,43]

### *Pain Relief*

Common methods of intrapartum pain relief and their frequency of use varied over time, providing chronologic information about intrapartum interventions and physiologic birth. Two of the earlier studies found significantly lower rates of narcotic analgesia in birth center groups when compared with hospital groups.[5,36] This variable was not reported in later studies. In 1994, Waldenström and Nilsson identified significantly higher utilization of pharmacologic pain relief methods in the hospital setting, including nitrous oxide, pudendal, and paracervical block contrasted with significantly higher rates of sterile water papule use in the birth center.[36]

Rates of epidural analgesia use for all women varied greatly over time and with study location. Although epidural analgesia is not available in a freestanding birth center, it is used by women after transfer. When reported, epidural analgesia rates for women planning or beginning birth center care were significantly lower than for women planning hospital care.[8,10,11,36,37,44] However, women planning hospital birth may have different preferences for labor coping than women planning birth center birth.

### *Perineal Integrity*

Episiotomy rates decreased over time throughout the studies and in all sites. Three studies found significantly lower rates of episiotomy in birth center groups as compared to hospital groups.[11,44,56] In a 1987 study by Feldman and Hurst, the episiotomy rate in the birth center was 47.2%, and in the hospital it was 78.1%.[44] In 1999, David et al found that freestanding birth centers in Berlin had a 15.7% episiotomy rate compared to a rate 54.8% at hospitals in the same city.[56] In a 2011 study, the episiotomy rate in freestanding birth centers (8.6%) was still significantly less than within the hospital (19.3%).[11]

In 3 studies, rates of women having an intact perineum following vaginal birth were significantly higher in the birth center group when compared with a hospital group.[8,44,56] Intact perineum rates in the birth centers, when reported, ranged from 25%[44] to 61.3%.[8] Although the rates of episiotomy were lower in the birth center groups and the rates of perineal integrity were higher, there was not a significant difference in the rate of third- and fourth-degree lacerations between groups in the 2 studies reporting this measure.[8,11]

### *Oxytocin Use in Labor*

Whereas oxytocin is not used prior to birth at freestanding birth centers following AABC standards, studies using intent-to-treat analysis provide insight on the rates of women needing oxytocin induction or augmentation. Oxytocin use during labor was significantly lower among intended birth center groups in all 6 studies reporting this variable.[5,8,10,11,37,44]

### *Length of Labor*

Three sources measured length of labor and found that women beginning labor in birth centers had significantly longer labors than women beginning labor in the hospital.[5,37,44] An analysis of more than 745,000 births in a variety of settings in the United States found that 4661 women who gave birth in freestanding birth centers were significantly more likely than women who gave birth within the hospital to have prolonged or precipitous labors, although a definition of *prolonged labor* was not provided.[20]

### *Transfers*

Transfer rates during antepartum, intrapartum, and postpartum care were reported in 18 studies. However, definitions were not uniform across studies, making comparisons difficult. For instance, some studies separated antepartum transfers into medical and nonmedical,[10,12,36,38,42,43] whereas other studies did not differentiate.[7,44] In addition, one study had a unique category for women experiencing a first trimester loss.[12] Rates of antepartum transfer for medical reasons during pregnancy ranged from 13%[37] to 27.2%.[10] The most recent antepartum medical transfer rate, which was reported by Stapleton et al, was 13.7%.[12] Waldenström and Nilsson were the only authors to differentiate antepartum transfer rates by parity, and multiparous women were transferred in the antepartum period at a rate 5 times greater than that of nulliparous women.[36]

Intrapartum transfer rates ranged from 11.6%[8] to 37.4%.[7] In studies from the past 5 years, intrapartum transfer rates ranged from 11.6%[8] to 16.5%.[11] Researchers did not have a uniform approach to defining this variable and calculated rates using a variety of denominators ranging from

all women entering birth center care prenatally to women admitted to the birth center in labor. For example, birth centers assess laboring women and determine if they meet admission criteria. Women who are transferred after this initial intrapartum assessment but prior to admission (known as a *preadmit intrapartum transfer* in 2 studies[12,45]), are included in the intrapartum transfer data of some but not all studies, affecting the ability to compare rates across studies. Twelve articles reported intrapartum transfer rates as a ratio of women transferred following admission in labor to all women admitted.[8,9,12,34,39,40,43,45,51,56] Four articles calculated intrapartum transfer rates from a denominator of women planning birth center birth at the beginning of labor.[5,11,41,42] Three studies, published in 5 articles, calculated intrapartum transfer ratios by dividing the number of women transferred intrapartum by the number of women in prenatal care or the study group.[7,10,36,37,44] These discrepancies in denominators, combined with differences across countries, make it difficult to make conclusive statements about transport rates.

Transfer from freestanding birth centers during labor and postpartum was the focus of 4 articles.[39,41,42,51] The most common reasons for intrapartum transfer were failure to progress, rupture of membranes without labor, and prolonged labor.[12,41,42,51] In all studies reporting transfer data, the leading reasons for transfer were nonemergency conditions. Rowe et al reported on transfer time and reported that average time from decision to transfer to being assessed at the hospital was 60 minutes, but the transfer time was significantly decreased for emergency transfers.[42] Nonreassuring fetal heart rate was the leading indication for emergency intrapartum transport.[12,41,51]

Intrapartum transfer rates for nulliparous women were at least 5 times higher than for multiparous women.[8,11,36,42] When reported, intrapartum transfer rates for nulliparous women ranged from 27.3%[36] to 29.6%[11,42] and for multiparous women from 4.9%[42] to 5.3%.[11] In a large study from England, 78% of women transferred from freestanding birth centers were nulliparous.[42] In the Stapleton et al study in the United States, nulliparous women accounted for 81.6% of intrapartum transfers.[12]

Postpartum transfer rates were reported in 11 studies[5,8,11,12,36,37,39,42,44,45,56] and ranged from 0.5%[45] to 4.8%,[11] with postpartum hemorrhage and retained placenta as the most common reasons.[9,11,12] Three sources calculated postpartum transfer rates by dividing the number of women needing postpartum transport by the total number of women giving birth in the center.[9,12,39] Other studies used the larger denominator of women admitted to the birth center[5,8,11,42,45,56] or planning birth center birth.[7,36,37]

Women transfer from birth center care due to medical or nonmedical reasons at any point in pregnancy, labor, or postpartum, resulting in gradual attrition from the birth center group. Two studies provided data on the percent of women who began care in a freestanding birth center and remained low risk and gave birth within the center. In 1992, Rooks et al reported that of women who had at least one prenatal visit, 52.5% of them gave birth in the birth center.[39] Of women who had regular antepartum care, 56.5% gave birth at the birth center.[38] In 2003, Jackson et al reported that 45% of women who entered antepartum care gave birth at the center.[10] No articles provided data on the percent of women who began prenatal care at a birth center and completed their entire peripartum care through to postpartum at the birth center.

Three studies examined the rate of emergency (emergent) transfers in comparison to nonemergency (nonemergent) transfers.[12,39,42] Rooks et al reported 7.9% of women or newborns experience emergency complications, but half were managed at the birth centers and half transferred to hospitals.[9,39] In Stapleton et al, of the 12.4% intrapartum transfers, 1.9% were reported as emergencies.[12] Rowe et al analyzed transfer data from the Birthplace study[11] and found that nulliparous women had a 9.5% "potentially urgent" transfer rate in labor, whereas multiparous women had only a 1.5% "potentially urgent" transfer rate.[42] In all studies examining transport, the majority of intrapartum transfers involved nonemergency conditions.[9,12,39,42]

### *Serious Maternal Outcomes*

The incidence of serious maternal morbidity and mortality is low in the developed world, resulting in low statistical power to see differences between hospital and birth center groups. Nearly all studies collected data on the incidence of serious maternal complications, although the definition of this variable was not well defined, and few reported any serious complications for women planning birth center or hospital care. The Waldenström and Nilsson 1997 study reported one case of severe maternal morbidity requiring admission to the intensive care unit in each group.[37] (One woman in the birth center had water poisoning with electrolyte imbalance, and one in the hospital group had severe toxemia.) Both women fully recovered.[37] Overgaard et al reported no severe adverse maternal outcomes in either group.[8] David et al had one maternal death in the hospital group and none in the birth center group, but they did not elaborate on the circumstances.[56] A large 2011 study of birth in all settings in the United Kingdom reported a significantly lower rate of blood transfusions and transfer to a higher level of care when comparing women who planned freestanding birth center care at the beginning of labor to hospital care.[11]

### *Satisfaction*

Four quantitative and 2 qualitative studies reported measures of maternal satisfaction. Two studies with comparison groups found significant differences in satisfaction with prenatal, intrapartum, and postpartum care compared to the control groups of standard hospital care.[7,9,36] Women beginning labor in a birth center had significantly improved quantitative measures of satisfaction when compared with women planning hospital births.[33] Significantly more women in the birth center group felt that antepartum care raised their self-esteem and that they would use the same model in the future.[7]

Two of the 8 qualitative studies included findings specifically about satisfaction,[35,48] and all other qualitative studies had results loosely related to this concept.[47,49,50,52] Women in birth center care were satisfied with the comprehensive, personalized care that they received[49] and the overall environment of the center.[47,48,50,52] Positive relationships with midwife caregivers were a theme in 4 qualitative

studies.[47,48,52–54] Participants valued the connections with midwives.[47] Women stated that their relationships with birth-center midwives were more egalitarian than with previous hospital providers,[53] and this personal connection enabled them to be active participants in health care decisions.[53] Participants in the Pewitt study felt that the close relationship with the birth center midwives care increased their confidence, and that their birth experiences demonstrated their capacity to handle life challenges.[48] As a result of these experiences, they felt more confident as parents.[48] Satisfaction with the relaxing birth center environment was a theme in 3 qualitative studies.[47,50,52] Women were also pleased with the birth center physiologic approach to care in comparison with previous hospital experiences.[53,54]

## DISCUSSION

This is the first integrative review of maternal outcomes in birth centers and clearly supports that birth centers are safe locations of birth for low-risk women as part of a leveled approach to maternity services.[3,4] The quantitative studies reviewed included more than 84,300 women seeking birth center care, and few severe adverse maternal outcomes and no maternal deaths were reported in the birth center groups. Rates of spontaneous vaginal births were high compared with hospital groups or national averages,[5,8–12,44,56] and the cesarean birth rates were lower than similar hospital comparison groups.[5,10,37,44,56] In addition, qualitative reports support that birth centers provide patient-centered care, consistent with current goals for patient engagement in health care decisions.

### Summary of Maternal Outcomes

Maternal outcomes for birth centers were equivalent or improved when compared with hospital groups or national averages in all studies. Serious maternal outcomes were exceedingly rare, and no maternal deaths occurred following admission to the birth center in any of the studies. The rates of cesarean birth were lower for women admitted to a birth center in labor when compared with women admitted to hospitals in all studies, and larger studies with adequate statistical power found statistically significant differences between the groups.[5,10,37,44,56] The rate of assisted birth was also less for women who started labor at the birth center. Correspondingly, rates of vaginal birth were higher, or significantly higher, for women receiving intrapartum birth center care in all studies.[5,8–12,44,56]

Use of pharmacologic pain relief was significantly decreased for women beginning labor in birth centers when compared with women laboring in hospitals,[5,8,10,11,44] even in studies that randomized women to birth location.[36,37,43] Length of labor was significantly increased in birth centers when compared with hospital groups.[5,20,37,44] However, use of oxytocin was significantly decreased for women starting labor in the birth center when compared with their hospital counterparts.[5,8,10,11,37,44] Birth center care in labor and during birth was associated with lower rates of episiotomy[8,10,11,44,56] and higher rates of perineal integrity[8,44,56] when compared with hospital care.

Women, including those transferred to other facilities, reported satisfaction with the birth center model in both quantitative and qualitative studies.[7,33,36,47,48,52,53] Women were pleased not only with the environment, services, and providers, but also reported a new sense of self-confidence and empowerment following birth. Engagement in ongoing decision making was mentioned in qualitative studies.[53–55]

However, whereas birth centers have positive maternal outcomes, not all women are appropriate candidates for birth center birth. Total transfer rates of women from entry into prenatal care to birth range as high as 54.7%.[10] Multiparous women were more likely to be transferred antepartum,[36] and nulliparous women were more likely to be transferred intrapartum.[11,12,39,42] Emergent transfers from birth centers were a small percentage of all transfers, and the most common reason for intrapartum transfer was lack of progress.[12,42]

These results provide information that birth centers are a safe option for low-risk women who chose an out-of-hospital model of care. However, there are caveats to the generalizability of the findings. For example, in all but one study, participants were women who specifically wanted a birth center birth; pregnant women are a vulnerable research population, and assigning them to give birth in a specific location has ethical implications. Only the 1986 Scupholme et al study had a forced allocation to the birth center related to hospital overcrowding.[5] Even the randomized controlled trial conducted by Waldenström and Nilsson enrolled only women desiring the birth center; therefore, the sample may have been different than the general population of pregnant women.[7,36,37]

The population of women seeking birth center care often had characteristics associated with positive perinatal outcomes. In the majority of studies, women who sought birth center care were more educated and from ethnic or racial groups associated with improved maternal outcomes in comparison with hospital cohorts.[2,7–9,12,33,34,36,37,45,56] However, improved perinatal outcomes were found even in studies that included or targeted women from marginalized racial groups.[43,46]

The heterogeneity of the studies and the variations of practice also limit generalization of findings. Maternity care practices change over time and vary dramatically by country. Even when the country and time were held fairly constant, there were still variations in practice within multisite trials. The 2 large studies of birth center care in the United States, led by Rooks et al and Stapleton et al, enrolled a variety of accredited and unaccredited centers.[9,12,38–40] However, even with this diversity of sites, these studies had outcomes similar to research from more uniform datasets. Although there are limitations to the literature on birth center care, the consistency of positive maternal outcomes across studies supports this model.

High rates of transfer may contribute to the positive birth outcomes in birth centers due to selection bias. However, when studies used an intent-to-treat analysis, the risk of intrapartum interventions, including cesarean, was consistently lower for women who were admitted to birth centers in labor.[5,8–12,44] Taken as a whole, the data supports that birth centers are appropriate for low-risk women who want this approach to maternity care.

### Practice Implications

Maternal outcomes following birth have received increased attention because the United States and other developed nations have experienced a rise in maternal morbidity and mortality.[57] Allowing or even encouraging low-risk women to choose birth center care could reduce cesarean rates, an important goal in improving maternal outcomes immediately and with subsequent pregnancies.[3,58,59] In 2015, a statement endorsed by the American College of Obstetricians & Gynecologists, AABC, and the American College of Nurse-Midwives acknowledged the birth center as an appropriate location of birth as part of a leveled approach to maternity services based on maternal risk status. A British organization, the National Collaborating Centre for Women's and Children's Health, went even further in supporting birth center care by stating that all low-risk women should be encouraged to choose out-of-hospital models for birth to increase their likelihood of positive perinatal outcomes.[3]

However, the literature does not support that all low-risk women should be required to use birth center care. All but one study included only women who wanted birth center care, creating allocation bias within the studies. In this research, women who wanted to give birth in birth centers had superior maternal outcomes. However, this positive effect may not remain if women were required to begin their labor in this location. Although allocation bias is problematic for research generalization, patient autonomy and patient-centered care put the woman's priorities for care as a paramount consideration. Whereas the positive aspects of birth center care may not remain if all low-risk women were required to utilize birth centers, women should be allowed to choose their location of birth.

Based on this integrative literature review, a woman who desires birth center care should be encouraged to find a birth center operating under the AABC standards that meets her needs. Although the birth center model has clear benefits for low-risk women, information on the likelihood of transfer needs to be included as part of a larger patient-centered conversation about informed choice.

### Research and Policy Implications

Whereas this review demonstrates that high-quality studies performed across time and in a variety of locations support the birth center model, further research is needed. Although it would be ideal to have comparative effectiveness research with hospital comparison groups carefully matched to birth center groups for risk status, educational level, and race/ethnicity, women who opt for birth center care may have a different philosophy or approach to birth, as stated in qualitative studies, that acts as a confounding variable. Instead, more research with large datasets would increase the strength of the evidence. Ideally, these data sets could be gathered from birth centers providing care according to the AABC standards.

Currently, the lack of standardized definitions of key measures of birth center care, including intrapartum transfer, limits the generalizability of studies. Researchers should strive toward uniform definitions of these concepts, such as those in the AABC Perinatal Data Registry.[60] In addition, authors should also present the denominator of all subgroup analyses for clarity and to allow outcome comparisons across studies.

This integrative review focused solely on maternal outcomes. Many of the reviewed studies include information on neonatal outcomes in birth centers, and other publications study solely neonatal outcomes. Clinicians could benefit from a comprehensive appraisal of the literature on neonatal outcomes to provide information to women considering birth center care.

Although the birth center model results in fewer intrapartum interventions and positive maternal outcomes, cost savings of this model, when compared to hospital care, has not been established. Cost analyses should include fees associated with transfer and savings from prevention of first and subsequent cesarean births to provide a comprehensive estimate of the cost of birth center care. Cost comparisons would provide valuable information to understand if this model, even with high rates of consultation and transfer, provides an overall financial benefit that is consistent with current initiatives to encourage evidence-based, efficient care.[61]

Transfer is a relatively common event for women admitted to birth centers. Researchers should assess women's experience of transfer to provide information on best practices for this vulnerable moment. Information from the literature on home birth may have applicability to this population, but this needs further exploration.[62]

Birth center care is consistent with current national priorities for health promotion, shared decision making, and appropriate use of medical technology and services. To increase access to freestanding birth centers, barriers to operations and sustainability need to be addressed at the local, state, and national levels. Recent national and international reports support birth centers as a vital component of a comprehensive maternity care system.[3,4] Ideally, local providers, state regulators, and insurance companies will review the evidence and support the birth center model of care.

## CONCLUSION

Birth centers are a maternity care model for low-risk women leading to positive outcomes. Women who receive birth center care have higher rates of spontaneous vaginal birth and postpartum perineal integrity when compared with matched hospital cohorts. Using intent-to-treat analysis, intrapartum birth center care was also associated with lower rates of medical interventions and procedures including oxytocin augmentation, episiotomy, assisted vaginal birth, and use of pain medication. Quantitative and qualitative studies found that women were very satisfied with birth center care. Overall transfer rates from the birth center ranged up to 54.7% of women beginning prenatal care, but the majority of transfers were for nonemergency conditions. This data clearly supports that birth centers are a safe model of care for low-risk women when associated with a health system able to provide higher-level care. Although more research is needed, birth centers should be supported by clinicians, policy makers, and health insurance carriers to enable low-risk women to access this evidence-based model of care.

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## CONFLICT OF INTEREST

Jill Alliman, CNM, DNP, is an employee of the American Association of Birth Centers. Julia Phillippi, CNM, PhD, FACNM, has no conflicts of interest to disclose.

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**Maternal and Child Health Advisory Board (MCHAB)**
**May 7, 2021 Update**

- **Domain: Women/Maternal Health**
  - Increase the percent of women ages 15-44 receiving routine check-ups in the previous year
  - Increase the percent of women receiving prenatal care in first trimester

- **Title V MCH Program and Partners –**
  - Community Health Services (CHS) provided preventive education services with a focus on well-care screenings, contraceptives, Sexually Transmitted Infection (STI) screens, immunizations, as well as nutrition, weight, and exercise information. All women presenting for reproductive health visits were screened for domestic violence and behavioral health, as well as depression. Affected women were referred to appropriate providers.
  - Carson City Health and Human Services (CCHHS) conducted well visits for women. Referrals were made for women afflicted by domestic violence, mood disorders, substance use, and women reporting alcohol use were educated about risks of alcohol use with pregnancy. The website https://sobermomshealthybabies.org/ was promoted during clinic visits.

- **Rape Prevention & Education (RPE) Program –**
  - The Nevada Rape Prevention and Education (RPE) Program is part of a national effort launched by the Centers for Disease Control and Prevention (CDC) in response to the Violence Against Women Act of 1994. It continues through reauthorization and expansion of the original legislation. The RPE Program focuses on preventing first-time perpetration and victimization by reducing modifiable risk factors while increasing protective health and environmental factors to prevent sexual violence. CDC funds the RPE Program, sexual violence funds set-aside through Preventive Health the Health Services (PHHS), and the Title V Maternal and Child Health (MCH) Program Block Grant.
  - Over the last few months, RPE partners have continued to adapt prevention efforts from in-person training to virtual platforms with much success.
  - UNLV continued the CARE Peer Program (CPP), an individual/relationship level strategy, and the CARE Campus initiative, a strategy focused at the community level. CPP is an empowerment-based 45-hour training curriculum with interactive modules focused on promoting social norms that protect against violence, such as bystander approaches and healthy relationship/communication components. It is offered to all UNLV students with an outreach emphasis on priority populations of women, female-identified, and LGBTQI students. Graduates of the CPP can become CPP Leaders and graduate students eligible for scholarships, thereby improving both leadership skills and economic stability as they are supported in completing their education.
  - CARE Campus focuses on revising existing protocols and procedures to identify and respond to intimate partner violence (IPV) for students, faculty, and staff. This work will result in tools for tracking and monitoring policy findings over time. Due to COVID-19, UNLV has moved to virtual education, outreach, and training.
  - Nevada Coalition to End Domestic and Sexual Violence (NCEDSV) is working to identify policies and legislative recommendations for increasing gender equity in Nevada to empower and support women and girls. They have connected with various organizations in Nevada working on economic justice issues, which may or may not have connected economic justice and sexual violence. NCEDSV has met with or intends to meet with: Opportunity Alliance, PLAN, Nevada Women's Lobby, Nevada Women's Equity Coalition,

Nevadans for the Common Good, Nevada Minority Health and Equity Coalition, Make it Work Nevada, and Make the Road Nevada.

- NCEDSV researches statewide economic policies impacting women and girls, such as pay equity, childcare, education, and housing. Also, NCEDSV explores policy initiatives to help identify strategies to operationalize initiatives through changes to existing regulations, codes, and legislation. NCEDSV plans to identify given issues to focus on going forward and intends to hold virtual meetings with key players and interested parties in December 2020 and January 2021.
- Safe Embrace is currently working to assist entertainment and hospitality organizations in Northern Nevada to establish and strengthen zero tolerance and sexual harassment policies in the workplace.
- In their work to create protective environments, Safe Embrace conducted outreach to new partners in the business community, highlighting how they could increase safety for staff and patrons. Since the program's start in late 2019, 12 establishments have MOUs in place and receive information, training, and policy guidance, while 25 other establishments expressed interest in the program.
- The Rape Crisis Center of Las Vegas (RCCLV) continues to implement the Stay Safe / SAINT program, which is targeted to the hospitality industry. While the program was initially put on hold in March due to Nevada's shelter in place order, as businesses reopened, RCCLV held socially distanced and masked training promoting safety and security. Through the Stay Safe / SAINT program, RCCLV has worked to institutionalize relationships with MGM and Wynn and seek new partnerships to expand the safety practices. In the coming year, RCCLV plans to reach out to casinos, bars, and clubs to establish and formalize programming support relationships.
- Additionally, RCCLV is working on enhance prevention efforts concerning Sexual Violence and Intimate Partner Violence during COVID-19 by increasing protective factors by supporting 24-hour crisis response hotlines and improving public health emergency preparedness (PHEP) capabilities through community preparedness and information sharing. Sexual Violence and Intimate Partner Violence Prevention efforts are statewide with a particular focus on rural and frontier counties. This Covid-19 funding will specifically benefit populations that are at higher risk in experiencing sexual abuse and intimate partner violence. Due to Nevada's unique geographic distribution of population, 90% of the state's population resides in urban counties. The majority (73%) of the state's population lives in Clark County, 16% in Washoe County, and the remaining 11% in rural and frontier counties. Additionally, a third of Nevadans (33.7%) live in a health professional shortage area (HPSA). This percent is intensified among rural and frontier counties, with 50.6% of rural Nevadans living in an HPSA. The great differences between urban and rural contexts in Nevada highlight unique needs related to HPSAs across the state and the different obstacles many counties face. Nevada's unique geographical landscape, with rural and frontier counties making up most of Nevada's geographical areas, increases the risk of Nevadans experiencing sexual violence and intimidate partner violence. Access to health, prevention, and protection services in the U.S. is disparate based on population density: women in rural areas have less access than urban women to domestic violence shelters, physical and mental health professionals, law enforcement, and judicial personnel. Women in rural areas are also nearly twice as likely to be turned away from services because of the insufficient number of community-based health programs and inadequate staffing.
- Additionally, Nevada RPE was awarded CDC COVID-19 Supplemental funding as Nevada's current shelter-in-place restrictions from the COVID-19 pandemic continue, reports of violence in the home increase in some areas. The Domestic Violence Resource

Center in Washoe County, Nevada, has observed a 64% increase in calls to its 24-hour hotline over the past months, a trend consistent with national spikes in domestic violence during COVID-19. Contributing factors for this increase include, but are not limited to, job loss, financial instability, being restricted to home environments, and close proximity to partners and children, which may amplify not only family violence but also diminish the family's ability to engage in constructive communication or coping strategies. The supplemental COVID-19 funding will support crisis response via 24-hour hotlines to increase protective factors during the COVID-19 pandemic and increase protective factors during future state-wide disasters and emergencies by improving public health emergency preparedness (PHEP) capabilities through community preparedness and information sharing.

- **MCH Coalition (north, south, and statewide) –**
  - The NV Statewide MCH Coalition continues to distribute materials promoting the Go Before You Show campaign, the Medical Home Portal (MHP), Perinatal Mood and Anxiety Disorders (PMAD), Nevada 211, Sober Moms Healthy Babies, and the Nevada Tobacco Quitline. In addition, monthly e-newsletters, educational opportunities, and Program updates are provided to Coalition members. Social media campaigns promoting maternal, child, and adolescent health continue on Facebook and Instagram.
    - Southern Nevada MCH Coalition meetings were held:
      - January 12, 2021
      - February 9, 2021
      - March 9, 2021
    - Northern Nevada MCH Coalition meeting were held:
      - January 14, 2021
      - February 2021: Meeting canceled.
      - March 2021: No meeting held.
    - Held quarterly steering committee meeting on February 18, 2021.
    - Next meeting scheduled for June 17, 2021.
    - Four Perinatal Mood and Anxiety Disorder (PMAD) Virtual trainings were conducted, from January to March. Virtual PMAD training held on January 20, 2021, January 29, 2021 for UNLV, February 26, 2021 for UNLV, and March 23, 2021 for UNLV.
    - Facebook followers increased by 4 in January, by 5 in February, and by 10 in March for a total of 19 from January to March.
    - Instagram followers increased by 9 in January, by 29 in February, and by 16 in March for a total of 54 from January to March.

- **Nevada Pregnancy Risk Assessment Monitoring System (PRAMS) Program**

  - The Pregnancy Risk Assessment Monitoring System (PRAMS) is a joint research project between the Nevada Division of Public and Behavioral Health and the Centers for Disease Control and Prevention (CDC). The purpose is to determine protective factors for healthy, full-term births; risk factors for short-term births, babies born with disabilities; and maternal health. To do this, our questionnaire asks new mothers questions about their behaviors and experiences before, during, and after their pregnancy. Each year in Nevada hundreds of babies are born with serious health concerns or disabilities. Many factors in a mother's life may affect her pregnancy and the health of her child, this survey is designed to capture these variables. The overall goal of PRAMS is to reduce infant morbidity and mortality and to promote maternal

health by influencing maternal and child health programs, policies, and maternal behaviors during pregnancy and early infancy.

- PRAMS received $14,999 in supplemental funds in year 5 of the grant that runs from May 1, 2020 to April 30, 2021. These supplemental funds allow for the continuation of the additional disability questions through March of 2020. NV PRAMS continued the opioid supplemental questions with MCH Title V Program and state general funds. A total of 18 supplemental questions will continue on the survey relating to pregnancy and disability, as well as opioid use in pregnancy. Data from the survey will inform future data driven MCH efforts.
- Nevada PRAMS received $16,444 from the Council of State and Territorial Epidemiologists (CSTE) to add eleven questions on how the COVID-19 pandemic and response impacted women's pregnancy and birth experiences. These questions began in October 2020, and will run through April 2021, representing six months of data collection.
- 2017 Nevada PRAMS data had a response rate of 41% and 2018 data had a response rate of 39%, which is under the Centers for Disease Control and Prevention (CDC) required response rate threshold of 55% to publish data. 2019 weighted data was received in February and had a response rate of 42% which is under the CDC threshold of 50% to publish data. This data should be interpreted with caution due to the response rate.
- Data can be requested via the Office of Analytics at data@dhhs.nv.gov. The primary goal for Nevada PRAMS is to increase response rates moving forward.

- **Domain: Perinatal/Infant Health**
  - Increase the percent of children who are ever breastfed
  - Increase the percent of children who are exclusively breastfed at 6 months

- **Title V MCH Program and Partners –**
  - CCHHS reached out to businesses to educate about breastfeeding laws, encourage participation in the Breastfeeding Welcome Here (BFWH) Campaign, and check interest in needing a space established for staff to feed their infants. A Pregnancy Risk Assessment Monitoring System (PRAMS) social media campaign promoted the value of participating in the survey to improve prenatal health care in Nevada. These messages reached 2,366 with 4,266 media impressions and 220 clicked on the link to obtain resources. Vaccination reminder cards were sent for infants/toddlers four-months through 35-months old in need of recommended shots. During clinic visits, staff educated women receiving positive pregnancy test results about breastfeeding. All were referred to WIC for support, informed about the value of participating in the PRAMS survey and given information about https://sobermomshealthybabies.org/
  - Promoting Innovation in State and Territorial MCH Policymaking (PRISM) through the Association of Maternal and Child Health Programs (AMCHP) held virtual action planning sessions in March. The PRISM Learning Community provides technical assistance and capacity building over a twelve month period to support and advance policy implementation within states and territories to equitably address substance misuse and addiction and mental health disorders in women, children, and families within the context of the COVID-19 pandemic. Nevada participated in the Cohort Two kick-off call in February and the virtual action planning session in March.

- **Safe Sleep Media Campaign**
  December, January, and February 2020-2021: 221 Total TV Spots Aired, 1,935 Radio Spots Aired
    - TV
      - North: 54 English, 29 Spanish
      - South: 105 English, 33 Spanish
    - Radio
      - North: 1146 English, 87 Spanish
      - South: 656 English, 46 Spanish

- **SoberMomsHealthyBabies.org Media Campaign**
  December, January, and February 2020-2021: 183 Total TV Spots Aired, 1,410 Radio Spots Aired
    - TV
      - North: 45 English, 29 Spanish
      - South: 74 English, 35 Spanish
    - Radio
      - North: 883 English, 72 Spanish
      - South: 420 English, 35 Spanish

- **PRAMS Media Campaign**
  December, January, February 2021: 247 Total TV Spots Aired, 2,465 Radio Spots Aired
    - TV
      - North: 59 English, 36 Spanish
      - South: 113 English, 39 Spanish
    - Radio
      - North: 1628 English, 70 Spanish
      - South: 645 English, 122 Spanish

- **Washoe County Health District (WCHD) continues to review records for the Fetal Infant Mortality Review (FIMR)**
    - Twenty-five new FIMR cases were received between January 1, 2021 and March 31, 2021 from local hospitals, Washoe County Medical Examiner's Office, and Washoe County Health District Vital Statistics. Three of the cases were out of jurisdiction, (not from Washoe County) but received some care within Washoe County. The number of cases received and out of jurisdiction cases are subject to change due to findings during the course of case investigation.
    - There were three Case Review Team (CRT) meetings during this reporting period. Eleven cases were presented and discussed. Meetings have been held virtually since COVID-19. The team typically meets monthly, except in June and December. The CRT has reviewed thirty-two cases this fiscal year so far.
    - There were no maternal interviews during this quarter.
    - Staff completed the Multi-year FIMR Executive Summary, and it has been sent for final approval.
    - Staff completed the Washoe County FIMR Local profile for National FIMR.
    - Staff continue to attend and provide updates at the Northern Nevada Maternal Child Health meetings, Pregnancy & Infant Loss Support Organization of the Sierras (PILSOS), and Child Death Review meetings.

- Staff are helping plan the PILSOS “Time for Remembrance” event October 10, 2021 and the PILSOS conference which will be held on April 23, 2022.
- The Northern Nevada Maternal Child Health (NNMCH) Coalition continues to function as the FIMR Community Action Team (CAT). One NNMCH Coalition meeting was held during this quarter. The most recent meeting was held on January 14, 2021 with a presentation about Postpartum Depression. The February meeting was canceled. The next NNMCH Coalition meeting will be held on April 8, 2021.
- Staff virtually attended the 2021 MOM Annual Forum March 24-26, 2021.
- Staff met with a physician on the CRT to meet his office staff, discuss CRT process improvements and implement changes in case reviews.
- Washoe County FIMR Staff met with staff from the State of Nevada Department of Health and Human Services, DPBH to refine data collection and entry into the National Fatality Review Case Reporting System.
- Staff continues to make information available on the Nevada Tobacco Quitline, Nevada Children’s Medical Home Portal, and Nevada PRAMS in the public areas of the WCHD as well as in all clinics.
- The Case Review Team remains dynamic with a diverse multidisciplinary membership and a consistent core group of participants. The team continues to recruit members to gain an ongoing diverse group representing multiple disciplines. No new members to report this quarter. Staff continue to actively recruit for representation from Tribal entities.
- Staff members continues to explore potential grant opportunities for sustainability.
- The Washoe County FIMR program has been exploring the “Count the Kicks” fetal movement awareness app and campaign. A recommendation was made by the CRT to support this fetal movement campaign in Nevada. Washoe County FIMR staff have met with the Executive directors of “Count the Kicks” and a local health care insurance company outreach team who may be interested in supporting a campaign in Nevada for their enrollees through a grant.

- **Safe Sleep/Cribs for Kids-**
  - Provides safe sleep media outreach and conducts activities with safe sleep partners, including community event participation statewide.
  - Maintain consistent partner communication and continue with the train-the-trainer model.
  - Work with hospital partners to implement Infant Safe Sleep practices and increase awareness by presenting at a minimum of four hospitals per year.
  - Includes Infant Safe Sleep brochures in the PINK packets
  - Delivered program supplies and equipment.
  - Purchased more safe sleep kits to distribute to partners
  - Continued to promote 211, Nevada Tobacco Quitline and Nevada Children’s Medical Home Portal

- **REMSA Cribs for Kids-**
  - Provided Train-the-Trainer Safe Sleep Training February 3,2021 to WCHSA-Our Place - 2 attendees, March 23, 2021 to Olive Crest – 8 attendees, and March 24, 2021 to Foster kinship – 6 attendees.
  - Distributed car sets to Tribal partners:

        - Owyhee- 7car seats
        - Washoe- 0 seats due to event cancellation
        - Southern Bands- 0 car seats
        - Walker River Paiute Tribe- 0 car seats
    - Survival kit distribution: 220
    - Binder distribution: 13
    - Poster distribution: 20
    - Brochure distribution: 28,484
    - Flip Chart Distribution: 4
    - Sudden unexpected infant death (SUID) intake questionnaire: 151
        - 3-month follow-up: 31
        - 12-month follow up: 21

- **Maternal-Infant Program –**
    - Critical Congenital Heart Disease (CCHD) data collection continues.
    - Congenital syphilis reduction efforts are a focus of MCAH staff efforts in partnership with DHHS and DPBH programs
    - Participation was completed in the AMCHP-led Infant Mortality CoIIN focused on the Social Determinants of Health. The IM CoIIN ended 9/2020, a final budget update was submitted 9/2020 and a final virtual meeting was attended on August 24, 26 and 28, 2020. A final interview was completed on October 23, 2020 and a close out meeting celebrating lessons learned was held January 13, 2021.
    - Breastfeeding Welcome Here Campaign
        - KPS3 is continuing to host the website address for nevadabreastfeeds.org. **The website launched on April 20, 2021**
    - MCAH staff continue to participate in the Nevada ASHTO OMNI and CARA substance use in pregnancy core team.
        - Updated Infant Plan of Care and CARA provider and family resources were posted on sobermomshealthybabies.org
    - FIMR participation and addition of COVID-19 resources on the DPBH MCAH website
    - Information dissemination on maternal and infant COVID-19, anti-racism, and health equity resources
    - AIM efforts are ongoing and data system is under construction
    - Maternal Mortality Review Committee case abstraction and case record documentation requests continue.
    - Newborn Screening Advisory Committee participation by MCAH staff
    - Regulatory development in relation to newborn screening fees and diapering resources are ongoing.
    - Reproductive health promotion and working with MCAH staff to administer the Account for Family Planning continues
    - PRISM held a Cohort Two kickoff call in February and a virtual action planning session in March.

- **Domain: Child Health**
    - Increase the percent of children (10-71 months) who receive a developmental screening using a parent-completed screening tool
    - Increase the percent of children (6-11) who are physically active at least 60 minutes a day

- **Title V/MCH Program and Partners –**
    - CHS administered infant and child immunizations in the clinic setting and through community immunization clinics.

- CCHHS works collaboratively with the in-house WIC office whose staff virtually met with clients and discussed the value for a medical home with individuals. Additionally, Nevada 211 and medical home portal promotional materials were discussed with CCHHS clients and made available in the clinic area. Two Facebook campaigns were run. The Nevada 211 posts reached 1,497 people with 2,953 impressions and 197 engaged users. A Facebook campaign promoting immunizations reached 2,491 people with 3,242 impressions and 98 engaged users.

- **Child and Adolescent Efforts by Title V MCH staff**
  - Title V MCH continued creating resources on state-led child and youth mental health programs and social support services, especially those implemented and utilized since the public health emergency began.
  - The AHWP Coordinator continued participation in the Collaborative Innovation and Improvement Network (CoIIN) facilitated through the Association of State Public Health Nutritionists. This staff member, in partnership with the Nevada Office of Food Security and Obesity Prevention and Control programs finalized content for the social media campaign promoting a series of fact sheets to assist Early Care and Education centers in implementing the Child and Adult Care Food Program (CACFP). This program is recommended to help childcare settings improve childhood nutrition, prevent obesity, and address food insecurity. Collaboration continued for the annual conference abstract poster session highlighting the social media project.
  - The AHWP Coordinator serves as the Title V MCH mandated member on the National Center for School Mental Health CoIIN for the Nevada team led by the Nevada Department of Education (NDE). This staff attended monthly meetings with other states participating in the learning collaborative.
  - The AHWP Coordinator attended several children's mental health meetings. Information and resources were shared with DPBH staff from the Nevada Children's Behavioral Health Consortium meetings, including child mental and behavioral health bill drafts being considered for the Nevada 81st Legislative Session. The NDE + DCFS Collaboration Meetings discussed topics pertinent to COVID's impact on school-aged children, school-based mental health services, and enhancements in Medicaid reimbursement to include telehealth visits, specialized foster-care, and services targeting children and youth with special health care needs. The Title V MCH staff are involved in creating an Interconnected Systems Framework allowing state agencies working on childhood resiliency to create a unified resource list and action plan.
  - The AHWP Coordinator disseminated child health topic content to be displayed on the MCH Coalition and Office of Primary Care e-newsletters such as new content in the Medical Home Portal, autism resources, etc.

- **Domain: Adolescent Health**
  - Increase the percent of adolescents aged 12-17 with a preventive medical visit in the past year
  - Increase the percent of middle school and high school students who are physically active at least 60 minutes a day
  - Reduce pregnancies among adolescent females aged 15 to 17 years and 18 to 19 years

- **Title V/MCH Program and Partners –**
  - Community Health Services (CHS) provided preventive education services with a focus on well-care screenings, contraceptives, Sexually Transmitted Infection (STI) screens, immunizations, as well as nutrition, weight, and exercise information. Youth presenting for reproductive health visits were screened for domestic violence and emotional/mental

problems, as well as depression. Staff were trained on topics pertinent to creating adolescent-friendly clinic environments using best practice resources from the Adolescent Health Initiative (Starter Guide mini toolkits and Spark trainings).

- Carson City Health and Human Services (CCHHS) conducted well visits for adolescents. Referrals were made for youth afflicted by domestic violence, mood disorders, substance use, and those reporting alcohol use. The clinic made plans to implement the electronic risk Rapid Adolescent Prevention Screening (RAAPS) and Adolescent Health Technologies (ACT) assessment tools performed during well-visits. The youth-friendly assessment is intended to solicit more honest information than other tools to identify risk behaviors and depression. Staff were trained on topics pertinent to creating adolescent-friendly clinic environments using best practice resources from the Adolescent Health Initiative (Starter Guide mini toolkits and Spark trainings).
- Urban Lotus Project (ULP) Trauma-Informed Yoga for Youth no-cost courses were conducted at 4 agencies and through a virtual format serving Northern Nevada adolescents at public community hubs, drop-in centers, treatment facilities, and human service entities. COVID-19 resulted in 9 routine locations not offering in-person classes. Yoga teachers taught 84 classes to 311 adolescents reaching 90 new students. The Association of Maternal and Child Health Professionals (AMCHP) awarded funding to a Texas yoga agency to replicate ULP practices and policies. The AHWP and ULP director will be trained by AMCHP as coaches to best lead these efforts.
  - Additional ULP course promotion, expansion, and growth:
    - Virtual classes promoted through ULP e-newsletter and Facebook/Instagram
    - Meetings conducted with Pyramid Lake Jr/Sr High School, Billinghurst Middle School, Washoe Inspire Academy, and Washoe County Department of Child and Family Services. Two schools are interested in programming
    - Partnered with Mindful Health Initiative to offer yoga classes at Trainer Middle School as part of an afterschool program
    - Held CEU courses for Washoe County School District teachers and counselors on the physiological impact of trauma in youth and various movement, breathing, and mindfulness practices
    - Accepted as presenter at the Nevada Coalition to End Sexual and Domestic Violence Annual Conference
- DP Video conducted a month-long social media campaign promoting the value of yearly adolescent well-visits. Messages and videos targeted youth and parents/caregivers. Six video ads (3 English/3 Spanish) were displayed on Facebook/Instagram. The messages reached 16,382 people in the specified demographics, with 109,194 media impressions, 11,889 video views, and 696 clicks on the links for additional resources. Six video ads (3 English/3 Spanish) were displayed on Twitter resulting in 168,625 media impressions.

- **<u>Adolescent Health and Wellness Program (AHWP) –</u>**
  - The AHWP Coordinator serves as a member on the Coalition to Prevent the Commercial Sex Exploitation of Children (CSEC). The group discussed plans to complete mandated Senate Bill 293 activities executed in the 80th Legislative Session. Safety nets will be put into place through 24/7 CSEC Receiving Centers to assist impacted youth with necessary services. Standards of care will be developed, as well as staff training to include trauma-informed approaches. Human and sex trafficking bill drafts were discussed being considered for the Nevada 81st Legislative Session. This staff member serves on the External Engagement subcommittee to:
    - Disseminate information regarding services available for CSEC in Nevada. Activities include helping facilitate Nevada 211 in updating website information and providing user friendly access for survivors of these resources. Additionally, the

AHWP Coordinator will help Nevada 211 implement trauma-informed education for staff answering the phones and speaking with possible victims/survivors.
        - Partner with the DPBH to expand CSEC awareness and prevention. Activities include recommendations for victim-sensitive/centered for content for non-sensationalist awareness campaigns. Additionally, the AHWP Coordinator will help create a Toolkit/media toolkit how to conduct victim-sensitive awareness campaigns to avoid re-traumatization.
    - The PREP and AHWP Coordinators joined the Leadership Exchange for Adolescent Health Promotion (LEAHP) learning collaborative to assist in development of state-specific action plans in support of adolescent health policy assessment, development, implementation, monitoring, and evaluation. The NDE led group is comprised of representatives from education agencies, health departments, state-level decision makers, and state-specific adolescent health organizations. It addresses sexual health education and services, as well as safe and supportive mental and emotional health environments. Non-state staff have drafted legislation specific to certain NV LEAHP team goals. One bill will capture data on student health to determine gaps. Another will partner with DHHS to track student provided mental health issues through a data dashboard.
    - The AHWP Coordinator attended several adolescent focused meetings. These included discussions amongst other state adolescent health program coordinators about program successes and challenges. Additionally, this staff member attended the first session of an ongoing Racial Equity Learning Community organized by the National Network of State Adolescent Health Coordinators.
    - The AHWP Coordinator shared the Facebook video posts promoting adolescent well-visits created by DP Video with funded partners and outside agencies for placing on their Facebook pages.

- **Domain: Children and Youth with Special Health Care Needs (CYSHCN)**
    - Increase the percent of children with special health care needs with a medical home
    - Increase the percent of children without special health care needs with a medical home
    - Increase the number of WIC, Home Visiting, Healthy Start, and other program participants that received information on the benefits of a medical home
    - Increase the number of referrals to Nevada's medical home portal

- **Title V MCH Program and Partners –**

  Nevada Center for Excellence in Disabilities (NCED) continued work to implement six University of Nevada Reno (UNR) sponsored Project ECHO trainings on health care transition. Providers will learn best practices from Got Transition's six core elements, related resources, and be involved in case-based discussions. The AHWP Coordinator provided resources to expand the course opportunity to reach practitioners serving both children with and without special health care needs. Course offering will be promoted by Project ECHO to their listserv reaching providers affiliated with the Nevada Chapter of the Academy of Pediatrics (AAP), state Primary Care Office, and other professional associations. The AHWP and NCED Coordinators will promote the course to providers serving youth with and without special health care needs (e.g., Nevada Primary Care Association, local health departments/community health nursing clinics, Nevada PEP, Nevada Department of Vocational Rehabilitation, Ackerman Autism Center, etc.). A draft survey

- **Children and Youth with Special Health Care Needs (CYSHCN) Program**
    - Title V MCH and Public Health Preparedness (PHP) staff presented to the AMCHP Cohort 3 Emergency Preparedness and Response Action Learning Collaborative (EPR ALC) in two

webinars on state successes. Through this opportunity, AMCHP and CDC provided technical assistance to Nevada and other participating states to aid in developing or enhancing the integration of MCH populations in their emergency preparedness and response plans.
  - Title V MCH staff continued participation in the Pediatric Mental Health Care Access Program (PMHCAP) with the Nevada Division of Child and Family Services (DCFS). PMHCAP uses telehealth strategies like Mobile Crisis Response teams to expand mental health services for children in Nevada. Title V MCH staff recently peer reviewed the Early Childhood Mental Health Brief development process and protocols initiated by PMHCAP and the Nevada Institute for Children's Research and Policy (NICRP).
  - Title V MCH staff shared general vaccination resources from the Centers for Disease Control and Prevention (CDC) and Sickle Cell Disease (SCD)-specific immunization schedules, CDC SCD infection prevention flyers, and two flu awareness events to the Nevada MCH Coalition, as well as Family TIES of Nevada.
  - Title V MCH staff provided federally available data (FAD) on flu immunizations for children to Dr. Nik Rashid and Linetta Barnes, BSN, RN from Sickled Not Broken Foundation of Nevada. In addition, Title V MCH staff connected the Division of Health Care Financing and Policy (DHCFP) and national Genetics Network staff.
  - Title V MCH staff presented to the Nevada Governor's Council on Developmental Disabilities (NGCDD) on CYSHCN Programs.

- **Domain: Cross-Cutting/Lifecourse (activities within this domain are included within each subpopulation above), which include the following objectives:**
  - Reduce the percent of women who smoke during pregnancy
  - Increase the percent of women who call the Nevada Tobacco Quitline for assistance
  - Reduce the percent of women using substances during pregnancy
  - Reduce the percent of children who are exposed to secondhand smoke
  - Increase the percent of adequately insured children
  - Increase the percent of callers to Nevada 2-1-1 inquiring/requesting health insurance benefits information

- **Tobacco Cessation:**
  - All subgrantees continue to promote the Nevada Tobacco Quitline (NTQ). CCHHS and CHS referred tobacco users to the NTQ. CCHHS & CHS counseled self-identified nicotine users with a Brief Tobacco Intervention resulting in referrals to the NTQ due to desire to change smoking/vaping habits.

- **Substance Use During Pregnancy:**
  - All Title V MCH subrecipients promote website: https://sobermomshealthybabies.org/
  - Title V MCH staff participate in Substance Use workgroups and collaborate with the Substance Abuse Prevention and Treatment Agency (SAPTA) on the Comprehensive Addiction Recovery Act (CARA) initiatives, including Infant Plan of Care, and the Association of State and Territorial Health Officials (ASTHO) Opioid Use Disorder, Maternal Outcomes, and Neonatal Abstinence Syndrome Initiative (OMNI), and Promoting Innovation in State and Territorial MCH Policymaking (PRISM).
  - PRISM held a Cohort Two kickoff call in February and a virtual action planning session in March.
  - CARA final materials were posted to the website: https://sobermomshealthybabies.org/

- **Nevada Public Health Conference**
  - The Nevada Public Health Conference occurred March 8-9, 2021. MCAH and CFCW staff participated as attendees and presenters.

- **Adequately Insured Children:**
  - CCHHS partners with the Division of Welfare and Supportive Services (DWSS) by placing insurance enrollment staff on-site. Due to COVID-19, onsite efforts were replaced with virtual/online assistance, thus reporting ceased for this activity. In-reach was provided to uninsured clients seeking services through CCHHS.

- **Nevada 211:**
  - Nevada 211 received 140 calls/texts from within the MCH population with 91% being pregnant. PRAMS program information was provided to 6 women, 9 referrals were made to the Medical Home Portal, and 14 recommendations were given for Text 4 Baby. Caller/text demographics reported revealed 64% were on Medicaid, 90% resided in Clark County and 40% identified as Black.
  - All subgrantees continue to promote Nevada 211.

- **Nevada Home Visiting:**
  - All Nevada Home Visiting sites successfully navigated transition to virtual services. The NHV Program shared COVID-19 resources with Local Implementing Agencies and submitted the grant application and data reporting to HRSA.
  - More than 1000 virtual home visits have been provided to families
  - Families have received help connecting to the internet through free services from Spectrum
  - Families have received help accessing telehealth services for well child, well adult, and mental health services
  - Some agencies have supported families with food from local food pantries and have delivered to keep families safe.
  - Children have received curriculum handouts either delivered or in the mail, as well as books
  - Home Visitors have adjusted activities to use what families have on hand to support their child's development

- **Teen Pregnancy Prevention Programs:**
  - All Teen Pregnancy Prevention Program sites successfully navigated transition to virtual services and curricula implementation. The Program shared COVID-19 resources with agencies.
  - A Teen Mental Health social media campaign was completed, linking youth to Resilience Ambassador (https://www.nevada211.org/nevada-resilience-project/) information at dpbhnrp@health.nv.gov.

- **Nevada Early Hearing Detection and Intervention**
  - Nevada Early Hearing Detection and Intervention (EHDI) successfully works with its hospital, audiologist, early intervention provider and family-based organization partners to ensure all children in Nevada are screened for hearing loss at birth and those identified with hearing loss receive timely and appropriate audiological, educational, and medical intervention. EHDI promotes the national EHDI goals and timelines developed by the Joint Committee on Infant Hearing. Information and resources are available here: http://dpbh.nv.gov/Programs/EHDI/EHDI-Home/

  - Cytomegalovirus (CMV) public awareness information and resources are available here: https://nevadacmv.org/

April 8, 2021

# Medical Home Portal

# FFY2021 Q2 REPORT

## 1. FEATURE UPDATES

Features that have been significantly reworked or updated during the Quarter ending March 31, 2021.

### A. Snooze Button

i. Link Checker now features a Snooze Button which will allows Admins to "snooze" records for 30, 60, or 90 days. This can be helpful for records where an invalid link keeps showing but the link has been tested and proven to work.

### B. Default to State Region Service Providers

i. In the Services Directory, searches now default to show in order of selected state first. All Nationwide listings in a search will default to the end of the search results.

## 2. CONTENT UPDATES

Content that has been published or updated during the Quarter ending March 31, 2021

### A. New Content

i. Clinical

1. *Adrenoleukodystrophy Newborn Disorder*
2. *Evaluation of Developmental Delay*
3. *Evaluation for Suspected Ehlers-Danlos Syndrome*
4. *Feeding & Swallowing Problems in Children*
5. *Mental Health Screening for Children & Teens*
6. *Screening for Eating Disorders*

### B. Updated Content

i. Clinical

1. *ADHD*

2. *Carnitine Uptake Deficiency- Newborn Disorder*
3. *Fragile X Syndrome*
4. *Intellectual Disability & Global Developmental Delay*
5. *Transition Issues*

ii. Family

1. *Additional Early Services*
2. *IEP and 504 - What's the Difference*
3. *Individualized Education Plan (IEP)*
4. *Medical Needs at School*
5. *Special Education Supports and Services*
6. *Special Education Laws and Process*
7. *Transportation Options for Young Adults*
8. *Transportation and Travel for People with Disabilities*
9. *504 Plan*

## 3. GOOGLE ANALYTICS

Google Analytics January 1- March 31, 2021. Traffic Refined for Quality Segment.

(Percentage change from previous quarter.) [Percentage change from previous year.]

A. Aggregated Subdomains

i. Users: 126,666 (-2.47%) [+11.92%]
ii. Sessions: 148,924 (+1.32%) [+17.38%]
iii. Pageviews: 231,528 (-0.70%) [+20.90%]

B. Nevada

i. Users: 5,743 (-13.01%) [+22.89%]
ii. Sessions: 6,528 (-11.68%) [+23.19%]
iii. Pageviews: 12,120 (-7.54%) [+32.71%]

# Primary Care Office (PCO)

## Our Mission

The PCO is an administrative unit of the Nevada Division of Public and Behavioral Health that works to improve the health care infrastructure of Nevada. The PCO supports the Division's mission to promote the health of Nevadans by working to:

- Improve access to primary health care services for Nevada's underserved;
- Increase availability of primary care providers in underserved areas;
- Increase access to maternal and child health care service for underserved populations; and
- Improve provider access to health care financing resources.

## Programs and Services

The PCO is funded by federal grants from the Health Resources Services Administration (HRSA) to support multiple programs through the following services:

- Complete applications for federal designation of Health Professional Shortage Areas (HPSAs) or Medically Underserved Areas of Populations (MUA/Ps). These designations support eligibility for increased federal funding and recruitment of health care professionals;
- Review applications and provide letters of support for the J-1 Physician Visa Waiver program to bring international medical graduates to underserved areas in Nevada; and
- Review site applications and provide recommendations for the National Health Service Corps loan repayment and scholar programs.

The PCO also engages in the following activities:

- Support primary care workforce development through linkages with education and training, licensure and certification, and recruitment and retention.
- Review applications for certificates of need for construction, or expansion, of facilities providing medical care in counties with less than 100,000 population, or communities with less than 25,000 population in counties with more than 100,000 population.

## Oversight

The Primary Care Advisory Council was established in 2008 to enhance oversight of the PCO and the services provided, in an advisory capacity to the Administrator of the Division of Public and Behavioral Health. Creation of the PCAC led to statutory and regulatory changes to ensure compliance with the J-1 Physician Visa Waiver program, under NRS 439A.130-185 and NAC 439A.700-755.

## Linkages

The PCO works with many public and private partners to support the health care safety net, including: Nevada Primary Care Association, Federally Qualified Health Centers, Rural Health Centers, Critical Access Hospitals, National Health Service Corps sites, State Office of Rural Health, Nevada Rural Hospital Association, University of Nevada School of Medicine, Western Interstate Commission for Higher Education, Nevada Division of Health Care Financing and Policy, and multiple health professional licensing boards. Facilitated activities include strategic planning for shortage designations, primary care data development and sharing, recruitment and retention strategies, and workforce development.

## Contact

Heather Mitchell, Health Resource Analyst, hmitchell@health.nv.gov 775-684-2204; or NV PCO at nvpco@health.nv.gov

## PCO Highlights from January – March 2021

- National Health Service Corps (NHSC) outreach activities during this quarter included one health clinic virtual site visit with Pediatric Small Smiles Dental, one virtual student outreach event with the University of Las Vegas for their Interprofessional Education Workshop with approximately 300 students via recorded YouTube presentation https://www.youtube.com/watch?v=Pc-XhjFSLhU. *Zero* site certifications or recertifications reviews were completed (the new site certification cycle is open through May 25, 2021). Inquiries received from Children's Cabinet, and a provider interested in opening a Pediatric RHC in Pahrump, and Boulder City Hospital and RHC seeking to become NHSC certified. These activities increase awareness of the program and subsequent program participation, which leads to increased recruitment and retention of health providers for underserved maternal, pediatric, and adolescent populations. These safety net health care sites serve all patients regardless of ability to pay and represent critical primary care, mental health, and dental access points for maternal, pediatric, and adolescent populations in Nevada.

- Nine Conrad 30 J-1 Visa Waiver applications were reviewed, public hearings were held, and letters of support completed for nine physicians to practice in Nevada under the Conrad 30 J-1 Visa Waiver program. One of the physicians specializes in OBGYN and will serve underserved populations in Clark county at Women's Health Associates of So. NV, and one physician is a pediatric cardiac intensivist in Clark county, and one Rheumatologist who will work at a FQHC who serves the underserved populations in Clark County. These doctors will serve underserved populations including maternal, pediatric, and adolescent populations in Las Vegas and Reno area. The J-1 program has received fourteen applications this program year.

- The 1st Quarter (01/11/21) PCO Newsletter was published to 467 subscribers and included multiple articles that support maternal, child, and adolescent health. Articles included information regarding shortage designation updates, Nevada 211 Youth App, Youth Mental Health Supports and virtual training for parents and providers, Health Status of Children Entering Kindergarten in Nevada survey results of the 2019-20 year, and P4 Challenge – Innovations in Pediatric Primary Care to Improve Child Health. Announcement for Nurse Corp loan repayment cycle open (01/12/21) that sets aside special funding for applicants who specialize in women's and behavioral health; up to $5 million allocated for applicants working as women's health nurse practitioners, certified nurse midwives, or certified nurse midwives, or certified RNs in obstetrics and gynecology.

- Monthly or Quarterly meetings continue with our safety net partners continue to collaborate on data development and sharing, provider recruitment and retention, shortage designations, statewide rational service area plans, and workforce development. PCO Primary Care Needs Assessment completed with stakeholder input with identified priorities of Mental Health, Seniors, and Children and submitted for review to HRSA March 30, 2021.

If you would like to receive our PCO Quarterly Newsletter, you can sign up online through http://dpbh.nv.gov/Programs/Conrad30/NV_PCO_Newsletter_Sign_Up/ OR constant contact.