

Promoting Breastfeeding-Friendly Hospital Practices: A Washington State Learning
Collaborative Case Study

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Abstract

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Background. Hospital breastfeeding support practices can impact breastfeeding outcomes. Learning Collaboratives are an increasingly common strategy to implement practices in healthcare, and have been applied to breastfeeding in many cases.

Objectives. The aims of this study of the Evidence-Based Hospital Breastfeeding Support (EBBS) Learning Collaborative, a Washington State Department of Health (WA DOH) initiative, were to describe the perceptions of participants regarding the process and effectiveness of the EBBS Learning Collaborative, describe perceived barriers and facilitators to implementing the Ten Steps to Successful Breastfeeding, and to identify the needs for additional WA DOH actions and resources.

Methods. Qualitative, semi-structured telephone interviews were conducted with 13 key staff that represented 16 of the 18 participating hospitals.

Results. The Learning Collaborative was perceived positively by participants, meeting the expectations of nine, and exceeding the expectations of four persons interviewed. The most beneficial aspect of the program was its collaborative nature, and the most difficult aspect was the time required to participate, as well as technological difficulties. The key barriers were staff time, staff changes, cost, and the difficulty of changing the culture of hospitals and communities. The key facilitating factors were supportive management,

participation in multiple breastfeeding quality improvement projects, collecting data on breastfeeding outcomes, tangible resources regarding the 10 Steps, and positive community response. EBBS participants stated that they would like to see WA DOH create a resource-rich, centralized source of information for participants

Conclusion. This learning collaborative approach was valued by participants. Future efforts can be guided by these evaluation findings.

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Background.

Breastfeeding is the best method of infant feeding. Formula-fed infants are at higher risk of both acute and chronic illnesses throughout the life span. For example, formula-fed infants have been shown to have higher incidence rates of otitis media, gastrointestinal illness, SIDS, and lower respiratory illnesses¹. The benefits of breastfeeding also extend to maternal health, including decreased risk of cardiovascular disease and certain cancers².

The American Academy of Pediatrics³, Academy of Nutrition and Dietetics⁴, and American Public Health Association⁵ all recommend that infants be exclusively breastfed for their first six months, and that infants continue to be breastfed for at least twelve months¹. The breastfeeding care new mothers and their infants receive in the hospital affects breastfeeding initiation, duration, and exclusivity^{2,6,7,8}. Healthy People 2020⁹ has enumerated several objectives aiming to improve breastfeeding rates. One 2020 objective is to “reduce the proportion of breastfed newborns who receive formula supplementation within the first two days of life” to 14.2%; another is to “increase the proportion of live births that occur in facilities that provide recommended care for lactating mothers and their babies” to 8.1%¹⁰.

The Baby Friendly Hospital Initiative™ (BFHI™) was developed in 1991 by the World Health Organization (WHO) and United Nations Children’s Fund (UNICEF) to “encourage and recognize hospitals and birthing centers that offer an optimal level of care for infant feeding and mother/baby bonding¹¹.” The Baby Friendly Hospital Initiative™ (BFHI™) enumerates “10 Steps to Successful Breastfeeding” (10 Steps) (Table 1). Hospitals that implement the 10 Steps and obtain BFHI™ designation have improved breastfeeding initiation rates¹² and exclusive breastfeeding at discharge¹³.

Quality Improvement Learning Collaboratives are an increasingly common approach to improving issues within the healthcare system. A Learning Collaborative (LC) is a group of practitioners from multiple organizations who work together to improve a specific aspect of their service through electronic or in-person collaborative activities. Participants often utilize teleconferences or conference calls to learn from outside experts and/or from one another “best practice in the area chosen, about quality methods and change ideas, and to share their experiences of making changes in their local setting¹⁴.” A systematic review evaluated the success of Quality Improvement Collaboratives (QICs) and found that QICs can be effective in implementing changes at the provider level¹⁵. Learning Collaboratives have been applied across a variety of health care settings including depression care¹⁶, smoking cessation¹⁷, reducing disparities¹⁸, childhood obesity management¹⁹, and medical home implementation²⁰. For the most part, LCs are associated with positive outcomes, such as fostering communication and collaboration across disciplines¹⁷, access to resources²⁰, increasing provider-level outcomes such as patient education, improved local ownership of efforts¹⁵, “organizational commitment”,

and increased awareness and momentum toward accomplishing goals¹⁸. However, barriers to these approaches have been identified in busy health care systems, including staff time constraints, staffing constraints, and inadequate support from leadership^{18,20}.

Hospital breastfeeding support practices have also utilized the LC method. The Surgeon General's Call to Action¹ and the Centers for Disease Control and Prevention (CDC) propose several methods for hospitals to improve maternity care practices impacting breastfeeding²¹. Best Fed Beginnings, sponsored by the CDC and the National Institute for Children's Health Quality (NICHQ), is a large LC with 90 participating hospitals in 26 states, which aims to support hospitals as they work toward Baby Friendly Hospital™ designation. Members participate in group work, such as in-person learning, conference calls, webinars, and an online learning laboratory².

A similar program in New York State has been implemented, called Breastfeeding Quality Improvement in Hospitals (BQHI). This program aimed to “change care systems and close the gap between current and recommended hospital maternity care practices that impact breastfeeding^{22,23}.” This program worked to implement the 10 Steps in a cohort of 17 hospitals in New York State, utilizing a tri-phasic format: a Pre-work Period, Learning Sessions, and Action Period. Webinars were utilized, with a goal set for each webinar. At the end of each webinar the group discussed each hospital's progress on the previous goal.

In 2012, the Washington State Department of Health (WA DOH) and WithinReach, a non-profit organization that coordinates breastfeeding promotion activities in Washington

State, initiated the Evidence-Based Hospital Breastfeeding Support Learning Collaborative (EBBS LC) to promote the adoption of evidence-based breastfeeding-friendly practices in Washington State hospitals. EBBS aims to increase exclusive breastfeeding rates in hospitals, and reduce non-medically indicated formula supplementation. The LC consists of 18 hospitals representing approximately 44% of the births in Washington State. Quarterly webinars are held to share information about the 10 Steps, and to offer a forum for discussion on best practices in supporting and implementing evidence-based breastfeeding practices. Between webinars, hospital teams work to make incremental changes in practices that impact the breastfeeding success of mothers and infants.

Despite the fact that LCs are being utilized to improve breastfeeding-friendly practice implementation in hospitals, little published work exists to describe the process or findings of these endeavors. This study seeks to address this gap by providing findings “from the trenches” about what works and does not work for a specific Learning Collaborative: EBBS LC. We hope that other groups can use our findings to inform their approaches.

This study has two specific aims. First, we want to describe participating hospital staff perceptions of the effectiveness of the EBBS LC and its components, including webinars, support from other hospitals and EBBS staff, and collaboration with other hospitals. Secondly, we wanted to describe perceived facilitators of and barriers to implementation of the Ten Steps to Successful Breastfeeding, and assess perceptions of the role of the

EBBS program in facilitating the implementation of the 10 Steps and decreasing barriers thereto.

Methods.

This case study of a Washington State LC employs a descriptive, exploratory qualitative methods approach. This research was approved by the Washington State Institutional Review Board.

Data were collected during semi-structured telephone interviews with the primary participant from each hospital that had participated in at least one webinar. These interviews took place between July and October 2014. Subjects were given a \$10 gift card for their participation. The interview guide was developed to address the specific aims of this study. The guide was reviewed by several breastfeeding experts from the WA DOH, WithinReach, and the University of Washington. It was also reviewed by qualitative research experts at the University of Washington.

Interviews were audio-recorded and transcribed into Microsoft Word²⁴, and reviewed for accuracy before being finalized. Interview transcripts were analyzed using open-coding on Atlas.ti²⁵. Codes were either structural (e.g. describing the participant's credentials or each of the 10 Steps) or thematic (identifying participant perceptions). For two of the interviews, field notes, rather than transcripts, were analyzed. The first three transcripts were independently coded by the second author to confirm accurate interpretation of the data. Data analysis was guided by the conceptual framework provided by Patton²⁶, with data organized into thematic areas and the content within each area summarized.

Results.

The 13 subjects in these interviews represented 16 of the 18 hospitals participating in the EBBS LC. Another hospital, not included in the 18 participants, has not participated in the program and therefore was not contacted for interview. Webinar attendance varied among participating sites. Of the two hospitals that were not represented, one declined to participate, citing limited participation in the program, and one was unavailable for interview. All of the subjects interviewed were Registered Nurses, and nine of the 13 were International Board Certified Lactation Consultants.

Overall Impressions of the EBBS Learning Collaborative

Overall, participants cited a positive perception of the LC. Four of the 13 reported that the project exceeded their expectations, and the remaining nine reported it met their expectations.

The collaborative aspect of the LC was cited by all thirteen hospitals as the most beneficial program component. Participants reported sentiments like “we weren’t the only ones” and “you’re not alone.” Interviewees appreciated direct interaction with other participants, and being able learn from the experiences of others and to share suggestions about overcoming challenges faced in implementing the 10 Steps. The didactic portions of the webinars were also well received. Eleven participants explicitly reported learning new information, and appreciated the ability to use this information to provide the evidence base to convince others of the importance of changes they attempted to make in their facilities. Webinars also acted as a motivational tool for sites to continue working on implementing the 10 Steps.

Problems cited about the webinars included the difficulty of finding time to attend, as well as technical difficulties, which were reported for multiple webinars. Another issue reported by two of the participants was that the speaker was “preaching to the choir” on topics that the sites were already aware of. In these cases it was felt that time could be better used providing new information.

Implementation of the Ten Steps

Key barriers and facilitators to implementing the 10 Steps reported by EBBS participants are summarized in Table 2.

Barriers

Hospital culture was cited as a significant implementation barrier. Sites reported difficulty getting everyone “on the same page” regarding the importance of providing evidence-based breastfeeding support services. Eight sites reported difficulty convincing some care providers to counsel patients from an evidence-based perspective, rather than personal experience. One site reported “We have staff that take their own personal experiences in breastfeeding, we have a lot of women here that have done it. [It’s about] changing the culture of ‘this is what works for me’ versus ‘this is what the standards are and this is what best practice is’.”

Current maternity care practices were cited as a challenge to implementation of Steps 4, 6 and 8 (Table 1). Several common practices -- such as immediately taking the infant’s measurements after birth -- are deeply ingrained, and allowing mothers to breastfeed an infant prior to performing these tasks proved challenging for several sites. Regarding

Step 8, one participant illustrated this difficulty well by noting the increased levels of flexibility and competence required to support breastfeeding on demand, rather than on a schedule. “For so long it was ingrained into people’s brains, feed every 2-3 hours, ... feed 15 minutes on each side.... So really getting staff to encourage watching your baby, not the clock. And to get patients to actually do that, to trust their babies and their bodies.” Another subject mentions, “It’s difficult when you have a crying baby and mom asking for formula, to take the time and explain everything and really give good teaching, rather than just handing them that bottle of formula.”

Facilitators

“Collateral improvement” was cited as a facilitating factor to implementing the 10 Steps for sites participating in multiple breastfeeding improvement initiatives; especially those that had a Baby Friendly™ committee. Sites frequently applied information from participation in the EBBS LC to efforts toward Baby Friendly™ certification, helping to implement steps and provide resources to aid in this process. Eight of the 13 hospitals reported having a Baby Friendly™ Committee (one of these sites was already certified Baby Friendly™). Another application of “collateral improvement” was between hospitals. This is especially true of hospital groups working toward implementing Baby Friendly™ policies. For example, if one hospital created a policy (Step 1), other hospitals in the group could adopt the same policy, avoiding “recreating the wheel” at each facility.

The initial EBBS data collection on select breastfeeding rates and outcomes was helpful to hospitals, many of which reported that this was a helpful push toward acquiring data used for site improvement, Joint Commission baseline data, or to proceed toward Baby

Friendly™ status.

Tangible resources cited by participants were often those provided by EBBS (such as the presentation slides from webinars) but also included items generated by the site, such as a poster or flyer created by one hospital and shared with others, and video- and webinar-based trainings accessed online.

Several sites reported that improvements in hospital breastfeeding support were “consumer driven.” Examples included positive feedback from patients. This was particularly evident for one site, having heard reports from women who have had multiple deliveries at the facility, who had noticed improvement in their experience from one delivery to the next.

Impact of Learning Collaborative Participation

There were several ways in which participation in the LC was noted to have positively impacted the implementation of evidence-based breastfeeding practices in participating hospitals. No sites reported negative impacts. First, participation in the LC served as a motivational tool for sites to keep improving their breastfeeding support practices. There was accountability in having to report their progress at each webinar, and some sites reported a friendly competition with other hospitals.

The interactive aspect of the program, in the form of examples, advice and support provided by other hospitals, were key benefits to participation in the LC. As one subject put it, “It’s helpful to have peers in your community ... be doing the same thing... [there is] support in having a number of hospitals in the area working toward the same goal.”

[03] The resources and credibility provided by being able to share what they were learning as part of the Collaborative were helpful to many sites. Several reported the benefit of a 2-day breastfeeding support education course provided by the LC, and enjoyed being able to train several of their staff members (in addition to EBBS participants) through this sponsored course. Participation in the program offered interviewees a degree of credibility as they worked toward implementing changes among hospital staff. Many reported being able to cite a specific fact or figure presented in the webinars, as well as credibility from participating in this initiative, giving them a reason for requesting changes. One subject stated, “I think the biggest impact of the EBBS program is the accountability and the fact that the information was coming from someone different than the lactation consultant. Lactation consultants are sometimes seen as the squeaky wheel of a childbirth center.”

Suggestions from sites

Participants offered several suggestions for future programs of this nature. Suggestions primarily revolve around facilitating access to resources and funds for staff training.

- The LC should provide a model policy to participants. As one subject said, “We don’t breastfeed any differently in Western Washington than we do in Eastern Washington. And I think if the state came out with a policy ... because hospitals are really, really good at implementing good policies. I think we waste a lot of time recreating the wheel for every hospital.”
- Audio and visual recording of webinars would also be beneficial for sites that are unable to attend webinars.

- The resources provided by the LC were important to many subjects. Existing resources were frequently relied on by participants, but many cited a desire for more resources, preferably in a concise, online format. Printable resources, such as fact sheets about the 10 Steps, flyers and posters would also be helpful. As one subject put it, “[It would be helpful] if I had a tool and then I could be the vehicle to help implement that tool, rather than trying to create the tool myself.”
- Step 2 was the most difficult to implement for a majority of hospitals interviewed, due to cost and staff time. Many sites indicated that one of the most helpful things that the LC, or WA DOH, could do is provide funding for staff training programs and a list of good training resources. The 2-day training EBBS provided was well received. However, this may not have been well publicized, as some sites reported not finding out about the course in time to send staff.
- Several participants indicated that they would prefer more communication among sites, outside of the webinars. The most common example mentioned was a meeting at least once per year, where sites get together to discuss progress and strategies for implementing evidence-based practices in their facilities. Another option is an online discussion forum, wherein sites could communicate electronically at any time. In addition, technical difficulties should be resolved prior to beginning webinars.
- Finally, multiple sites reported interest in learning what the original data they collected for the LC on breastfeeding rates was used for.

Discussion.

Overall, we found that the attitude toward the program was positive, and it met or exceeded the expectations of all subjects interviewed. Participants appreciated the collaboration with other facilities, and the ability to use EBBS participation as a motivational tool and informational resource. Difficulties reported included finding the time to participate in the webinars and technical issues with the presentations.

This study produced many novel findings regarding barriers and facilitators to successful implementation of the 10 Steps, as well as findings which proved similar to other published works, including positive outcomes involving collaboration with the broader community, access to resources, and improved local ownership of efforts^{15,17,18,20}.

Important to the EBBS LC in particular was the benefit of the increased awareness and momentum toward accomplishing the goals set during each webinar. Previous studies also reported time and staffing constraints^{18,20}. Perhaps due to the positive perception of breastfeeding in Washington State and recent mandates from governing agencies, participants in this study unanimously reported support from leadership, representing a significant facilitative factor to successful participation in the EBBS LC.

While participation in the EBBS LC was perceived as beneficial, time constraints on participation are a key barrier that must be addressed in future programs. This issue can be addressed by providing multiple times for webinars, as well as by making the entire presentation, with audio, available on the LC website, so participants can access this resource at any time.

This program followed a structure similar to a New York State Learning Collaborative, which hosted Learning Sessions similar to EBBS webinars. During these sessions, participating sites shared strategies for implementing evidence-based breastfeeding practices²². A majority of participating NY hospitals reported improved breastfeeding outcomes. The 12 hospitals in the New York initiative were low-performers, while hospitals in the EBBS LC self-selected into the program, and were not specifically underperforming. While the NY State Learning Collaborative had outcome data and EBBS did not, the difference in baseline performance level of subjects may lead us to anticipate different outcomes in evaluation of EBBS. Additionally, the climate around breastfeeding in this country has changed in recent years to a more positive perception of breastfeeding, from the federal government to popular media.

Some suggested clinical implications from the New York State program mirrored those mentioned here, including the necessity of active leadership, collaborative sharing to maintain momentum in implementing changes, and the importance of online education²⁷.

While the authors were not able to find published results from the other LCs discussed in this work, including Best Fed Beginnings and ECELC, it is significant that both projects offered extensive online resources to aid participants in accomplishing the goals of each project^{2,19}. This element is key when a model like that of the EBBS LC is based on webinars, which may at times be impossible for participants to attend.

Limitations

This is a case study of a breastfeeding support improvement program that has been implemented only in the hospitals involved in this study, and only in Washington State. Therefore, while the findings are germane to other programs of a similar nature, they are not meant to be generalizable to a larger group. Hospitals participating in EBBS may not be representative of the majority of Washington State hospitals. Respondents are likely highly motivated to provide breastfeeding support and evidence-based practices in their facilities, while non-participating hospitals may have different levels of interest. It is possible that hospitals which participated in EBBS have more resources than non-participants, as they are able to provide staff to manage this program and participate in the EBBS quarterly webinars.

Participation in EBBS is voluntary, and the degree of participation varies among hospitals. It is possible that sites that had a higher level of difficulty participating in EBBS were less likely to respond to this study's call for participants. This could introduce bias in our results.

Because interviewees indicated a desire for more access to resources, in the future, programs such as this could create a well-functioning, resource-rich, centralized website. This website should offer templates of resources such as posters and brochures to promote evidence-based breastfeeding practices, as well as a model policy and list of educational resources compatible with Step 2 requirements, audio and visual recordings of all webinars, and an interactive discussion area where participants can interact outside of the webinars. More research is needed to understand what the most effective platform

for providing this information to participants might be. Sharing of information among breastfeeding coalitions, community organizations, and departments of health is an excellent way to compile and centralize many useful resources for LC participants and others in the community. When possible, funding for staff education would be beneficial.

Conclusion.

Overall, the LC was well received by participants, meeting or exceeding the expectations of all thirteen subjects interviewed for this study. The collaborative aspect and the webinar format were reported as the most helpful components of the program.

Participants received the benefit of other participating sites' experience, a source of motivation to keep working toward implementing evidence-based breastfeeding practices, as well as a source of credibility in promoting said practices to hospital staff.

Learning Collaboratives are perceived as a helpful way for state-level public health and breastfeeding practitioners to improve breastfeeding policies, practices and outcomes in hospital settings. The lessons that were learned in this initiative can be applied in other states and public health settings.

Funding and Conflict of Interest.

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Figure 1.

The Ten Steps to Achieving the Breastfeeding Friendly Hospital Designation:

1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in the skills necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. Help mothers initiate breastfeeding within one hour of birth.
5. Show mothers how to breastfeed and how to maintain lactation, even if they are separated from their infants.
6. Give infants no food or drink other than breast-milk, unless medically indicated.
7. Practice rooming in – allow mothers and infants to remain together 24 hours a day.
8. Encourage breastfeeding on demand.
9. Give no pacifiers or artificial nipples to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or birth center.

Figure 2. Barriers and facilitators to implementing the Ten Steps to Successful Breastfeeding

| Barriers | Facilitators |
|---|---|
| Staff time to participate in webinars | Supportive management |
| Staff changes | “Collateral improvement” between multiple breastfeeding initiatives, specifically BFHI™ |
| Cost of training staff and implementing certain Steps | Data collected on breastfeeding rates and outcomes |
| Changing hospital and patient culture | Tangible resources to help implement the 10 Steps |
| Step 2 implementation – time and cost | Positive community response |

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