January , 2020

# Breastfeeding Equality, Resources, and Policy Updates For San Bernardino County

CALIFORNIA WIC ASSOCIATION
WORKING FOR BETTER HEALTH

IEBfC inland empire breastfeeding coalition

FIRST 5 SAN BERNARDINO

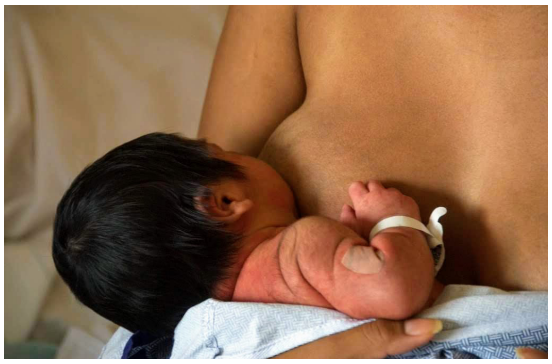
# Achieving Breastfeeding Equity in California

## Are hospitals doing enough to support at-risk families?

**A Policy Update on California Breastfeeding and Hospital Performance**

Produced by California WIC Association and the UC Davis Human Lactation Center

# San Bernardino County: 2018 Data



## Breastfeeding: A Health Equity Priority

- Breastfeeding provides short- and long-term health benefits that reduce global health care costs.[1-4] Breast milk provides infants with all the nutrients they need and other components that promote optimal growth, development, and immune function.[1,2] For mothers, breastfeeding promotes a more rapid recovery from childbirth and reduces risk for some cancers and chronic diseases.[2-4] These benefits are greatest when breast milk is fed exclusively.[1,2]
- To breastfeed successfully, most mothers need support during the hospital stay.[5,6] Hospital practices strongly influence mothers' abilities to achieve their breastfeeding goals.[6,7] Mothers who experience supportive practices in the hospital are more likely to breastfeed exclusively than those who do not.[1,7]
- Ongoing efforts have improved the quality of maternity care in many hospitals and increased breastfeeding rates and the number of Baby-Friendly hospitals statewide.[8]

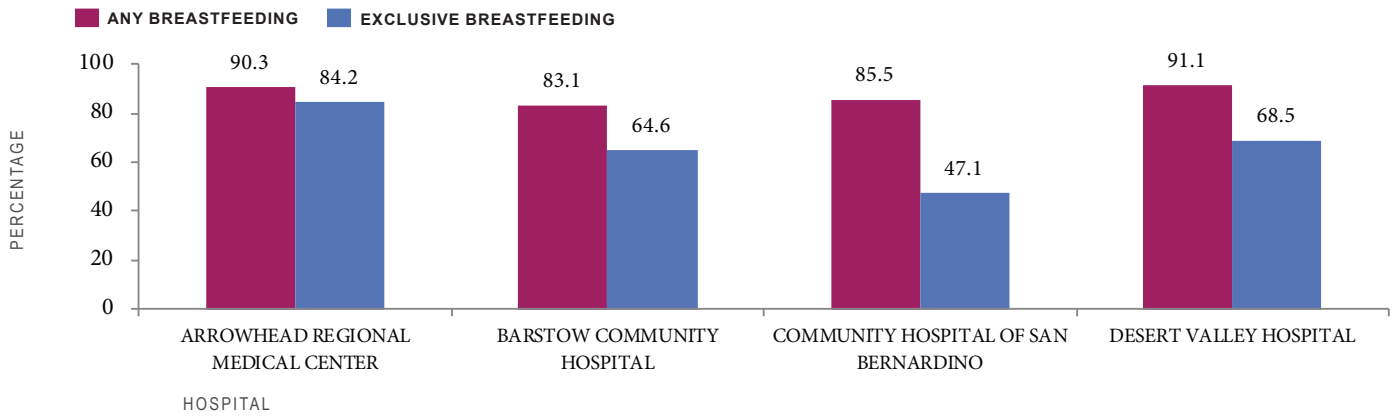
## Building on the Foundation of Baby-Friendly Practices

- Improvements in hospital policies have resulted in increases in breastfeeding rates. From 2010 to 2018, California exclusive in-hospital breastfeeding rates rose from 56.6% to 70.4%, and population differences were reduced significantly.[9]
- Recent data show that progress has slowed, and smaller but important disparities persist.[9] While Baby-Friendly and similar policies improve maternity care, not all California women experience these policies and practices the same way.[7,10]
- To achieve breastfeeding equity in California hospitals, we must build on the foundation created by widespread adoption of Baby-Friendly policies. Resources, quality improvement processes, and community partnerships are needed to ensure equitable structures and approaches are in place to meet the needs of California's diverse families.[11]

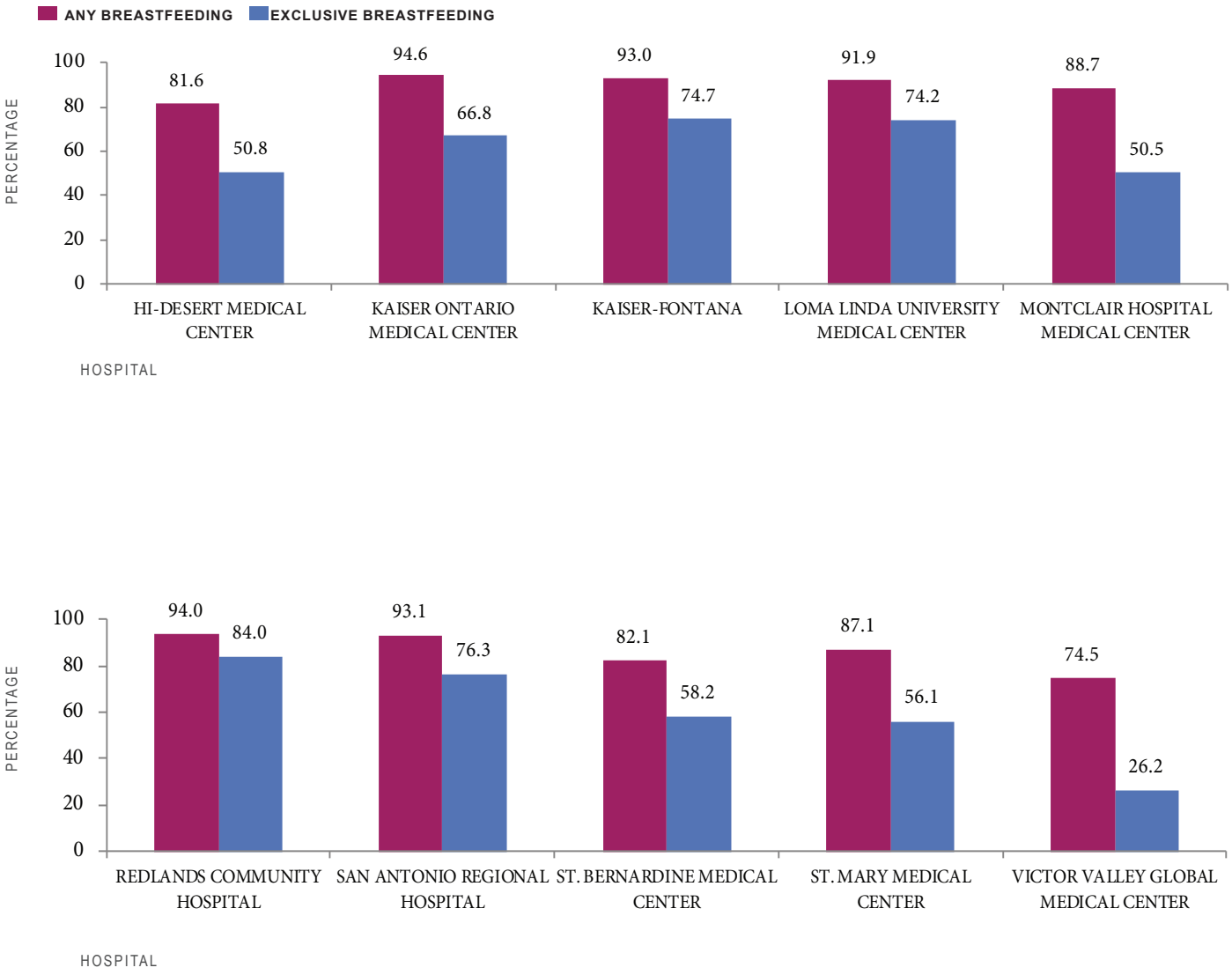
*Continued on page 3*

*The UC Davis Human Lactation Center used data reported by the California Department of Public Health Maternal, Child and Adolescent Health Program to create the following charts showing in-hospital breastfeeding rates.[9]*

**San Bernardino County In-Hospital Breastfeeding Rates, 2018**



## San Bernardino County In-Hospital Breastfeeding Rates, 2018



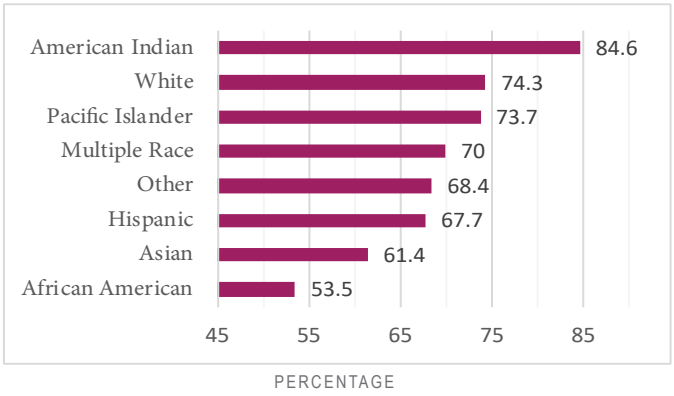

### San Bernardino Baby-Friendly Hospitals

- Seven Baby-Friendly hospitals: Arrowhead Regional Medical Center, Barstow Community Hospital, Community Hospital of San Bernardino, Loma Linda University Children's Hospital, Redlands Community Hospital, San Antonio Regional Hospital, St. Bernardine Medical Center

## Achieving Breastfeeding Equity

- To regain momentum and further increase in-hospital exclusive breastfeeding, advocates and administrators must ensure that 1) Baby-Friendly and similar optimal policies are adopted by all California hospitals providing maternity care and 2) equitable structures and approaches are integrated throughout medical systems to work synergistically with those policies.
- The California Department of Public Health must provide clear guidance and associated metrics or benchmarks to be used for implementation of SB-402 so that hospital systems can prepare for surveillance beginning in 2025.
- Administrators and policy-makers must provide resources to remove current barriers to breastfeeding equity. Targeted and sustainable changes will be needed to eliminate persistent disparities and ensure that all mothers in California are able to meet their breastfeeding goals.

### San Bernardino County Exclusive Breastfeeding Rates by Race/Ethnicity, 2018




Source: California Department of Public Health Genetic Disease Screening Program, Newborn Screening Data, 2018[9]

### San Bernardino County Breastfeeding and Hospital Performance

- County average breastfeeding rates: Any – 90.0% Exclusive – 67.6%
- County ranked 32nd in the state for exclusive breastfeeding
- One hospitals among the 15 lowest-scoring in the state for exclusive breastfeeding rates: Victor Valley Community Hospital
- One hospital among the 15 highest-scoring in the state for exclusive breastfeeding rates: Arrowhead Regional Medical Center
- Highest performing hospital in the county: Arrowhead Regional Medical Center

### NOTES:

• All nonmilitary hospitals providing maternity services are required to complete the Newborn Screening Test Form [Version NBS-I(D) (12/08)].

• Infant-feeding data presented in this report include all feedings since birth to time of specimen collection, usually 24 to 48 hours since birth. Upon completing the form, staff must select from the following three categories to describe 'all feeding since birth': (1) Only Human Milk; (2) Only Formula; (3) Human Milk & Formula.

• The numerator for "Exclusive Breastfeeding" includes records marked "Only Human Milk." The numerator for "Any Breastfeeding" includes records marked "Only Human Milk" or "Human Milk & Formula." The denominator excludes cases with unknown method of feeding, cases marked NPO and those receiving TPN at time of specimen collection.

• Excludes data for infants who were in a Neonatal Intensive Care Unit (NICU) nursery at the time of specimen collection.

• Excludes cases that were not collected by facilities listed as "Kaiser" and/or "Regular" maternity hospitals in the newborn screening database.

• Data for counties include information for all births occurring in a 'Regular' or 'Kaiser' facility providing maternity services in that county. Counties and facilities with fewer than 50 births with known type of feeding are not shown.

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California Breastfeeding Coalition
Working Together for a Healthier California

This project was supported by Kaiser Foundation Hospitals

Photograph Sources: California WIC Association, Bill McLeod, www.Istockphoto.com

# SB 402: Benefits, Challenges and Recommendations

Prepared by Nicholette Lambert for the Inland Empire Breastfeeding Coalition

“Existing law provides for the licensure and regulation of health facilities, including hospitals, by the State Department of Public Health. Existing law, commencing January 1, 2014, requires all general acute care hospitals and special hospitals that have a perinatal unit, as defined, to have an infant-feeding policy.

This bill would require all general acute care hospitals and special hospitals that have a perinatal unit to adopt, by January 1, 2025, the “Ten Steps to Successful Breastfeeding,” as adopted by Baby-Friendly USA, per the Baby-Friendly Hospital Initiative, or an alternate process adopted by a health care service plan that includes evidenced-based policies and practices and targeted outcomes, or the Model Hospital Policy Recommendations as defined.”

*-Text of SB 402*

# Baby Friendly USA Ten Steps to Successful Breastfeeding

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.

# Introduction

California has adopted some of the most progressive legislation for breastfeeding in the United States such as legal protections that allow mothers attending high school and those in prison to pump milk for their infants. SB 402 is another pioneering piece of legislation that aims to promote, protect and support breastfeeding. SB 402 has the potential to change the lives and health of many Californians. However, as a groundbreaking piece of legislation, there will be challenges in implementing it. This report will outline the benefits of SB 402, potential problems with it and recommendations to overcome those obstacles.

SB 402 requires that all hospitals in California with a perinatal unit become Baby Friendly certified by 2025 or adopt a similar breastfeeding support program by 2025. Baby Friendly certification means that a hospital follows the Baby Friendly Ten Steps to Successful Breastfeeding and the International Code of Marketing Breast-milk Substitutes. It also means that the implementation of these steps is verified by Baby Friendly USA for certification and to maintain certification status. The Baby Friendly Hospital Initiative (BFHI) is a global program launched by the World Health Organization and UNICEF in 1991 to implement the Ten Steps to Successful Breastfeeding and International Code of Marketing Breast-milk Substitutes on a broad scale (Baby Friendly USA, 2012).

# Benefits of SB 402

## Promotes and Supports the Health Benefits of Breastfeeding

We have legislation for other public health concerns: we put calorie content on fast food, we have no-smoking laws and we have laws about food safety. We use legislation as a way to encourage and support healthy behaviors and discourage unhealthy ones. Since breastfeeding is a health-promoting behavior, it makes sense to have laws that protect, promote and support it. SB 402 requires hospitals to take actions that support breastfeeding and ensure that hospital policies and hospital staff don't impede breastfeeding. The high rate of mothers who breastfeed at least once but the low rates of exclusive breastfeeding indicate that most women want to breastfeed their infants. The in-hospital breastfeeding rate in California show that much of the "drop-off" in breastfeeding starts in the hospital with high rates of any breastfeeding but low rates of exclusivity upon discharge (California Department of Public Health, 2019). SB 402 addresses a critical link in the chain of breastfeeding promotion.

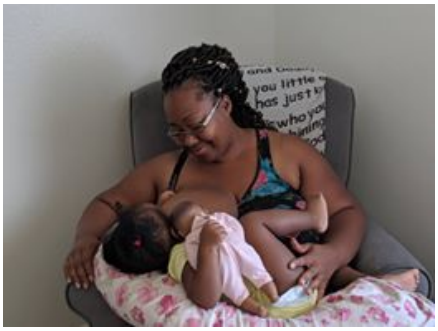
Breastfeeding is recognized as the optimal nutrition for an infant. But much like we see a lack of access to fresh fruits and vegetables in many low-income areas, most infants born to low-income mothers lack access to breast milk because their mothers lack access to breastfeeding help and instruction. Just as we wish to address nutritional disparities among low-income adults and children, we should seek to address these disparities among low-income infants. These disparities often start in hospitals where there is no support for breastfeeding because optimal infant feeding has become a low priority. Healthy People 2020 places the goal for newborns receiving formula during the first 2 days of life at 14.2% (United States Breastfeeding Committee, 2019). Many counties in California — including San Bernardino (32.4% of infants receiving formula in the hospital) and Riverside (33.2% of infants receiving formula in the hospital) counties — are not meeting that goal (California Department of Health, 2019).

There is clearly much room for improvement and laws that support the changes we want to see are necessary.

## Promotes Ecologically Sound Infant Feeding

California has a long history of legislation to protect the environment. In 1965, California became the first state to regulate vehicle exhaust by setting limits on hydrocarbons and carbon monoxide emissions. Two years later, the California Air Resources Board set the nation's first air quality standards for total suspended particulates, photochemical oxidants, sulfur dioxide, and nitrogen dioxide (Schmidt, 2007). More recently, California has banned single use plastic bags to reduce environmental harm. Breastfeeding is yet another way that California can take the lead in reducing environmental impact.

Breastfeeding has a much lower carbon footprint than formula feeding. Breastfeeding requires no emissions for manufacture or transport, unlike formula which requires manufacturing and transport to reach the family's home. Most formulas also use a cow milk base, which is typically produced on a concentrated animal feeding operation. The environmental impact of concentrated cattle feeding operations has been well documented. The emissions from feeding large numbers of cows is very high. As large ruminants, they require large amounts of feed. Large amounts of feed can not be grown on the feeding operation and so must be grown on farms and transported in. This requires large quantities of fertilizers which frequently leach into waterways causing pollution and toxic algae overgrowth. The feed is then transported over long distances, contributing to more emissions. The large amounts of manure produced by cows on a concentrated feeding operation cannot be disposed of easily and so generates further emissions as it decomposes. Enteric fermentation from large cattle herds then produces yet more emissions (Karlsson, Garnett, Rollins, et al., 2019).



## Addresses Health Disparities for Marginalized and Disadvantaged Groups

The benefits of breastfeeding have been hotly debated. Critics argue that the benefits of breastfeeding are not substantial in a developed country such as the United States. Amy Keifer (2015), a research scientist living in the San Francisco Bay Area, claims that the benefits of breastfeeding are small in a developed country like the United States and for otherwise healthy infants. Joan Wolf, a professor from Texas A&M University, says that "Under the best of circumstances, [the benefits of breast-feeding] are extremely small and they can be offset by the costs to the mother." (Grose, 2014). However, these women come from a higher socioeconomic background than many formula feeding mothers. Their views disregard the fact that the burden of formula feeding is borne largely by women and babies from low-income, disadvantaged situations. (Also notably absent from their writings about the "modest" benefits of breastfeeding are a discussion of the reduction in SIDS and certain cancers for breastfeeding mothers and babies.)

The reality of socioeconomic disparities in infant feeding stands in stark contrast to assertions that breastfeeding benefits are minimal. Data from the California Department of Health (2019) show that hospitals in low-income areas and those in rural areas with large minority

populations have lower rates of breastfeeding initiation and exclusive feeding in the hospital and the highest performing hospitals for breastfeeding initiation and exclusivity are often in higher income areas. The result is that low-income women are much more likely to formula feed than middle and high income women (California WIC Association and UC Davis Human Lactation Center, 2006). The irony of this is that low-income women have fewer resources to deal with the negative effects of formula feeding.

Formula costs vary, but range from $68 a month to $243 a month (Simon, 2019). For a family on a California minimum wage of $2,080 per month, at $100 a month (on average) for formula costs, this represents approximately 5% of their monthly income. For a baby that requires hypoallergenic formula, the costs are even more burdensome. Assuming an average of two cans of hypoallergenic formula are used each week, the family may spend $320 a month on formula. For a family on minimum wage, the cost of hypoallergenic formula represents 15% of the family's monthly income. Even for a family making a middle class budget of $6,000 a month, hypoallergenic formula would still take up 5% of the family's monthly income. As costs for housing rise in California and families cut corners on food to meet these costs, the cost of formula can be a substantial unnecessary expense. For low-income families, WIC and SNAP can partially cover the costs of formula. However, this means that the additional costs of formula feeding are then passed on to taxpayers who meet the costs of formula acquisition for WIC and the additional costs of babies on Medi-Cal who become sick more frequently from formula feeding.

But the expenses of formula don't stop with the monetary costs. Babies who are formula fed get sick more often than breastfed babies. This means that parents incur additional costs associated with caring for a sick baby such as missed days from work. For parents with paid vacation or sick days, this is less burdensome, but low-income families are less likely to have jobs that allow them these benefits. The family's income is then further impacted by formula feeding.

The expense of formula has nutritional implications for formula fed babies. In some cases, parents will add extra water to "stretch" formula further. This practice is common even among families receiving WIC. According to a study from Cincinnati Children's Hospital Medical Center that was published in *Clinical Pediatrics*, two-thirds of families on the WIC program in Cincinnati reported running out of formula before the end of the month and 27 percent of food insecure families reported watering down formula or reducing feedings to make the formula last until the next month's formula vouchers (Burkhardt, Beck, Klein et al., 2012). We have no reason to believe this doesn't happen in California where the cost of living is even higher than in Cincinnati.

Because of expense and dependence, formula has become a popular target for theft. Parents who run out of formula will sometimes resort to shoplifting to obtain it. And because of its portability and the constant need for it, formula has also become a target for organized crime rings. In these rings, opioid addicts are often the low-level "boosters" who steal formula from store shelves and re-sell it for drug money. The stolen formula is then sold to parents on Craigslist, eBay and other black market venues (Pomorski, 2018). The issue of formula shoplifting rings is now widespread with busts in Florida in 2009, 2014, and 2019, Colorado in 2010, New Jersey 2010, Oregon in 2010, Los Angeles in 2011, Kentucky in 2011, Texas in 2011, Utah in 2015, and Arizona in 2019. In a few cases, thieves would buy a can of formula and then return it filled

with a substitute like white flour, posing a danger to babies who are fed the flour and water mixture (Gander, 2019). Decreasing the demand for formula has the potential to reduce formula related theft along with the benefits of disease risk reductions.

# Challenges With Implementation: Obstacles and Strategies

The attitude of staff is critical to becoming Baby Friendly certified and will be likewise critical to California hospitals under SB402. Research from North Carolina hospitals shows that the efficacy (belief that the staff as a whole could make the required changes) and commitment (belief that staff is willing to make the required changes) were crucial to making the changes necessary to become Baby Friendly. Research on implementing Baby Friendly practices indicates that obstacles to implementing Baby Friendly practices include hospital policies and procedures, care providers and patients. (Hughes, 2015). Among the objections to Baby Friendly certification and other 10 Step breastfeeding programs are cost and lack of importance among doctors, nurses and hospital administrators.

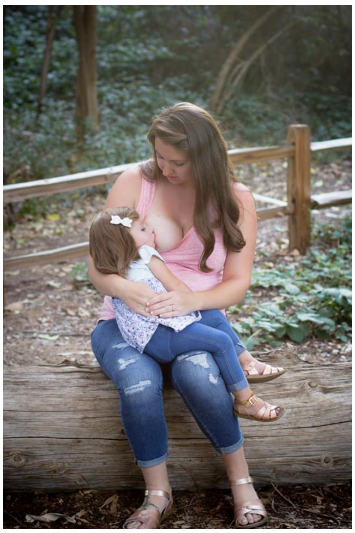
## Perceived Costs

Hospital administrators have raised objections about the costs of rooming-in and purchasing formula. In the Ten Steps to Successful Breastfeeding, rooming-in means that the mother and baby are kept together 24 hours a day. The costs of rooming-in are small as are the costs with an inspection to certify and re-certify. A study of 747 hospitals across the United States found that the median cost of uncomplicated deliveries at hospitals that were following 0 to 2 ideal practices from the Baby Friendly USA program were not significantly lower than those of hospitals following 9 to 10 ideal practices. The median delivery costs for hospitals following 3 to 5 ideal practices and 6 to 8 ideal practices were roughly equivalent (Allen, Longenecker, Perrine, et al, 2013). Dellifraine, Langabeer, Williams, et al. (2011) found that the costs of delivery at Baby Friendly hospitals were 1.6% to 5% higher compared to non-Baby Friendly hospitals, but only averaged $35 more. The concern that a 10 Step breastfeeding program will significantly increase birth costs to the hospital are unfounded.

Another cost of concern is formula acquisition. With Baby Friendly certification, hospitals are required to abide by the International Code of Marketing of Breast-milk Substitutes and relevant World Health Assembly resolutions. This means that hospitals can not receive free formula and be Baby Friendly certified. Receiving free formula is a conflict of interest because it promotes formula to new mothers at the hospital. Ultimately, the answer isn't to get formula cheaper. The vast majority of women can breastfeed and their babies do not require formula. Helping these women to breastfeed will not only reduce the hospital's costs but also increase breastfeeding rates.

Hospital administrators, doctors and nurses need to keep in mind that formula feeding costs more than breastfeeding. The perceived savings that hospitals receive from free formula or steeply discounted formula are just passed on to the families who are now dependent on formula to feed their babies and other parties affected. These unseen costs include:

- Time and cost of caring for a baby who is sick more frequently
- Taxpayers and insurance companies that pay the healthcare costs for babies who are sick more frequently
- Additional cancer risk among mothers and babies
- Higher risk of SIDS
- Employers who have increased absenteeism from parents in order to care for sick babies
- Increased carbon footprint
- Law enforcement and retailers who deal with the burden of formula shoplifting



The socially responsible thing for a hospital to do is pay the extra $35 per delivery to prevent the massive social, environmental, economic and health costs down the line.

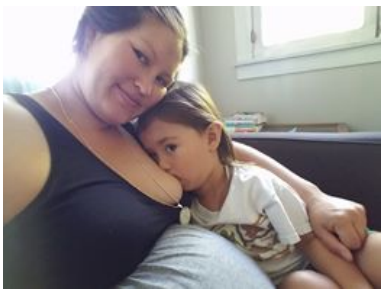
A hospital's estimate for the cost of formula acquisition may not be accurate to begin with. According to Hughes (2015), if these estimates have been gleaned from pharmaceutical companies, the expected costs may be thousands of dollars higher than they actually are. Hughes mentions one hospital in a study published in the 2015 *Journal of Human Lactation* who found that their actual formula costs were only 20% of the cost that was initially predicted. Dellifraine, Langabeer, Williams, et al. (2011) found that the initial "start-up" costs of becoming Baby Friendly were about $148 per infant which decreased sharply over time. And, of course, more breastfeeding babies means less formula consumption and the need for less formula on hand. Many hospitals have formula feeding rates in the 40% to 60% range or even more. So if these hospitals were to feed only 10% to 20% of their infants formula instead of 40% to 60%, their costs would go down dramatically. While there might be a period of transition where formula feeding gradually decreases, a 10% to 20% formula feeding rate hardly seems like an unrealistic expectation since the vast majority of infants through human history were exclusively breastfed by their mothers.

Free formula from formula manufacturers presents other problems as well. It puts formula in a place where it isn't handled like other medical supplies. Hopefully all hospitals are keeping track of their formula supplies as they would any other medication or supply with lot numbers and expiration dates noted. There is concern that lax attitudes about receiving formula could cause lax attitudes towards keeping track of it.

Hospital administrators and doctors sometimes don't realize that the nature of these free formula arrangements are not ethical and primarily benefit the formula manufacturers while reducing breastfeeding rates and increasing the costs associated with programs like WIC and Medi-Cal. The hospitals that receive free formula are providing product placement and promotion for formula companies at no cost. Furthermore, most hospitals don't need as much formula as they think they do, since the vast majority of mothers are capable of fully breastfeeding.

So the relationship that develops is one in which formula manufacturers get free advertising and promotion for a product that hospitals wouldn't need large quantities of if hospitals

had successful breastfeeding support programs. The unnecessary use of formula then undermines women's ability to breastfeed and increases the risks of health problems in the mothers and the babies. The definition of racketeering in the online Legal Dictionary (n.d.) is "The practice of engaging in a 'racket,' in which the organization extorts others, or otherwise creates problems, for the purpose of solving those problems for a fee or other benefit." While selling and profiting off formula isn't illegal, giving free formula to hospitals creates a problem of low breastfeeding rates which then benefits the formula company, making these arrangements closer to racketeering than altruism. One might ask why the hospitals don't charge the formula companies for the use of the hospital's advertising and promotion services.



SB 402 does not require hospitals to certify as Baby Friendly but does require them to adopt Baby Friendly USA's "10 Steps to Successful Breastfeeding" or an alternate process used by a health care service plan that includes evidenced-based policies and practices and targeted outcomes, or the Model Hospital Policy Recommendations. So there are alternatives to Baby Friendly that hospitals can adopt, though none of these plans allow free formula. However, hospitals that are concerned about paying the cost of formula should consider the requirements of the Joint Commission's Perinatal Core Measure of Exclusive Breastfeeding (2013). It doesn't require paying fair market value for formula, but it does require that hospitals ensure that business relationships and vendor policies with formula and breastfeeding supply companies are congruent with policies for other vendors. This is perfectly reasonable. Formula is necessary in some instances but can also undermine valuable public health efforts to ensure breastfeeding. Hospitals should also be tracking lot numbers and expiration dates of formula for safety reasons just as they would for any other medication or device.

## Doctors and Nurses

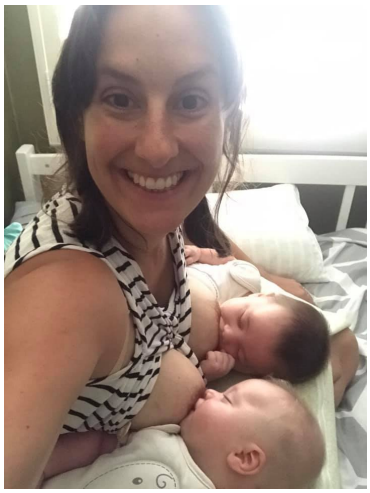
Doctors and nurses are critical components of breastfeeding support. However, the understanding of nurses and doctors about breastfeeding is often lacking (Radzyminski and Callister, 2015). Even the Surgeon General (2011) has noticed the lack of breastfeeding knowledge among doctors in their Call to Action on Breastfeeding. The Surgeon General's report found that many pediatricians believe the benefits of breastfeeding do not outweigh the challenges that may be associated with it. Doctors also reported various reasons to recommend against breastfeeding. The report found that some clinicians used their own breastfeeding experiences to replace evidence-based knowledge and recommendations they shared with their patients. Doctors who do not value breastfeeding support say that they either perceive little benefit or are reluctant to discuss breastfeeding in case it makes mothers feel guilty (Brown, 2016). This may explain the mindset of healthcare professionals at under-performing hospitals.

**Perceive Little Benefit**

When healthcare professionals don't participate in healthy behaviors, they tend to have a different perception of those behaviors. Doctors who are overweight, for example, are less likely to diagnose their patients as being overweight or obese and less likely to counsel them

about weight loss (Graham, 2016). Similar biases exist with doctors and nurses who have not breastfed their children or whose partners did not. Nurses who have not breastfed tend to have less knowledge and more negative attitudes about breastfeeding than those that do have personal experience with breastfeeding (Radzyminski and Callister, 2015). Ironically, female physicians may be more likely to cease breastfeeding prematurely because of the demands of their work, and then are less likely to actively promote breastfeeding among their patients (Sattari, Levine, Neal, et al., 2013).

**Uncomfortable Talking About Breastfeeding**



Breastfeeding is very sensitive topic among women because it deals with very personal feelings about bodily rights and mothering. There are many ways that women feel affected by breastfeeding promotion and lack thereof. Women who can't breastfeed sometimes feel upset if they try to breastfeed and fail, women who want to breastfeed often feel under-supported and women who don't breastfeed at all by choice sometimes feel as though they are perceived negatively for their decision. Talking about breastfeeding with women can be a very emotionally charged issue.

There are a few things that health professionals should keep in mind as they approach the subject of breastfeeding with mothers. First, most California hospitals have a high percentage of babies who receive some breast milk, which indicates that most women want to breastfeed their babies. The average of any breastfeeding for the entire state of California is 93.8 % (California Department of Health, 2019). Most women are convinced of the benefits of breastfeeding and want to breastfeed. Problems that lead to poor rates of duration and exclusivity include poor prenatal education, lack of support from knowledgeable professionals and a lack of support in the community and workplace (Brown, 2017). For women who feel negatively about breastfeeding or are unsure about it, doctors still have a responsibility to share accurate information about breastfeeding just as they would any other health issue such as smoking, diet or hand washing. It can be a fine line between being perceived as "pushy" versus encouraging healthful choices with good information, but the role of a healthcare professional is to promote healthy behaviors.

# Recommendations

A hospital that is only enacting a plan for compliance with SB 402 may have more difficulty with providing breastfeeding support. Hospitals that have voluntarily developed and implemented a written breastfeeding policy likely have a different organizational culture and prioritize breastfeeding more than a hospital with consistently low breastfeeding rates. Hospitals that have voluntarily enacted a breastfeeding support plan have staff or administrators at the highest levels who consider breastfeeding to be a high priority while hospitals with consistently low breastfeeding rates and no plans to address the issue do not have the same priority. Hospitals that have low breastfeeding rates will probably need more guidance in adapting to Baby Friendly practices.

Interventions that have been helpful for transitioning to Baby Friendly practices have included additional staff education, specific patient interventions such as orientation to BFHI principles, and environmental structural support. Environmental structural support measures that have been successful include eliminating a central nursery to promote rooming-in and lo-

cating formula in difficult to access areas. Other structural supports have included changes in policy and procedure and staffing patterns for lactation consultants (Hughes, 2015).

Based on available research, there are some steps that seem to be particularly critical. Step 1 (have a written breastfeeding policy that is communicated to all staff) is one of the hardest steps for hospitals to implement (Sanborn, 2018). Step 4 (skin-to-skin contact after birth to initiate breastfeeding) receives very little resistance from mothers but yields substantial results in both patient satisfaction and and breastfeeding initiation (Hughes, 2015). Community support is also crucial, especially after discharge— "One of the steps that has had a strong positive correlation with sustained exclusive breastfeeding is the Step 10 of the initiative that suggests providing community support for mothers who are breastfeeding." (Sanborn, 2018). Step 3 (prenatal breastfeeding education) works hand-in-hand with Step 10 to guide parents through breastfeeding. The good news is that getting hospital administrators and staff to work out a plan gets them over a substantial "hump" and Step 10 (fostering breastfeeding support groups and referring mothers to them upon discharge) helps maintain the progress started in the hospital. We recommend having supportive resources to help guide hospitals with low breastfeeding rates to develop these steps.

All hospitals will need the help of International Board Certified Lactation Consultants (IBCLC) to implement a 10 step breastfeeding program. IBCLC's have the most specialized education in clinical breastfeeding management of any health professional. The Surgeon General (2011) has expressed concern about the lack of knowledge among doctors and nurses, so utilizing the skills of lactation consultants is critical to an evidence based breastfeeding support program. It would be unthinkable to implement any other health program without having experts in the given field to advise and oversee it. It only makes sense to have IBCLC's guide hospital staff through the transition and maintenance of a breastfeeding support program. IBCLC's will be crucial to helping hospital staff get the education they need to become Baby Friendly certified or implement a comparable alternative program. IBCLC's are an especially important part of Step 3 (inform all pregnant women about the benefits and management of breastfeeding) and Step 10 (foster breastfeeding support groups and referring mothers to them upon discharge) because of their specialized knowledge.

Though Step 1 is the hardest to implement, it will be very helpful for hospitals that deal with transient staff. Hospitals have written protocols for everything from using medical devices to evacuation of the facilities in an emergency. With a written policy, all the doctors and nurses will know what is expected for infant feeding. With the enormous public health benefits of breastfeeding, a written policy on infant feeding is a reasonable expectation for any hospital with a perinatal unit.

## Reframing Breastfeeding for Families

Dorfman and Gehlert (2010) point out that the risks of artificial feeding are frequently framed in terms of impact on the baby. This often leads to a conflict with the perspective that women have needs too. When seen in this way, breastfeeding can be perceived as a burden on the mother that she endures for the sake of the baby. This perspective is reinforced with doctors, nurses and even some scholars when they say that the negative effects on the mother outweigh any positive effects for the baby. However, longer breastfeeding duration is associated with positive health outcomes for mothers as well. Women who have never breastfed have an increased risk of breast cancer, ovarian cancer, obesity, heart disease and diabetes (Stuebe, 2009). These are

often not addressed and promoted to women as benefits of breastfeeding.

These benefits move breastfeeding out of the realm of something that mothers do as a sacrifice solely for their babies at no advantage to themselves and into the realm of a mutually beneficial feeding choice. And breastfeeding doesn't have to be a burden if the mother has adequate support to deal with the initial learning curve and any challenges that might emerge.

Getting partners or other close family members to support breastfeeding is also an important component of breastfeeding success. Once discharged, an unsupportive partner or family members may make breastfeeding difficult (Radzyminski and Callister, 2015). Hospitals can get ahead of this problem by involving partners and family in breastfeeding outreach and education. Helping fathers to understand the substantial health, economic and environmental benefits could help them be more supportive.

Support and education for pumping and returning to work can also help reframe breastfeeding as "inconvenient" or a "burden". When women understand their right to pump, how to enforce those rights and how to pump and store milk efficiently, pumping and working can become a viable option. Hospitals need to start setting an example themselves with adequate pumping and storage resources for their own doctors, nurses and patients.

## Reframing Breastfeeding for Doctors and Nurses

Introducing formula leads to mothers breastfeeding less, which means their milk production drops, then ceases, and then the baby is exclusively formula fed (Brown, 2017). Doctors and nurses need to realize that once a baby is exclusively formula fed, the family cannot stop feeding formula until the baby is weaned. This means that any negative health and financial consequences the family will experience are largely irreversible at that point. While a doctor or nurse may be satisfied with the outcome of formula feeding for his or her family, not every family will be so fortunate. It is not a doctor's or nurse's place to offer their experience as proof of formula feeding safety for others. Considering the heavy financial burden on families and health risks, doctors and nurses should do the ethical thing and support breastfeeding for all women.

In a few cases, such as previous breast reduction surgery or certain types of breast dysplasia, women will not be able to fully breastfeed. Many of these women can still partially breastfeed. Healthcare professionals should keep in mind that breastfeeding is not an "all-or-nothing" endeavor. Even partial breastfeeding still has benefits for the baby and the mother and can alleviate some of the financial stress of formula feeding. This is where a breast exam from a lactation consultant soon after the birth can be helpful. This way, mothers with potential anatomical problems find out before the situation becomes so overwhelming and critical that the mother won't even attempt partial breastfeeding. Midwives and OB-GYN's should find out if the mother has a history of breast surgery as part of the medical history.

## Rural Healthcare and Lactation Support

Much of California is rural and many of these communities lack adequate lactation support. These communities are often far removed from major urban areas. Some, such as those in the Bear Valley and Lake Arrowhead areas, may even be inaccessible during winter because of traffic and road conditions. Without a system to provide consistent lactation support, these communities will not be able to increase breastfeeding initiation and exclusivity. Rural California hospitals will benefit from having interventions that can address these needs.

Rural lactation support interventions that have been helpful in other places include developing women from the community to be lactation professionals and telelactation support through video conferencing or chat. Rural Desha county in Arkansas developed a lactation support program by recruiting a local mother to be a peer counselor. The mother worked under the Arkansas Department of Health and offered support in the community through home visits and at the local hospital. She had access to a Little Rock based IBCLC through video conferencing over an iPad when she required additional help. The peer counselor also worked towards her CLC (Certified Lactation Counselor) certification and is now fully certified. One advantage with this program is that it served all the women in the area who were breastfeeding and not just those receiving WIC (Towbin, Osibanjo, 2016). A similar intervention could be used in other rural communities here in California.

A program in Pennsylvania that used video calls to allow women living in rural communities to access lactation consultants at any time received very high satisfaction scores. 91 percent of the women who made one or more video calls reported being satisfied with the help they received. The women who participated in the study suggested that the program could be enhanced by access to online information about breastfeeding and a way to connect with other women who are breastfeeding (Kampinos, Kotzias, Bogen et al., 2019). Grant money that could fund similar programs here in California would be a good investment in improving breastfeeding in rural communities in California.

Other ways to implement rural lactation support could involve utilizing existing WIC resources, having lactation consultants from regional hospitals make visits to rural hospitals, partnering with community groups like the La Leche League and establishing further online resources to serve these communities. WIC is already present in most rural and low-income communities and provides breastfeeding support. Ensuring WIC coordinators in these areas have adequate education and teaching resources (models, diagrams, time, etc.) to provide support and access to a IBCLC for situations where they need more help could fill in the gaps for some communities. WIC peer counselors could work in conjunction with rural hospitals to make visits or provide a clinic or support group. Arranging gas coverage for ICBLC's to travel to rural hospitals once or twice a week could help improve breastfeeding rates for many disadvantaged communities as well. La Leche League leaders who would be willing to travel to the community and hold a monthly satellite support group would be another way to provide rural lactation support.

Methods of communication and support that offer contact outside of business hours are very valuable to all demographics because many mothers seek support during the night or early morning. (Kampinos, Kotzias, Bogen, 2019). These methods can also reach women in communities that are hard to to access because of distance or weather. Online resources can also be used to offer additional support for rural women. Women who can't make it to a once-a-month support group or clinic or may be separated from other breastfeeding mothers by distance or weather could still connect online through private social

media groups targeting a region (for example, Morongo Valley/Twentynine Palms/Yucca Valley/ Joshua Tree).

Ensuring women in rural areas know the number for the 24 hour seven-days-a-week Loving Support hotline can help these women access lactation support and feel less alone in their breastfeeding journey. Hospitals might consider offering a refrigerator magnet or other type of easy-to-find item that has the Loving Support number printed on it for easy reference. Text messaging can also be a valuable tool for outreach. A study from Queensland University of Technology in Australia found that mothers who received cellphone text messaging support breastfed four times longer than those who did not. Shasta county started a text message program for WIC peer counselors to contact mothers (with the mother's consent to receive text messages). Their program quickly became very popular with mothers because of its portability and convenience when taking care of an infant. (Perrin, 2012). This is an intervention that can be highly effective at a low cost and over a distance.

## Mentoring for Low Breastfeeding Rate Hospitals

Hospitals with low breastfeeding rates will not be able to turn their breastfeeding rates around over a short period of time. These hospitals will need more help in getting their breastfeeding 10 Step program started. Mentorship programs with hospitals that have high breastfeeding rates is one possible way to help these hospitals transition towards more successful breastfeeding. In this arrangement, hospitals with low breastfeeding rates would be able to ask hospital administrators, doctors, nurses and lactation consultants from hospitals with well established breastfeeding programs for advice or guidance on implementing their own program. This would be especially helpful if both hospitals serve similar communities.

## Gentle Cesareans

Cesarean sections are associated with a greater risk of breastfeeding difficulty. This is because cesarean babies are less likely to have skin-to-skin contact with their mothers and breastfeeding is often delayed (Hobbs, Mannion, McDonald, et al., 2016). A gentle cesarean or family-centered cesarean holds solutions to these barriers to breastfeeding. During a gentle cesarean, the mother and baby have skin-to-skin contact after the birth and are allowed to initiate breastfeeding. While emergency cesareans where the mother or baby are in danger are not compatible with a gentle cesarean, planned cesareans and cesareans for failure to progress can be gentle cesareans.

Gentle cesareans require some adaptation and cooperation among obstetricians, anesthesiologists, pediatricians, and maternity nurses, but the changes are well worth it. Not only do mothers report greater satisfaction with gentle cesareans than traditional cesareans, but mothers and babies do as well or better physically. Mothers and babies who have gentle cesarean birth have a shorter time to discharge, fewer instances of hospitalization in the first four days postpartum and babies birthed through a gentle cesarean are less likely to be admitted to the NICU. Gentle cesareans carry little to no additional costs, either (Camann, 2012).

# Conclusion

While there are many challenges that hospitals face with implementing SB 402, the benefits are substantial. SB 402 can ensure equal access to optimal infant feeding, reduce the carbon footprint of infant feeding and reduce socioeconomic and health disparities. Tailoring breastfeeding education for healthcare professionals to start their 10 Step programs, investing in rural lactation support, providing support for low performing hospitals, and encouraging gentle cesareans will give hospitals the tools to put SB 402 into practice and make California families healthier.

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