



## **FED IS BEST FOUNDATION COMMENTS TO HEALTHY PEOPLE 2030 OBJECTIVES**

These comments are being submitted on behalf of The Fed Is Best Foundation (the “Foundation”) in response to the U.S. Department of Health and Human Services (“HHS”)/U.S. Department of Agriculture (“USDA”) request for comments regarding the Proposed Objectives for Healthy People 2030, with particular focus on the Maternal, Infant, and Child Health objective regarding the increase in proportion of infants exclusively breastfed through 6 months.

The Fed is Best Foundation is a national nonprofit organization of over 1200 nurses, physicians and other health professionals and patient advocates committed to identifying gaps in current infant feeding protocols, guidelines and education programs, in order to provide families and health professionals the most up-to-date scientific research, education and resources to ensure safe infant feeding with breast milk, formula, or a combination of both in order to support the ability to thrive and to prevent, especially in the early days following birth, complications associated with inadequate feeding in infants.

### **EXECUTIVE SUMMARY**

#### **PROPOSED REVISIONS REGARDING EXCLUSIVE BREASTFEEDING THROUGH 6 MONTHS**

The Foundation urges the Secretary to revise the Healthy People 2030 goal MICH-2030-15 objective, which calls for an increase in the proportion of infants who are exclusively breastfed from birth to 6 months. Specifically, we recommend revising this objective in order to promote breastfeeding in a manner that is safe, inclusive and respectful of parental informed decision-making and of natural variations in ability to breastfeed and to place greater focus on ensuring sufficient intake and prevention of short-term complications and potentially long-term consequences associated with insufficient feeding in infants.

**Proposed Revision: Increase the proportion of infants who are primarily breastfed through 4-6 months who have received sufficient nutrition to ensure optimal growth and brain development and to prevent feeding complications (e.g. hyperbilirubinemia, hypernatremia, dehydration, excessive weight loss, hypoglycemia and failure-to-thrive).**

#### **PROPOSED NEW HEALTHY PEOPLE 2030 OBJECTIVES:**

In addition, we propose two new objectives in order to improve infant feeding guidelines to prevent the insufficient feeding-related complications of hyperbilirubinemia (excessive jaundice), dehydration, hypernatremia, hypoglycemia and failure-to-thrive, particularly in exclusively breastfed newborns, which results in hundreds of thousands of U.S. newborn admissions every year and can have serious long-term negative consequences to infant health and brain development.

**New Proposed Objective #1: Reduce the proportion of infants who require treatment and/or extended or repeat hospital admission for insufficient feeding-related hyperbilirubinemia, hypernatremia, dehydration, excessive weight loss, hypoglycemia and failure-to-thrive.**



**New Proposed Objective #2: Increase the proportion of parents who have made the informed choice to partially- or exclusively-feed formula to provide safe and sufficient nutrition to their infants to prevent feeding complications (e.g. hyperbilirubinemia, hypernatremia, dehydration, excessive weight loss, hypoglycemia and failure-to-thrive) and optimize growth and brain development.**

## INTRODUCTION

The current public health objective to increase the proportion of infants who are breastfed exclusively from birth through 6 months has received significant criticism from the general population, nurses, pediatricians and other physicians in the media and in peer-reviewed publications.<sup>1,2,3,4,5,6</sup> Criticisms of the objective have mostly stemmed from emerging evidence of harm caused by excessive pressure to exclusively breastfeed even when an infant is showing obvious signs of insufficient feeding, namely persistent crying, prolonged, unsatisfied nursing and other clinical markers of dehydration, jaundice and hypoglycemia, particularly in the first days after birth. Nurses and doctors have reported these complications can stem from the pressure to meet the quality metric goal promoted by the [Joint Commission](#),<sup>7</sup> World Health Organization, the Center for Disease Control, and the American Academy of Pediatrics, of increasing rates of exclusively breastfeeding before discharge, which have encouraged unsafe practices like allowing newborns who show signs of persistent hunger to remain unsupplemented until they develop signs of critical illness.<sup>8,9</sup> Insufficient and delayed supplementation have led to exclusively breastfed newborns developing lethargy, inability to feed, seizures and even apnea and cardiac arrest from severe hyperbilirubinemia, hypernatremia and hypoglycemia.<sup>10,11,12</sup> These complications of insufficient feeding are known causes of irreversible brain injury, long-term disability and rare deaths. Furthermore, maternal exhaustion from 24/7 rooming-in and prolonged, unsatisfied nursing, common in the first days of life, has resulted in mothers accidentally falling asleep with their newborns resulting in newborn falls, asphyxiation and cardiac arrest also known as Sudden Unexpected Postnatal Collapse.<sup>13</sup> These complications have gained significant media attention and has resulted in several high-profile legal cases against health professionals and hospitals across the globe due to resulting newborn brain injuries and deaths.<sup>14,15,16,17</sup> The [WHO/UNICEF Baby-Friendly Hospital Initiative](#), published in 1991, based on the 1989 WHO Ten Step to Successful Breastfeeding, has been primarily responsible for the hospital program and public health messaging regarding exclusive breastfeeding as ideal for the vast majority infants from birth to 6 months. It is currently being promoted as the gold-standard for breastfeeding management in health facilities across the globe. However, little attention has been paid to the serious negative health consequences of specific policies of the BFHI during its real-life application in health facilities until recently.

Below, we provide a background summary of relevant published data regarding the limitations of the current model of breastfeeding promotion and the rationale for our revisions to the MICH-2030-15 objective and our proposals for new 2030 Healthy People objectives.

## BACKGROUND ON CURRENT RESEARCH

Receiving adequate nutrition in the first days following birth and in the subsequent first 1000 days after birth is critically important for child health and development.<sup>18</sup> Among the leading causes of newborn extended and repeat hospitalizations are complications of insufficient feeding in exclusively or near-exclusively breastfed newborns.<sup>19,20</sup> Among the most common reasons for excessive weight loss and dehydration readmissions in infants are exclusive breastfeeding when breast milk is not sufficient and



when there is a delay in onset of copious milk production.<sup>21,22,23</sup> Insufficient feeding results in the complications of excessive weight loss, dehydration, hyperbilirubinemia, hypernatremia and hypoglycemia.<sup>24,25,26,27</sup> These complications not only lead to preventable hospitalizations and health care costs, but more significantly can also lead to brain injury and permanent disability among affected newborns, and in rare instances, even death.<sup>27,28,29</sup>

- Insufficient breast milk is common, especially in the first days after birth. In a study of healthy, mothers motivated to exclusively breastfeed with excellent lactation support, 22% experienced delays in copious milk production (lactogenesis II) that increase the risk of excessive weight loss in their newborns by 7-fold.<sup>22</sup>
- 42–44% of first-time mothers have similar delays in copious milk production.<sup>30,31</sup>
- The prevalence of women who overtly fail to maintain lactation even with maximal support is 15%, according to a prospective study of healthy, motivated breastfeeding women delivering healthy, term babies.<sup>32</sup>
- The prevalence of lactation “insufficiency” may be much higher, as 40–50% of women in the US and 60–90% of women internationally cite “not producing enough milk” or “baby not satisfied with breast milk” as the primary reasons for weaning prior to 6 months.<sup>33</sup>

As a result of high rates of delayed and failed lactogenesis II, complications of insufficient feeding are common, particularly among exclusively breastfed newborns.

The most recent studies show:

- 10% of healthy, term vaginally-delivered and 25% of cesarean-delivered newborns develop excessive weight loss of > 10% of birth weight,<sup>34</sup> which increase the risk for excessive jaundice (hyperbilirubinemia) and hypernatremic dehydration.<sup>6,35</sup> In comparison, less than 1% of newborns supplemented or exclusively formula-fed from birth lost >10% of birth weight from the same hospital cohort.<sup>36</sup>
- 10% of all healthy, term exclusively breastfed (EBF) newborns and 23% of first-born exclusively breastfed newborns develop levels of hypoglycemia (<40 mg/dL)<sup>37</sup> severe enough to increase risk of lower academic achievement<sup>38</sup> and developmental delay.<sup>39,40</sup>
- Cognitive impairment from hypoglycemia in the hours after birth can have long-term effects as evidenced by a study of 1395 newborns showing that newborn development of transient hypoglycemia (less than 40 mg/dL) was associated with a 50% reduction in passing the fourth-grade proficiency test in literacy and math.<sup>38</sup>
- A large population study of 101,060 healthy, term non-hyperinsulinemic newborns followed to 2-6 years of age found that developing neonatal hypoglycemia of < 40 mg/dL in the days after birth increased the risk of developmental delay by 2.5-fold, almost doubled the risk of motor delay (1.9-fold) and almost tripled the risk of cognitive developmental delay (2.8-fold) compared to newborns with normal glucose levels.<sup>41</sup>



- The published literature has shown that 12-35% of well-monitored healthy, term exclusively breastfed newborns develop hyperbilirubinemia and 5.7% of newborns born in hospitals with high exclusive breastfeeding rates require phototherapy.<sup>42,43,44,45,46,47,48,49,50</sup> The majority of hyperbilirubinemia is caused by non-hemolytic hyperbilirubinemia from insufficient feeding.<sup>51,52</sup> In comparison, a recently published study showed breastfed newborns supplemented to satisfaction have a hyperbilirubinemia rate of 1.3% and a phototherapy rate of 0.3%.<sup>53</sup>
- A 2008 U.S. study has shown that jaundice, feeding problems, and dehydration combined are the primary cause for 37% of all readmissions within the first 30 days of life.<sup>20</sup> A review by the National Perinatal Information Center of the American Hospital Association revealed that jaundice readmissions are increasing and that 78% of all readmitted newborns require phototherapy.<sup>54</sup>
- Moderate hyperbilirubinemia in the range commonly seen among newborns requiring phototherapy (14-20 mg/dL) are associated with Bilirubin-Induced Neurological Disorder, which manifest as developmental delay, cognitive impairment, disordered executive function (i.e. ability to plan to achieve desired goal) and behavioral and psychiatric disorders.<sup>55</sup>
- Severe hyperbilirubinemia (>20 mg/dL) in a 30-year follow-up study resulted in 45% of affected newborns having persistent neurobehavioral problems including difficulty with literacy and math, problems with attention and impulsivity, inability to complete secondary and tertiary education, lower life satisfaction scores and higher rates of drinking problems.<sup>56</sup>
- A recently published study showed that among healthy, term newborns universally screened for hypernatremia (>145 mEq/dL), a defining condition of insufficient feeding that increases risk of brain and vital organ injury, 36% breastfed newborns (both exclusive and mix-fed) developed hypernatremia.<sup>57</sup> Hypernatremia can occur at greater than 4.8% weight loss, within the range of what is commonly considered normal weight loss for breastfed newborns.<sup>57,58</sup> In comparison, among newborns in this cohort exclusive fed with formula, only 6% developed hypernatremia.
- Exclusive breastfeeding at discharge has been associated with a 2- to 11-fold higher risk of rehospitalization for jaundice and dehydration.<sup>20,21</sup>
- A recent case series has shown that neonatal hypoglycemia from poor feeding in breastfed newborns can result in extensive brain injury and severe long-term developmental disability.<sup>28</sup>
- In the U.S., there are approximately 190,000 phototherapy admissions every year, primarily in breastfed newborns<sup>59</sup> in addition to admissions for hypoglycemia, dehydration and failure to thrive. Phototherapy admissions alone cost the U.S approximately \$2.7 billion dollars annually, the majority caused by insufficient feeding-related jaundice.<sup>1\*</sup> The care of a child who sustains brain injury from insufficient feeding complications can result in millions of dollars in health care costs over their lifetime.<sup>60</sup>

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\* 83.2% breastfeeding initiation rate x 4,000,000 annual births = 3,328,000 breastfed newborns  
3,328,000 breastfed newborns x 5.7% phototherapy rate = 189,696 phototherapy admissions  
189,697 x \$14,247 average cost of admission<sup>54</sup> = \$2,702,598,912



**RATIONALE FOR THE PROPOSED REVISION AND PROPOSED NEW OBJECTIVES #1**

**Proposed Revision: Increase the proportion of infants who are primarily breastfed through 4-6 months who have received sufficient nutrition to ensure optimal growth and brain development and to prevent feeding complications (e.g. hyperbilirubinemia, hypernatremia, dehydration, excessive weight loss, hypoglycemia and failure-to-thrive).**

**Proposed New Objective #1: Reduce the proportion of infants who require treatment and/or extended or repeat hospital admission for insufficient feeding-related hyperbilirubinemia, hypernatremia, dehydration, excessive weight loss, hypoglycemia and failure-to-thrive.**

The goal of “exclusive” breastfeeding is the cornerstone of early breastfeeding management and is the most prominent quality metric of the Baby-Friendly Hospital Initiative.<sup>61</sup> This focus on avoidance of supplementation particularly in first days of life when insufficient milk is most common results in hundreds of thousands of admissions for insufficient feeding complications every year. The exclusive breastfeeding hospital metric continues to dominate early breastfeeding management despite lack of evidence from randomized, controlled trials that it interferes with long-term breastfeeding rates<sup>62,63,64</sup> and limited data in developed countries showing any difference between exclusive vs. non-exclusive breastfeeding on health outcomes. While exclusive breastfeeding status months after the newborn period may yield health benefits, the data show that exclusively breastfed newborns are at a greater disadvantage with regard to rates of hyperbilirubinemia, dehydration, hypernatremia and excessive weight loss and the related admissions when compared to ad-lib supplemented and exclusively-formula-fed newborns.

**Table 1. Compilation of Rates of Feeding Complications in Newborns**

	<b>Exclusively Breastfed Newborns</b>	<b>Ad-Lib Supplemented/ Formula-Fed Newborns</b>
Hyperbilirubinemia Rates	12-35% <sup>41-49</sup>	1.3% <sup>52</sup>
Phototherapy Rates	5.7% <sup>49</sup>	0.3% <sup>52</sup>
Excessive Weight Loss > 10%	10% (VD), 25% (CD) <sup>33</sup>	0.1% <sup>52</sup>
< 30 Day Readmissions	4.3% (VD) 2.4% (CD) <sup>19</sup>	2.1% (VD) 1.5% (CD) <sup>19</sup>
Hypernatremia (>145 mEq/dL)	36% <sup>56</sup>	6% <sup>56</sup>
Severe Hypernatremia (>160 mEq/L)	70 per 10,000,000 <sup>65</sup> 98.3% of cases	1 in 10,000,000 <sup>64</sup> 1.6% of cases
Hypoglycemia (<40 mg/dL)	10% <sup>36</sup>	N/A

*VD – Vaginally-Delivered; CD – Cesarean-Delivered; N/A – Not Available, unrestricted feeding protects against hypoglycemia*

Given the urgent need to reduce the short- and long-term morbidity caused by insufficient feeding complications in newborns, we recommend revising the language of the exclusive breastfeeding objective (MICH-2030-15) and removing the term “exclusive.” This publicly acknowledges the significant number



of mothers who have insufficient breast milk and who have delays in onset of copious milk production whose infants cannot be safely fed through exclusive breastfeeding from birth to 6 months.

Publicly acknowledging the reality of naturally occurring variations in breast milk production and ability to latch, while educating on the importance of supplementation when breastfeeding is insufficient can prevent hundreds of thousands of infant feeding complications and hospitalizations per year in the U.S. alone. When safe, tested human donor milk and safely-prepared formula exist to supplement infants who are developing dehydration, hyperbilirubinemia and hypoglycemia, allowing an infant to develop temporary or permanent injuries from insufficient feeding should be “never events.” The U.S. spends an estimated \$2.7 billions dollars in newborn hyperbilirubinemia admission alone (190,000 admissions per year), the vast majority caused by insufficient feeding in exclusively breastfed newborns. The Healthy People 2030 objective should reflect the goal of supporting and achieving optimal health for all infants and avoidance of brain- and life-threatening feeding complications, regardless of a mother’s capacity (biological or otherwise) or decision to breastfeed. Such a revision acknowledges that absolute exclusive breastfeeding from birth to 6 months may be unattainable and potentially unsafe for a sizable proportion of mother-baby dyads. By setting an objective to increase the proportion of infants who are primarily breastfed through 4-6 months to ensure infants have received sufficient nutrition to ensure optimal growth and brain development and to prevent feeding complications, and excluding breastfed infants who have developed insufficient feeding complications from the Healthy People metric, we can better estimate the number of infants who have benefited from breastfeeding, those who have a higher chance of having positive health outcomes from optimal breastfeeding support. Moreover, the literature reflects that supplemental feeding in the first days after birth of infants showing signs of underfeeding does not correlate with a decreased ability to successfully breastfeed longer-term.<sup>62-64</sup>

We further recommend specifically revising the 6-month criteria in the MICH-2030-15 objective as evidence is emerging regarding the potential harm of withholding solid food until 6 months of age. The American Academy of Pediatrics has publicly acknowledged and accepted evidence that delaying introduction of allergenic foods until 6 months of age as opposed to introducing it between 4 to 6 months of age, increases the risk of food allergies, which prompted revision of their guidelines.<sup>66,67, 68, 69</sup> They now recommend assessing the developmental readiness of an infant between 4 and 6 months of age and making recommendations to introduce solids food, particularly allergenic foods, through shared decision-making with the parents.

Multiple studies have also shown increased risk of iron deficiency anemia in exclusively breastfed newborns between 4 and 6 months of age compared to predominantly formula-fed infants, suggesting an increased need for dietary iron from solid food in breastfed infants.<sup>70,71,72,73</sup> Similar findings have been found with regard to vitamin B12 deficiency in breastfed infants between 4-6 months.<sup>74,75</sup> Both iron and vitamin B12 deficiency are known causes of poor cognitive development.<sup>76,77</sup> Furthermore, mothers have inadvertently caused their infants to develop failure to thrive by attempting to adhere to the 6-month exclusive breastfeeding rule despite signs of persistent infant hunger,<sup>78</sup> a condition which increases risk of lower cognitive development and other long-term negative health outcomes.<sup>79,80,81</sup> Without a public health message that informs parents of the signs and symptoms of insufficient feeding during the first 6 months of life and the importance of seeking medical evaluation to address them, parents may overlook the signs in their infants and potentially cause harm. Therefore, the Healthy People 2030 objectives should reflect the current data and the standard of care that has been adopted by the AAP to appropriately assess an infant’s readiness for solid food between 4-6 months and make recommendations on a case-by-case basis.

As an important complementary objective, we recommend adding the new proposed objective:



## **FURTHER RATIONALE FOR NEW PROPOSED OBJECTIVE #1**

**Reduce the proportion of infants who require treatment and/or hospital admission for insufficient feeding-related hyperbilirubinemia, hypernatremia, dehydration, excessive weight loss, hypoglycemia and failure-to-thrive.**

The data regarding increasing rates of insufficient feeding complications and hospitalizations have serious implications on the expected rates of children with long-term academic difficulties and other developmental disabilities. All the complications of insufficient feeding including hyperbilirubinemia, hypernatremia, dehydration and hypoglycemia require costly hospitalizations, phototherapy and parenteral (IV) treatment and can result in irreversible newborn brain injury, long-term disability and rare deaths. All these conditions are largely preventable through improved monitoring, improved health professional and patient education on the signs and consequences of insufficient feeding, as well as timely and adequate supplementation with milk bank donor milk or formula when breastfeeding is insufficient. Such an important patient safety improvement program requires relatively low-cost interventions and have the potential to save millions of dollars in health care costs for short- and long-term morbidities associated with insufficient feeding complications. Prioritizing neuroprotective infant feeding strategies can have a long-term impact on the health and cognitive development of all infants, regardless of feeding method, ensuring an equitable opportunity for optimal growth and brain development after birth for the entire infant population.

## **RATIONALE FOR NEW PROPOSED OBJECTIVE #2**

**Increase the proportion of parents who have made the informed choice to partially- or exclusively-feed formula to provide safe and sufficient nutrition to their infants to prevent feeding complications (e.g. hyperbilirubinemia, hypernatremia, dehydration, excessive weight loss, hypoglycemia and failure-to-thrive) and optimize growth and brain development.**

Nationally, there is a lack of adequate educational information for new parents on the nutritional needs of infants in the first days following birth and the overall importance of sufficient feeding to healthy infant growth and brain development. Additionally, there is little awareness of harmful consequences of insufficient feeding-related complications. While there has been a greater national focus on the importance of breastfeeding, the needs of formula-fed infants and their mothers have largely been ignored in public health policy and guidelines. As a result of inaccurate and outdated infant feeding education regarding the nutritional needs of newborns in the first days after birth, even formula-fed infants are developing complications of insufficient feeding. In a study of newborns universally screened for hypernatremia, a complication exclusively caused by insufficient milk feeding, not only was it found that 36% of exclusively breastfed and mix-fed newborns developed hypernatremia, but even 6% of exclusively formula-fed infants did as well.<sup>35</sup> This may come from misguided beliefs that the term newborn stomach only holds 5-7 mL (data has shown it is approximately 20 mL).<sup>82</sup> Formula-fed infants may receive insufficient milk as a result of this teaching and develop dehydration, hypoglycemia and hypernatremia as well. Even those requiring medically-indicated formula supplementation commonly receive only 10 mL of supplemental milk, which has insufficient fluid and calories to sustain a newborn much less to correct the metabolic complications of insufficient feeding.<sup>83</sup> Formula-feeding parents also need support on how to properly prepare formula and properly feed infants to achieve optimal health and brain development. This includes appropriate education on healthy feeding habits, appropriate growth, and signs and symptoms of nutrition-related problems that require physician evaluation.



In addition, significant harm results from framing mothers who are unwilling or unable to breastfeed exclusively as mothers who are providing inferior or even harmful nutrition to their infants. Sadly, failure to achieve breastfeeding goals among motivated mothers (which occurs even with maximal support) commonly leads to maternal postpartum depression, which is harmful to both mom and baby.<sup>84,85,86</sup> The factors that lead to breastfeeding-related postpartum depression are commonly the very prescriptions given to mothers to increase breast milk production, namely a grueling regimen of round-the-clock nursing, supplementing and pumping. The public health messages and hospital informed-consent forms<sup>87</sup> that characterize formula as dangerous is contributing to an epidemic of infant feeding complications and hospitalizations as well maternal postpartum depression among mothers who are unable to breastfeed. The pressure to avoid supplementation among mothers who cannot produce sufficient colostrum or breast milk is resulting in mothers refusing medically-indicated supplementation even when their infant is becoming ill from insufficient feeding.<sup>9</sup> Given that brain injury from hypoglycemia,<sup>88</sup> hyperbilirubinemia<sup>89</sup> and hypernatremia<sup>90</sup> increase with every minute it remains uncorrected, delays in rescue feeding can result in devastating outcomes in previously healthy infants and result in completely preventable and costly hospitalizations. The poorer health and neurological outcomes of “formula-fed” infants may in fact be mediated by underrecognized injury to the brain and vital organs from feeding complications during exclusive breastfeeding attempts in the setting of delayed and failed lactogenesis II.

## **DATA COLLECTION**

Data can be obtained through national survey of mothers on their current feeding practice, their original feeding intention, rates of breastfeeding initiation and tracking of infants by need for phototherapy and/or parenteral treatment for hyperbilirubinemia, “feeding problems,” dehydration, hypernatremia, hypoglycemia or failure to thrive (i.e. feeding complications). There are several national surveys that can be modified or augmented in order to track a more comprehensive set of data on breastfeeding rates, practices, and associated outcomes. Data on breastfeeding at a national level is obtained at birth hospitals using the Pregnancy Risk Assessment Monitoring System (PRAMS), the National Health and Nutrition Examination Survey (NHANES), the Maternity Practices in Infant Nutrition and Care (mPINC) Survey, and the National Immunization Survey (NIS). For example, PRAMS is used to track maternal and infant adverse outcomes and would be an appropriate data collection tool to obtain additional information about maternal feeding choices which can be then be assessed against adverse outcome data. While PRAMS has not been revised in several years, there is precedent for supplementing the PRAMS questionnaire (e.g., Zika supplement). Data on the admissions for feeding complications is primarily collected by the AHRQ, and in particular the Kids' Inpatient Database (KID) through the Healthcare Cost and Utilization Project (HCUP), which is produced every three years. Data on neonatal deaths related to insufficient feeding complications and brain- and life-threatening complications from accidental bed-sharing while breastfeeding or doing skin-to-skin care in the immediate postnatal period, also known as Sudden Unexpected Postnatal Collapse, can be collected through neonatal death certificates. Infants who develop feeding complications listed above would be excluded from the Healthy People 2030 statistic.

Currently, under [Section 42 U.S.C. § 701](#), which authorizes the federal government to allot certain funds to states for the purposes of supporting state programs aimed at maternal, infant, and child health, states (as a condition of receiving funding) are required to track and submit reports to the federal government of certain maternal, infant, and child health data captured from across their states. Among the data required for submission by states in reports to the federal government under 42 U.S.C. § 706(a)(2), states must report the rate of neonatal deaths in their state along with other “information on such other indicators of maternal, infant, and child health care status as the Secretary may specify.” Based on this authority, the Secretary can utilize this existing reporting mechanism from the states to collect information on the rates





of feeding-related complications in infants 0 to 6 months across their states and could link the information collected to an objective of the Healthy People 2030 initiative to reduce incidence over time with increased educational programming for new parents on sufficient feeding needs and recognizing the signs and symptoms of insufficient feeding for contemplation of alternative sources of milk such as donor milk or formula. For example, the following feeding-related complications could be tracked for reporting under 42 U.S.C. § 706(a)(2): hyperbilirubinemia, hypernatremia, dehydration, excessive weight loss, hypoglycemia, failure-to-thrive, need for phototherapy, exchange transfusion, parental treatment, brain injuries, developmental disabilities and deaths caused by insufficient feeding complications and Sudden Unexpected Postnatal Collapse.

## **Conclusion**

Focus on reducing infant morbidity, hospitalization, long-term disability and cost-of-care is vital to improving maternal, infant and child health outcomes. Equally important is the goal of protecting mothers from psychologically harmful public health messages that suggest failure to adhere to the exclusive breastfeeding directive equals failure as a mother. If the goal is to provide all mothers who choose to breastfeed safe and optimal conditions to successfully achieve their goal and to equitably support and ensure infants are best-positioned to receive sufficient feeding support for optimal growth and brain development, the focus should be on *healthy, sufficient and sustained breastfeeding*, rather than absolute exclusive breastfeeding from birth to 6 months, which for an unacceptable number of dyads, can result in infant and maternal harm. Formula-feeding families also require comprehensive infant feeding support in order to achieve optimal health and developmental outcomes for their infants. The current model of exclusive breastfeeding promotion in hospitals currently has no data on safety and evidence has emerged regarding its harms. Comprehensive reforms in infant feeding education and management requires objective examination of the evidence by a multidisciplinary panel of experts without financial conflicts of interests on the benefits *and* the risks of the recommendations prescribed to support breastfeeding. New parents require updated education as to the potential harms of insufficient feeding of infants, which include but are not limited to:

- Risk of feeding complications and need for hospital treatment of hyperbilirubinemia, dehydration, hypernatremia, hypoglycemia and failure to thrive
- Brain injury and developmental disability from insufficient feeding complications
- Sudden Unexpected Postnatal Collapse and newborn drops/falls from maternal exhaustion caused by 24/7 rooming, unsupervised skin-to-skin care and breastfeeding; and
- Rare infant deaths from the above listed conditions

Moreover, as the cost of litigation and cost of care related to insufficient feeding complications is increasingly burdening an already over-burdened health care system, these hospital safety issues need to be addressed urgently.

In summary, for the reasons discussed above, we respectfully submit the following requests for updates to the final Healthy People 2030 Objectives:

**Revise the MICH-2030-15 Objective: “Increase the proportion of infants who are breastfed exclusively through 6 months” to the following –**



**Proposed Revision: Increase the proportion of infants who are primarily breastfed through 4-6 months who have received sufficient nutrition to ensure optimal growth and brain development and to prevent feeding complications (e.g. hyperbilirubinemia, hypernatremia, dehydration, excessive weight loss, hypoglycemia and failure-to-thrive).**

We also recommend adding the following two new objectives:

**New Proposed Objective #1: Reduce the proportion of infants who require treatment and/or extended or repeat hospital admission for insufficient feeding-related hyperbilirubinemia, hypernatremia, dehydration, excessive weight loss, hypoglycemia and failure-to-thrive.**

**New Proposed Objective #2: Increase the proportion of parents who have made the informed choice to partially- or exclusively-feed formula to provide safe and sufficient nutrition to their infants to prevent feeding complications (e.g. hyperbilirubinemia, hypernatremia, dehydration, excessive weight loss, hypoglycemia and failure-to-thrive) and optimize growth and brain development.**

Respectfully,

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