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Commentary

Quality Improvement in Community Birth: A Call to Action

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The number of families choosing birth center and home birth midwifery care in the United States has been rising since 2004[1] and increased significantly during the COVID-19 pandemic.[2,3] There is growing recognition that well-integrated community midwifery care could be one solution to improving poor outcomes and rising costs in our maternity care system.[4–6] At the same time, community birth outcomes are inconsistent, and data are unreliable in most states.[7–10] Additionally, few practices or organizations have mechanisms for changing midwifery practices and systems based on outcomes and feedback from birthing people. These conditions provide a great opportunity for midwifery organizations and perinatal collaboratives to study existing models, evaluate innovations, and implement community birth quality improvement (QI). Now is the time for our organizations to build data collection and continual QI into the fabric of community midwifery.

Like all perinatal care providers, community midwives are highly motivated to provide safe, quality care to birthing families. Unlike hospital-based providers, however, most community midwives are not part of a structured, data-driven, QI program. Although there is extensive guidance for QI in hospitals, little guidance exists for community birth settings, where midwives work in small practices of 1 to 10 providers. This small scale means that community birth practices may have limited resources for QI, and many QI models are not appropriate to their size. Community midwife-specific QI programs in national and state midwifery organizations, birth center organizations, and state or regional perinatal quality collaboratives (PQCs) are needed to bridge current gaps and bring community midwifery into meaningful efforts to continually improve care for birthing families. In this commentary, we share models for QI in community birth to inspire midwifery and perinatal organizations to take action (Figure 1).

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DATA COLLECTION

Effective QI requires usable data on community birth incidence and outcomes, yet few states currently collect applicable and statistically sound data. Guidance and standards are needed from the National Center for Health Statistics; most states will need to change their birth and death certificates to have the data needed for effective QI. The Oregon birth and death certificates can serve as models for other states in this process. In 2011, Oregon medical and midwifery organizations worked together to pass HB 2380 to change the birth and death certificates to collect planned place of birth and planned provider type data.[11] The Oregon Center for Health Statistics now collects and reports all birth data in a manner that tracks outcomes from planned community births, including hospital transfers, allowing analysis by provider type and planned and unplanned unassisted births. These data have been invaluable to the Oregon Midwifery Council (OMC) QI program and have helped licensed community midwives reduce perinatal mortality from 3.04 of 1000 in 2012 to 2014 to 0.88 of 1000 in 2015 to 2019.[12,13]

Community birth QI would be further strengthened if birth outcomes were tracked in a comprehensive database that supported comparison of matched cohorts of community and hospital births. The Midwives Alliance of North America Statistics Project has played a crucial role in the collection of data for community midwifery research and QI but is limited by voluntary enrollment and the inability to include hospital births.[14] The American Association of Birth Centers Perinatal Data Registry and the American College of Nurse-Midwives Benchmarking Project collect data on all birth settings but are also limited by voluntary enrollment.[15,16] Strategic planning is needed to create an accessible database that could include interoperability across all birth settings. We recommend database design in a community-driven process in which birthing people and provider and researcher users design questions based on the information they need. The creation of a national, flexible, and user-designed community and hospital birth database could open the door for a new era of community birth QI and research.

COMMUNITY MIDWIFE INCLUSION IN PQCS

PQCs, with their focus on multistakeholder approaches to QI, are a logical place for community midwives, birthing people, and families to be included in work to improve maternal and infant care and outcomes.[17] Their inclusion gives PQC projects broader reach across places of birth, making them more likely to impact all patients' experiences of care. When PQCs include community midwives, collaborative relationships can be built across settings, increasing understanding of respective scopes, practices, and roles leading to improved

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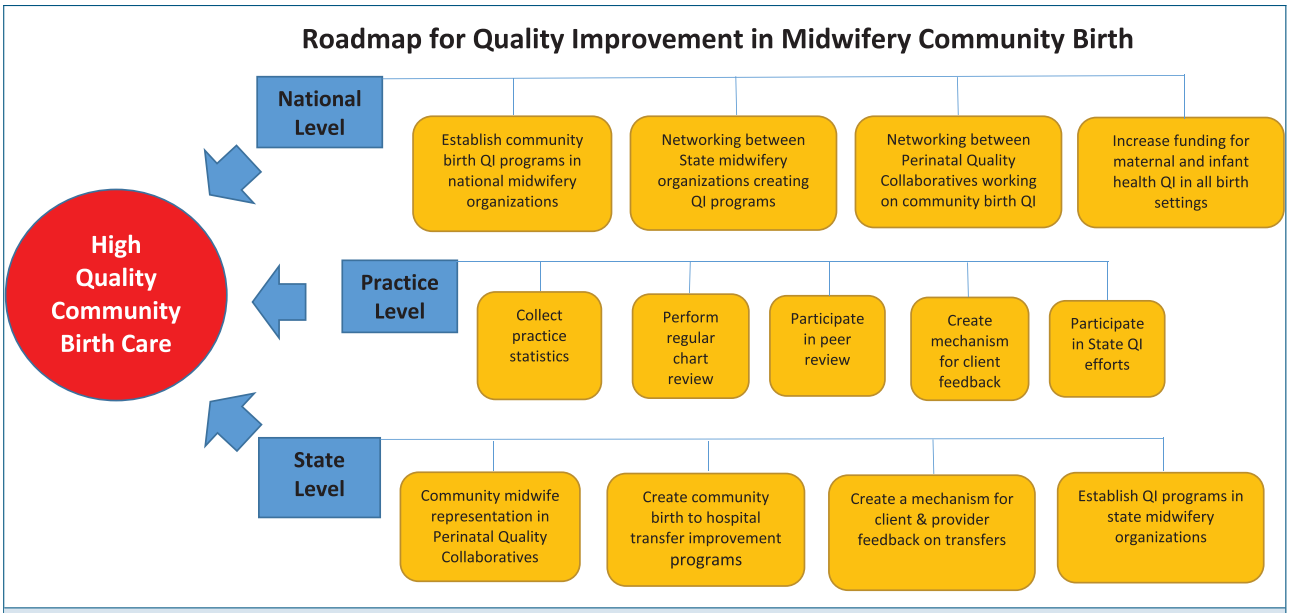

Figure 1. Roadmap for Quality Improvement in Community Birth.

care during community birth to hospital transfers. Inclusion also helps community midwives build skills in QI that can benefit midwife-led improvement efforts. Collaboratives can spread knowledge of improvement methods and help foster the idea of perinatal health and safety as shared responsibilities of all stakeholders.

Several partnerships between PQCs and community midwives provide useful examples of collaboration. Since 2008, the joint work of the Washington State Perinatal Collaborative and the Midwives Association of Washington State has been a model for community midwife involvement in PQCs. This collaboration has meant that community midwives in Washington have had greater access to information about state initiatives and better integration in the perinatal care system. At the same time, hospital-based health care providers have benefited from a better understanding of community midwife scope of practice and training and opportunities to build relationships with midwives. This collaboration has meant that community midwives have been integrated into hearing screening, congenital heart defect screening, and data collection programs beyond what is observed in other states. This level of relationship and integration contributed to the ability of health care providers in Washington to create Smooth Transitions, the first statewide community birth to hospital transfer improvement program in the United States and to Washington's rating as the most integrated state in the United States for the practice of midwifery.[6]

The Northern New England Perinatal Quality Improvement Network (NNEPQN) Is another model for community midwife inclusion in a PQC. Through stakeholder work including community midwives in New Hampshire, Vermont, and Maine, the NNEPQN established a program that provides independent and confidential case review of sentinel events for health care providers in all birth settings.[18] The lessons from these case reviews are integrated into ongoing QI for the region. In a third example, the Oregon Perinatal Collaborative has begun to include community midwives in their QI projects, starting with a postpartum hemorrhage initiative in 2019 and progressing to specific work on community birth to hospital transfers.[19] Another example of state-level community midwife inclusion in QI is a community midwife position in Oregon and California on their Maternal Mortality and Morbidity Review Committees.[20,21]

COMMUNITY BIRTH TO HOSPITAL TRANSFER IMPROVEMENT PROGRAMS

Improving home and birth center to hospital transfers is one of the most important, and established, approaches to QI in community birth. There is a long history of local collaboration to improve transfers, and there are statewide transfer improvement initiatives in Washington, Oregon, Alaska, and Utah. [19,22–24] This work has been guided by the Home Birth Summit guidelines on transfer from planned home birth to hospital[25,26] and the concept of levels of maternal care.[27] QI in community birth to hospital transfers is an essential area for improvement, as these transitions are vulnerable to gaps in care, especially in poorly integrated systems and during urgent transfers.[26] Through review of sentinel events, midwives have found that poor outcomes in community birth often involve a breakdown in safe and smooth transition of care from home or birth center to hospital.[13,28] There is evidence that transfer improvement programs can improve outcomes and both patient and provider experiences of care.[13,22]

Smooth Transitions in Washington is a well-established program and a proven model for statewide community birth to hospital transfer improvement.[22,26] It has led the way in framing transfer improvement from a systems perspective in which maternal and infant safety are the shared responsibility of hospital-based health care providers, nurses, midwives and Emergency Medical Services (EMS). In this relationship-based model, participating hospitals establish a Perinatal Transfer Committee that includes hospital-based health care providers and administrators, community midwives,

and EMS personnel. These stakeholders work together to create and adopt transfer protocols and tools to collect quantitative and qualitative data on patient and provider experience of transfers for use in continual improvement. Smooth Transitions is currently developing a neutral, third party, protected case review for participating hospitals and community midwives. At least 10 states are in the process of creating transfer improvement initiatives modeled after Smooth Transitions, based on the personal experience of the authors (S.A. and M.D.) in recent transfer improvement coalition meetings.

The Oregon Community Birth Transfer Partnership, an initiative of the Oregon Perinatal Collaborative, was created by a stakeholder workgroup that focused on feedback from, and direct involvement of, birthing people as the foundational information for program design. Stakeholders created and implemented a survey and conducted focus groups with birthing people who have experienced a community birth to hospital transfer in Oregon. Survey and focus group participants provided invaluable information on the experience of community birth transfers and gave specific recommendations for improvement.[19] The stakeholders chose to focus on feedback from Black, Indigenous, and other people of color in this foundational research to center equity in the creation of the program. The initial data were used to create a transfer program focused on the concerns and direct requests of birthing people. The survey and focus group tools are available for future research to measure improvement in hospitals that implement the program and for other states looking to use birthing person feedback to develop their own programs.[19]

QI PROGRAMS IN MIDWIFERY PROFESSIONAL ORGANIZATIONS

An important step in community birth improvement will be for all state and national midwifery organizations to develop or participate in QI programs. This will be a learning edge, or growth opportunity, for midwifery organizations. At this point the national birth center organizations have published QI standards.[29] Established QI programs exist in Oregon and Washington, and a program is under development in California.[13,30] The American College of Nurse-Midwives also has a benchmarking program that includes community midwives.[16]

In 2012, the OMC established a QI program in response to safety and quality concerns from midwives, birthing families, and receiving hospital-based health care providers. This program was developed with a focus on learning from case reviews of sentinel events and from feedback from birthing families. The OMC QI program uses 8 approaches to improve care: annual data benchmarking; hospital transfer improvement; peer review and sentinel event review; targeted continuing education for specific safety concerns; practice standards and informed consent templates; welcome and orientation for new midwives; a formal process for addressing concerns about a midwife or practice; and coordinated midwife participation in broader public health efforts.[13] The program has had significant positive impact on community birth outcomes in Oregon, evidenced by the reduction in perinatal mortality discussed previously.[12]

The California Association of Licensed Midwives (CALM) is currently developing a QI program to provide midwives with the resources needed for improving care. They worked with legislators to pass a bill in 2017 for legally protected peer review as their first step so that midwives could engage in improvement efforts.[31] CALM has been piloting 3 QI projects that will eventually be available throughout the state. The first provides peer incident review for sentinel events to support midwives in improving care and to identify solutions to systems issues. The second creates educational presentations for hospitals on community midwives and community birth transfers based on a World Health Organization framework.[32] The third provides regional, targeted continuing education workshops for midwives with topics chosen based on data and review of sentinel events. As their next step, CALM will implement survey tools to track and improve the experiences of birthing people, midwives, and receiving health care providers during community birth to hospital transfers.

CONCLUSION

The models presented in this commentary provide a starting place for this important work but are just the beginning. Community birth QI will be most effective if community midwives and partners expand our focus to learn from equity-centered QI models and Black-led organizations and researchers working in perinatal and infant health.[33–36] This work will be further strengthened by learning from patient-centered QI models and including birthing people and families in improvement efforts from the beginning.[37–40] Now is the time for state and national midwifery organizations and PQCs to use this information to build relationships, create programs, and engage in continuous QI so that the growing number of families choosing community birth have access to safe, quality care.

CONFLICT OF INTEREST

The authors have no conflicts of interest to disclose.

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