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Overall:

This complex and intensive study design might have benefited from a broader selection of states as sampled sites, but, in general, covers all issues satisfactorily. Many strengths are noted, however, weaker areas included the breastfeeding discussion in the introduction and one of the breastfeeding knowledge questions. Some of the findings were not in synch with other similar research (e.g., reasons for introducing formula), however, the overall findings were generally not unexpected for the short interval studied and for an intervention that comes rather late in the breastfeeding decision making process. Policy recommendations were reasonable; however, there are two more that should be considered (see below.)

Chapter 1 Introduction:

The Introduction provides a clear statement of purpose: evaluation of the impact of the regulatory changes on WIC package choices and the incidence, duration, and intensity of breastfeeding, and a succinct background.

The rest of the introduction is adequate, however, this is followed by a somewhat disappointing section on Breastfeeding Promotion, which relied heavily on AAP, and was somewhat sketchy, with a few throw away sentences on maternal difficulties with breastfeeding; it would have been appropriate to cite the work that AHRQ has done on the issue, including the clinical preventive health guidance and the Ip meta-analysis, or to consider the recommendations of other colleges, such as AAFP, or even APHA. Using only AAP is somewhat problematic in that there is some internal conflict in that organization concerning this recommendation. Further there is a slightly misleading discussion on the new 2020 Health People objectives that, in fact, have changed the target levels for all objectives. However, this is not a major part of the evaluation, and could be easily be cleaned up and corrected. Also, the example at the top of page 5, suggesting that there is a positive association between economic hardship and decreased likelihood of breastfeeding, is an odd choice, and I am sure that the authors could select a better example. Also, while the authors note somewhere that study measure breastmilk feeding intensity, not breastfeeding at the breast, it would have been appropriate to discuss this difference and its possible health ramifications.

As the introduction sets the stage for the research design, it is of note that the extreme variance between state programs, and even within states, is highlighted, but then not fully taken into

account in the sampling approach. The decision to set intensity of feeding by 5 groupings from exclusive breastmilk feeding to exclusive formula feeding is reasonable, if not entirely physiological, and follows more or less the definitional schema developed for the Innocenti meeting back in 1989.

Chapter Two: Data and Methodology.

Sampling of less than 1% of LWAs, with heavy state groupings (3 CA, 2GA, 3 FL, 2 TX), with replacements, seems less than optimal, especially with the earlier recognition that there is so much variance among and within states. An additional concern is that 3 are in California, where there has been significantly more peer counseling in the past, such that the new package might not have as much impact as in other states. (In fact, change was observed in this region, as recorded in later chapters. This, perhaps indicates that the good support readied the population to seize and benefit from the new package). However, they seem to have followed the schema set out for them by FNS. This is the only part of the design that was of concern; the remainder seems quite appropriate. The use of four data collection methods, weighting, etc. seems appropriate. They address the issue of truncated data as well.

Just a note: The term “breastmilk” as one word is not universally accepted, and it is not clear why it is chosen. More effort might have been made to use other terms, such as human milk, and to contrast more assiduously with breastfeeding. However, the authors did follow the general terminology used by the Agency, and hence it is appropriate for this report.

The breastfeeding knowledge questions were not, frankly, all well written. The word “baby” is not well defined, and in fact, at least one of the questions was age dependent, which could have been confusing. (‘Breastfeeding provides complete nourishment’ is only true for the first 6 months) Also, some of the questions in the survey refer to solids, a term which is not well understood to include mush.

The big picture issue, however, seem to be well handled.

Chapter 3: Description of the Sample

As noted above, following the commentary on the wide differences in WIC sites, the selected sites would seem to be too few (17) and, especially, too few states (10) included. It is difficult to see how this selection is representative of the wide variety of approaches used and variance in services already in place in WIC offices across the US. However, the data presented do show a good variety of client composition across the sites, and comparable populations before and after.

It is of interest that the hospital practices were not optimal, and it might be assumed that the prenatal support was also suboptimal. Prenatal and hospital practices have significant impacts on breastfeeding intention, hence initiation, and success. It is not clear to me how, or if, this variable was controlled in the analysis.

Chapter 4: Implementation of the Interim Rule

Implementation was very difficult for WIC programs, and it is not surprising that many were optimistic about impact. This chapter provides a nice description of the effort.

Chapter 5: Food Packages and Breastfeeding

This chapter seems to indicate the program functionally did as planned and created different choices successfully. It also seems to indicate little impact on initiation – which is not really surprising as the normative entry into the WIC program is postnatal, and since research has shown that prenatal and the hospital practices (not controlled by WIC package availability) profoundly impact initiation. Also, the movement away from the partial breastfeeding package is not surprising, given that those who are breastfeeding would benefit more from the more valuable exclusive package and those who are not intending much breastfeeding would prefer the increased amount of formula in the formula package.

Chapter Six: Breastfeeding Duration and Intensity

This chapter is of great interest in that these are the parameters (rather than initiation) where one might expect the package availability and choice to have greater impact. However, other research shows that hospital support would still be relevant, as it has been shown to be associated with these outcomes as well as with initiation.

The personal factors reported are somewhat different from that reported in other studies, and this may deserve additional exploration. Also, there is little logic that the reasons for starting formula use should have shifted between pre and post. (I don't know quite what to make of these findings, actually)

The data on duration and intensity are nicely presented. The changes, or lack of changes, may simply reflect other influence on the variable under study. For example, I believe that there has been more rapid increase overall in terms of breastfeeding support in the West, especially in CA. The significant shift in the Midwest, however, seems to be in favor of mostly formula feeding. It is not clear why this might have occurred.

Given that WIC is only one of the many social and structural variables that impact breastfeeding duration and intensity, the findings that there would appear to be little impact over the short time period is not surprising.

Chapter 7:

This chapter raises several of the points raised above. The four policy implications are sound as outcomes following from the discussion and findings, however, I would add two more: 1) strive to increase WIC participation during pregnancy, rather than postpartum, to have greater impact on initiation, and 2) somehow enable WIC to encourage improved hospital practices.

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Chapter 1

- 1* Purpose of the study---Clear and concise
- 1* WIC background---Historically correct, well referenced with relevant points included
- 1* Breastfeeding promotion: recommendations and objectives---Clear, complete, up to date (Healthy People 2020) and supported by relevant explanations
- 1* Breastfeeding promotion: WIC and breastfeeding (BF) Since WIC offers formula, it is critical that this section establishes clarity regarding how WIC promotes BF. WIC's multiple methods of support for BF is established by Code and the Interim Rule. However rates continue to lag using traditional methods of measure. Could it be that we are not able to account for the "observable and unobservable" differences between the WIC/non-WIC populations? The case set forth is plausible and clearly described
- 1* The new Food Package---The case is made for producing a WIC food package that is BF promotional
- 1* Developing the food package revision---Based on the 2005 IOM report WIC provided BF moms with more food while providing women who "partially BF" received some formula to prevent them from not trying BF if they wanted to.

This section is clear, concise and well documented.

- 2* WIC food packages under the interim rule---The evidence-based changes had the overall goal of improving nutrition while promoting BF. In light of the obesity epidemic it is not clear why an exclusively BF infant would need so much meat (77.5 ounces). This needs to be referenced and explained. Reader should be referred to exhibit 1.1 here.
- 2* State implementation of WIC food packages---While there are seven (7) federal food packages there are thousands of state variants with considerable local autonomy. If it's possible, greater clarity is needed in this section. Maybe a chart with month and what WIC provides, as noted in Exhibit 1.1 should be referenced here as well.

1* Terminology for WIC package options---This much needed section could not come at a better time. Confusion was mounting. Recognition that measuring BF outcomes needed to be uncoupled from WIC formula was important.

1* Conceptual framework Clear and very helpful--- The model makes clear that the goal is to measure the food package impact on both BF as well as food package choices. IOM consideration of the economic value of the WIC package was important to WIC client realities.

1.5* research questions and hypotheses---Domain 4 is noted twice. The section is clear and concise. Note: Following review of the data collection instruments, it is not clear how the 'street economic value' of formula is controlled for. A question of 'would you BF if there was no WIC program' might get at this.

Chapter 2

1* Data and methodology – Introduction clear and concise

1* Selection of local WIC agencies---A stratified sample of 1,885 LWAs with probability according to size was appropriately used given the need to include certain sample characteristics. This favors large programs with at least 125 infants up to 2 months of age.

1* Four data collection methods---Interview of WIC staff and participants as well as previously collected data on WIC characteristics and food package utilization was appropriate and well described.

1* WC Participant Survey---Sampling was proportional to BF initiation and ranged from 56 – 134/selected WIC site. Pre implementation data were collected 1-2 months before implementation and post data were collected 4-6 months after implementation of the interim rule. Though the sampling methods were adequate and clearly described I wonder whether 4-6 months was enough time for the interim rule to be fully understood and implemented?

2* WIC Participant Administrative data---The large file explanation was not clear in term of what it would be used for. Please expand the description. The remaining file descriptions were clear.

Sampling weights---Not qualified to assess. Edit – selection of LWAs

1* Analytic measures construction---The description of measure construction was clear describing the data source, procedures for constructing missing values as well as exhibits showing the distribution of questions that were later used to develop scales.

1* logistic regression for binary outcomes---This section was well done with examples from SNAP and other previous studies used to further clarify the descriptions. The review of how odds ratios are interpreted and why they are used instead of probabilities was a good inclusion.

1* Discrete-time hazard analysis of event timing--- Excellent explanation of hazard and survival analysis using easy to understand examples.

1.5* Organization of the analysis---I suggest that section 2.7 begin by stating what happened in chapters 3 and 4 such as – After a description of the sample in chapter 3 and a description of implementation of the interim rule in chapter 4,

Otherwise the section gives a good description of what will be accomplished in chapters 5 and 6.

Chapter 3. Description of the sample

1* Description of the sample---Good overview of what the chapter will cover. To provide context for this study the characteristics of the selected 17 local LWAs and mothers in the WIC Program will be described using the Administrative Data File.

1* Characteristics of LWAs---Clarity in this section was enhanced by the exhibits.

There is a lot of variability regarding the number and characteristics of WIC clients that may influence LWA operations as well as implementation of the Interim Rule. It is my understanding that the sample weights discussed in chapter 2 will help control for this variability.

Examples :

Agency size: range from 598 – 9,957 (exhibit 3.1)

Number of clinics: range from 4 – 19 (exhibit 3.2)

Race/ethnicity: 20 different ethnic groups were named.(exhibit 3.3)

Poverty rate: 70% have HH income below the Federal Poverty

Family size: 55% had families with 3-4 members.

OTHER PROGRAM PARTICIPATION: This included TANF, SNAP and Medicaid.

BF initiation ranged from 89% - 31%.

This section was clear.

1* Breastfeeding promotion and support---The history of BF in the LWA is an important factor that will be taken into consideration in this study. The amount of variability in LWA BF is striking. LWA Staff was interviewed regarding methods of BF support and whether they changed from the pre to post implementation of the Interim Rule.

Methods of BF support used by the LWAs:

Information dissemination --- even though all LWA staff was trained about BF, it varied from the highest level (IBCLC) to CLC (Certified Lactation Counselor) to CLE (Certified Lactation Educator).

Continuing BF education varied from monthly to every two – three years.

Peer Counseling: 16/17 LWAs provided peer counseling. The range in number of BF Peer Counselor sites 1– 10.

Measures of the important factors were included in this section and set forth in detail.

1* Representativeness of the sample---While I am not qualified to assess the correctness of the methods and technical aspects of this section, it is readable by a non statistician and it appears to present a sample for the study that seeks to represent the total population of WIC participants.

Chapter 4. Implementation of the Interim Rule

1* implementation of the Interim Rule---it is acknowledged that the Interim Rule is complex and the logic/justification for when it would be reasonable to assess its impact should be clearly stated in this section. In addition it is an asset that a mixed methods approach (both quantitative and qualitative data collection) is used to provide increased understanding and clarity of the findings. The purpose and content of this section is clearly outlined.

2* Decision making process for implementing the Interim Rule---Missing is a discussion regarding the decision of when to conduct the post implementation assessment of impact of the Interim Rule. Why was three months chosen as the time for staff interviews and 4-6 months chosen as the time for the other data collection? This request for justification regarding the decision of when to conduct the post implementation assessment of impact of the Interim Rule is further substantiated by the “temporary options” (page 48) that were available during the transition.

2* Information and support to local WIC staff---A multiplicity of appropriate materials was produced by the 10 State Agencies reporting and staff reported using the materials. The fact that some staff indicated that the materials were used as a reference during counseling was good but it may indicate lack of understanding and clarity of the content of the Interim Rule.

Missing is an assessment of the degree to which there was understanding and the ability to correctly implement the Interim Rule. The “interactive shopping class” was the only application oriented learning experience noted. This diversity of training methods and recipients leaves a lot of room for considerable variability in uptake of the information content and implementation.

2* Information and support to WIC participants---I believe the staff was correct to express apprehension regarding the ability to communicate this complex Interim Rule information to

WIC Participants and the need for a lot of advance notice. Even though there was variability in methods used (phases versus other), it appears that the process was started with adequate time for preparation and adequate implementation. It might be good if we had a table setting forth some of this timing information so that it becomes clearer who did what when and how reasonable is it to expect that most people knew enough to implement with fidelity, increasing the credibility of the outcome measure.

2* How WIC staff explained the changes---Most information was communicated to clients during certification but some was done during nutrition education classes, mailing and telephone. The report of using the benefits of nutrition and BF may have helped clients understand. The influence of continuing WIC clients versus new clients was acknowledged though the food package information given was reported to be the same with tailoring of the package to meet the needs of the clients. It appears that in many cases the WIC staff made the decision of which package to give unless challenged by the client. Therefore the link between the Interim Rule and BF decisions may be difficult to clearly assess.

1* Information to the community---The complexity of “need to educate” in the community is also diverse and I would imagine that vendors not knowing about the changes could lead to very embarrassing situations at the point of purchase. This is especially troubling since less than half of the sample publicized to vendors. It is very important that this aspect of the implementation was assessed. The array of issues considered is very comprehensive though how it will all be interpreted is a real challenge.

1* Process for changing from original Post Partum Food Package---To its credit, this study acknowledges real world WIC issues such as the challenges associated with changing food packages. The barrier of needing to speak with a BF “educator” before changing the food package might encourage opting for more formula up front thus clouding the true BF status. WIC staff time to deal with these complex issues is another very important acknowledged consideration.

1* Positive aspects and challenges associated with implementation of the Interim Rule---Early planning and training seems to have facilitated reports of a smooth transition even in the face of the complexity of the Interim Rule. It was reported that some aspects of the Interim Rule had already been implemented as a BF promotion approach thus making the transition easier and more enthusiastically supported. Giving more (food) was more universally accepted than taking away (formula). As always, the exhibits were very helpful.

1* Challenges faced by state WIC offices---Since no additional money was available to implement the Interim Rule, staff had to do “double duty” to get it done with some reported de-emphasis on promoting BF during this time period. Computer system updates were more of a challenge. It was acknowledged that educating WIC clients and partners was a problem,

especially the medical community. Getting medical permission to give soy products was an example. Availability of food for the new package at the point of purchase was another problem.

The report provides details for all of this.

1* Challenges faced by LWAs during implementation of Interim Rule---Seven LWAs reported that things went well. There was clarity in presenting the problems related to system updates, availability of foods, staff knowledge, class scheduling, site specific concerns, time appointments and educating partners, especially the health care community experienced by the other 10 LWAs. Given the complexity of the Interim Rule and the fact that only seven LWAs reported that things went well, it is interesting that the overall assessment at the local level as positive.

1* Agency staff insight into participant experiences and outcomes---The fruits and vegetables, whole grains, baby foods as well as the culturally specific foods seem to overshadow many barriers and challenges associated with the Interim Rule implementation. This was a good thing. As expected, low fat milk and decreased quantity of formula was a concern among almost every agency reporting. The exhibits as always are excellent. Given all the issues with implementation and the fact that most of the decisions about the food packages were made by WIC staff, it is not surprising that the perception is that the link between the food package and BF decision making was limited.

1* LWAs assessment of subsequent package decisions---The usual reasons were given for wanting more formula. Great that BF assistance is perceived as positive and helpful.

This study shows the added value of using a mixed methods approach when you have a very complex environment in which you are not only reporting what happened but also attempting to better understand why it happened.

Chapter five: Food packages and BF initiation

1* WIC participants in sampled LWAs---No major changes were found in WIC participant characteristics (race distribution, federal program participation, income and household size, rate and other characteristics of WIC enrollment,), thus removing from consideration an important factor that could influence the outcome of interest.

2* WIC food package choice---Given the amount of reported “staff choice of food package”, it may be more appropriate to use the terminology in Exhibit 5.4 “food package issued” as a more accurate portrayal of what happened. It appears that the Interim Rule was influential in increasing the BF package.

1* Pre and Post test of infant formula amounts---The Exhibits along with the explanatory notes greatly add to the accessibility of this section. It appears that the Interim Rule was influential in increasing the “no formula category as intended. As noted earlier, statistical significance may be an artifact of the large sample size.

2* Multivariate analysis of WIC food packages---As noted earlier, given the amount of reported “staff choice of food package”, it may be more appropriate to use the terminology in Exhibit 5.10 “food package issued” as a more accurate portrayal of what happened. Hispanic mothers have an important influence on WIC BF as their proportion of the WIC population has increased. Cautionary notes regarding interpretation of the data are important and appreciated (page 82).

It was insightful that the analysis was done by the stratification categories that were used in the selection of the 17 LWAs. The Exhibit and explanation for race and region were clear. I was not able to follow the third stratification based on “fraction of the caseload receiving the partial BF package.” Not clear what the message or meaning is.

1* Transition dynamics---Reference to the conceptual model and logic for the analysis in this section are clear and much needed. The expectation for change of “package” is tempered by the focus group discussion regarding the difficulty of frequently changing “packages.” This analysis turned out to be very helpful in explaining outcomes noted in earlier analyses. The multiple data sources and the insightful use of analytical techniques was helpful to further highlight details of what was happening at multiple levels. An important finding is the rapid transition from BF to partial or formula with increased amounts of formula. The amount of formula received versus the BF status may be the driver here. The graphical depiction of the discrete -time hazard models was helpful.

- BF initiation---It is interesting that BF initiation did not change significantly though there were demonstrable changes in the food packages and formula. Several insightful explanations were given for this conundrum.

- Multivariate analysis of BF initiation---There remained no change in BF initiation rates even when controlling for confounders.

Chapter six: Breastfeeding Duration and Intensity

2* Introduction---The terminology survey interview is confusing, especially after examining the survey instrument. The LWA instrument is what I am accustomed to seeing when conducting an interview – many open ended questions. By contrast the WIC participant survey with fixed responses is what I associate with the term survey. Calling it a survey interview seems to imply many more degrees in the response than is indicated on the instrument. Therefore I would recommend consistent use of the terminology in 6.1 – WIC Participant Survey.

1* Description of the WIC participant survey sample---No pre/post differences in WIC participants characteristics thus allowing any findings to be more reasonably attributable to the intervention of the Interim Rule.

2* Perceptions of WIC participants I am concerned that the information in Exhibit 6.2 may be misleading given the explanatory remarks below and set forth earlier in the report. The level of lack of understanding regarding details of the Interim Rule for food or formula package by WIC Participants was very evident. Therefore I would recommend that some of those findings be in tabular form since this is so much easier to grasp.

2* Factors affecting decision to initiate---WIC classes seem to be a clear winner and a noted opportunity to educate about the food package. It is unfortunate that hospitals persist in giving formula at discharge. Past experience and BF friends and family are important determinants of the BF decision. I recommend that the “WIC advice” scale information be put into an exhibit for greater clarity.

1* Common reasons WIC participants increase use of formula---WIC participants seem rather fixed in their opinions about reasons to start formula. It is refreshing to see that ‘return to work or school’ has less impact on decision making and that their work sites were perceived to BF friendly.

1 BF duration---The multiple methods of analysis used were important to provide information and insight that may have been overlooked. The difference in duration noted with the discrete-time hazard model versus the traditional multiple regression models. The graphic depiction of the findings is excellent. The race and region differences at the bivariate level of analysis are interesting.

- Breastfeeding intensity While no overall significant differences were found in BF intensity the decrease in full and partial BF packages and increase in formula package is important to note.

Chapter seven: Discussion and Conclusion

- Introduction---The overview was excellent.

1* Main results in five domains---I like the language in 7.1.2 indicating the ‘assigned food package’. This section was clear and thorough.

1* Fewer participants receiving the partial BF package---It would seem much more reasonable to categorize a person as ‘partial BF’ if they received some formula in the birth month rather than jump all the way to full formula. This may have clouded the results of partial BF.

The Interim Rule is complex and this was noted by

WIC staff, therefore the results may have been influenced by lack of clarity among WIC participants.

1* Absence in change in Bf practices---Even though conduct of the study from conceptualization to analysis and interpretation was excellent, the short time interval following implementation of the Interim Rule is worth serious consideration. More time may have allowed WIC staff, participants and systems to be more ready so that the target outcomes could be more accurately assessed.

Policy implications---While this section provides credible explanations for the findings, the economic realities of most WIC participants will make it almost impossible for them to refuse formula even in the face of full BF. The impact of this reality may be difficult if not impossible to measure.

***Quality Rating**

- 1 . Excellent – all points satisfactorily met
- 2 . Good – some important points not met and comments offered
- 3 . Poor – major import points not met and comments offered

**Dr. Julie Reeder
Research Analyst
Oregon Department of Human Services WIC Program**

Thank you for the opportunity to review this summary of an interesting and comprehensive investigation of the impact of the birth month food packages changes on breastfeeding outcomes and formula issuance. As both a researcher and a ‘program person’ I reviewed the document through both of these lenses. Due to the length of the document and the number of comments, I have organized my review to try to make locating the corresponding text as easy as possible.

Chapter One

Chapter	Page	Section	Paragraph	Sentence
1	3	1.3.2	First	2nd

Comment: I found this sentence somewhat awkward and imbalanced. If we’re speculating about the influence of free formula vs. education, it seems as though both should say ‘could’ encourage. Even with ‘could’ not being present in the part about education, the sentence seems to unnecessarily emphasize the free formula part, which may bias readers early in the process.

Chapter	Page	Section	Paragraph	Sentence
1	7	1.4.2	2 nd	all

Comment: I understand that until the implementation of the new food packages that the *regulations* specified that infants were given juice and cereal at 4 months. I would point out that the regulations may not reflect what was happening in practice in many states. Oregon, for example, put in a waiver about 25 years ago asking for an exception to delay introduction of juice and cereal until six months. My understanding from staff who worked in California is that they implemented this same change in the early 1990's. I point this out because in this section and again on the bottom of page nine, the report portrays the idea that prior to the changes any infant enrolled in WIC anywhere in the nation received juice and cereal at 4 months. This also implies that the 'new' rules were a substantial change in practice for every state, which again I would say is not an accurate portrayal.

Comment: To the best of my knowledge, the AAP is actually split in its statements about when to start solid foods. My understanding is that while the breastfeeding section of AAP says six months before introduction of solids, the AAP in general still says 4 to 6 months. You can verify this at AAP's website for parents, <http://www.healthychildren.org/english/ages-stages/baby/feeding-nutrition/pages/Switching-To-Solid-Foods.aspx>. The opening sentence states "Most babies are ready to eat solid foods at 4 to 6 months of age." However, I acknowledge that it may not be appropriate to point out this split opinion in the report.

Comment: I wonder if initially it might be good to clarify that fruit juice has been replaced by "commercially prepared infant fruits and vegetables, or jarred infant foods." Obviously the term jarred has limitations now that much of the baby food sold comes in plastic two-packs, but I felt that it might be helpful to make the clear that you're not referring to baby carrots or some other type of non-processed produce.

Chapter	Page	Section	Paragraph	Sentence
1	8	1.4.2	1st	All of #2

Comment: I wonder if it might be helpful when describing the ounces of jarred infant food to also put it in terms of 'approximately equivalent to X number of 3 oz. jars'. I think this will help readers get a better mental picture of the quantity of baby food being described.

Chapter	Page	Section	Paragraph	Sentence
1	9	1.4.3	1st	Last sentence

Comment: I find this more speculative statement in the middle of what is strictly descriptive information somewhat out of place.

Chapter	Page	Section	Paragraph	Sentence
1	9	1.4.3	last	Last sentence

Comment: Please refer to my earlier comments about earlier state waivers to delay introduction of juice and cereal until 6 months of age.

Chapter	Page	Section	Paragraph	Sentence
1	11	1.5	last	first

Comment: I think rather than saying ‘it is useful to view a mother’s decision’ it might be better to say one way of viewing a mother’s decision, because this certainly is not the only viewpoint.

Chapter	Page	Section	Paragraph	Sentence
1	11	1.5	last	Foot note

Comment: I would prefer that this alternative framework be placed into the text and not merely cited as a footnote. It is just a probable as that promoted by Racine and deserves equal footing.

Chapter	Page	Section	Paragraph	Sentence
1	12	1.5	First full	last

Comment: I did not see provision of breast pumps listed as a way WIC may influence breastfeeding.

Chapter	Page	Section	Paragraph	Sentence
1	14	1.7	Exb 1.4	Last scenario

Comment: I think that one alternative that should be mentioned particularly for those who plan to partially breastfeed in the first month, is that they take the full breastfeeding package from WIC during the first month, but partially supplement with formula obtained from the hospital, purchased with generous manufacturers’ coupons that arrive in the mail, or coupons obtained at check-out when purchasing baby related items. They can also pick up one or two cans on their own at the regular store. All of the listed scenarios assume that WIC is the only source for formula which is not the case.

Chapter Two

Chapter	Page	Section	Paragraph	Sentence
2	16	2.1	first	First full

Comment: I felt less comfortable with combining predominantly black with diverse, as I wondered how that might impact interpretation of the data. Could a bit more detail be provided about the impact of this decision?

Chapter	Page	Section	Paragraph	Sentence
2	19	2.3.1	all	

Comment: I certainly do not consider myself an expert in weighting, but from what I do know I felt as though a thorough effort was put in to determining appropriate weighting schemes. For the final report, the weighting information may be too detailed for the typical reader and might be more appropriate as an appendix piece for those who would like to review it.

Chapter	Page	Section	Paragraph	Sentence
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2 25 2.4.2 2nd last

Comment: I may be confused, but the sentence suggests that there were only 3 categories of education, with the lowest being some college or a 2-year degree? Do we not want to capture those who are high school students or have a High School diploma (or less) as their highest degree? I see on the actual survey you have more categories.

Chapter Page Section Paragraph Sentence
2 25 2.4.2 Exb 2.2 2nd bar

Comment: I understand that these questions were designed to assess breastfeeding knowledge. I am wondering why “babies should eat as many types of foods as possible” is listed as absolutely false. One of the selling points for breastfeeding is that your baby gets introduced to many different flavors through your breast milk. Once its time for introduction of solids, we would certainly encourage mothers to give a wide variety of foods, as long as they are developmentally appropriate. So I am unclear what this is trying to measure..

Chapter Page Section Paragraph Sentence
2 26 2.4.2 2nd & 3rd

Comment: After double checking the wording of the actual survey question, I felt as though what was written in the text takes a bit of liberty in its interpretation. The actual survey question asks “in general how comfortable do you feel about..”, and then says “A woman” breastfeeding in the presence of X group. In the text it implies that this is how comfortable the respondent would be breastfeeding in front of the group, and I’m not sure we can make this leap.

Chapter Page Section Paragraph Sentence
2 27 2.5 3rd & 4th

Comment: I appreciated the inclusion of a comprehensive discussion of odds ratios and their interpretation. This is an area of confusion for many.

Chapter Three

Chapter Page Section Paragraph Sentence
3 33 3.1.3 Last

Comment: I am wondering whether the deep poverty figures cited for the Providence RI site reflects true economic status, or has occurred because staff qualify people through adjunctive eligibility and then do not routinely ask for our record earned income. Were there are lot of zero incomes from this site?

Chapter Page Section Paragraph Sentence
3 34 3.1.3 First Last sentence

Comment: I was confused about what this sentence said. I thought it was the other way around. Please review this sentence.

Chapter	Page	Section	Paragraph	Sentence
3	34	3.1.4	second	first sentence

Comment: When you say previous experience with children you mean...? Parity? Number of children in household? Being an aunt? Lots of babysitting?

Chapter	Page	Section	Paragraph	Sentence
3	35	3.1.5	Last	Last sentence

Comment: Do we know that lower participation rates may be related to perceived stigma or is that mainly speculation. I think it might be good to revise the following sentence as well.

Chapter	Page	Section	Paragraph	Sentence
3	36 & 37	3.1.5		

Comment: On these pages I would like to voice general concern about the data from Metro East. I don't suspect this is driven by the failure of participants to accurately report participation status. I think there is a break down somewhere in the clinic's data collection procedures and it worries me how good any of the data is from that site.

Chapter	Page	Section	Paragraph	Sentence
3	38	3.2	last	last

Comment: May want to specifically mention provision of breast pumps as well.

Chapter	Page	Section	Paragraph	Sentence
3	39	3.2	2nd	Last sentence

Comment: You mention that fewer agencies provide information about breastfeeding during all three trimesters. If I'm not mistaken national WIC data shows that <40% of mothers enroll in WIC during their first trimester, making provision of information in all three trimesters difficult. It might be nice to add a little more context to the all three trimesters finding.

Chapter	Page	Section	Paragraph	Sentence
3	39	3.2	4 th	6th

Comment: May want to clarify by "update" training.

Chapter	Page	Section	Paragraph	Sentence
3	41	3.2	Exb 3.10	

Comment: I was just wondering how accurately WIC staff could answer some of these questions about what area hospitals are doing? They will know somewhat from what they hear from participants, but I don't know how well staff would really know if the hospital had provided lactation management training to their staff in the last 3 years? What training? What staff? It might be helpful to understand a bit more about rationale for asking WIC staff to speculate on this and then limit how far we take what is stated.

Chapter Four

Chapter	Page	Section	Paragraph	Sentence
4	59	4.7.2	First	last

Comment: When you refer to trying to ensure stores carry the approved food in approved sizes, are you mainly referring to issues with the 16 oz loaf of whole wheat bread? Or a broader range of items?

Chapter	Page	Section	Paragraph	Sentence
4	61	4.8.1	last	fifth

Comment: Did staff actually say participants appreciated the more “culturally sensitive” foods, and if so which ones in particular did they cite?

Chapter	Page	Section	Paragraph	Sentence
4	59	4.8.1	First	2 nd from last

Comment: Bulgar is actually spelled **bulgur**.

Chapter	Page	Section	Paragraph	Sentence
4	66	4.8.3	Exb 4.10	

Comment: You might note that when you were asking staff what they believe makes participants stop breastfeeding, they likely thought of women over a longer timeline, which may be why back to work is the top issue for staff. Your interviews with participants were at about 5 weeks postpartum, so it may not be entirely fair to say staff are off-base here because they are thinking about the population of women over time vs. the interview sample who were in their first month and not mostly back to work. That being said, I agree 100% that back-to-work is not really the deciding issue.

Chapter Five

Chapter	Page	Section	Paragraph	Sentence
5	68	5.1	3rd	2 nd from last

Comment: You state because the WIC office does not always have the need to confirm SNAP... I don't know if you're aware of the fact that in states that use an EBT card for their SNAP benefits, that the EBT card cannot act as proof of adjunctive eligibility. There is a USDA memorandum on this issued several years ago. I was also unclear about what this piece was communicating.

Chapter	Page	Section	Paragraph	Sentence
5	75	5.2.1	footnote	

Comment: I think the footnote deserves to be part of the regular text as it gives important context.

Chapter	Page	Section	Paragraph	Sentence
5	81	5.2.3	last	3 rd from last

Comment: There weren't a lot of surprises for me on the basic food package information pre and post. I did think it was interesting that Hispanic mothers jumped the most in receiving the full breastfeeding package. Is there any more information that can be shared about what occurred with this group?

Chapter	Page	Section	Paragraph	Sentence
5	84	5.2.3	First	Last sentence

Comment: Please see my earlier comment about whether they were commenting about their comfort with 'a woman' breastfeeding in that situation or themselves.

Chapter	Page	Section	Paragraph	Sentence
5	86	5.2.3	last	all

Comment: I was a little bit confused about the content of this paragraph in general. Maybe there is a way to reword it to make the key points more clear?

Chapter	Page	Section	Paragraph	Sentence
5	92	5.2.4	first	2 nd to last

Comment: You suggest that there is a larger group of participants with a comparatively low long-term propensity for breastfeeding. I might put forth that although these dyads were categorically full breastfeeding in terms of their WIC package, a good percentage were likely partially formula feeding. As mentioned before, WIC is not the only source for formula.

Chapter	Page	Section	Paragraph	Sentence
5	95	5.3.2	Last	2 nd to last

Comment: I would make a general comment about the finding of a smaller percentage of participants receiving the partial formula package during the birth month. Of course this the case because I believe two of the States where study sites were located completely disallowed giving one can in the first month. Most of the others highly discouraged staff from issuing the one can, essentially taking the partial breastfeeding option off the table. I'm actually surprised at how high the partial package rate was after implementation.

Chapter Six

Chapter	Page	Section	Paragraph	Sentence
6	98	6.2.1	First full	first

Comment: I'm not sure that I agree with this sentence at face value. I think that mothers think about the amount of formula they perceive their baby needs first and foremost, and not about the

total contents of the opposing packages.

Chapter	Page	Section	Paragraph	Sentence
6	99	6.2.2	2 nd	1 st

Comment: The fact that 80% of mothers reported receiving formula when they left the hospital is an important fact that I don't see emphasized again in the discussion or policy piece. Refer back to my early comments about recipients of the full breastfeeding package in the first month moving to full formula more quickly.

Chapter	Page	Section	Paragraph	Sentence
6	100	6.2.2	First	

Comment: I went back and reviewed section 2.4.2, about construction of the 5-point breastfeeding knowledge scale. Unless I missed it, I don't see any information about the original sources for each of the items. As I mentioned earlier (chapter 2 comments), I'm not sure that I agree with the answer for one of the BF knowledge items, and I'm curious why those particular indicators were chosen and what kind of testing they've undergone.

Chapter	Page	Section	Paragraph	Sentence
6	99-100	6.2.2	Last	

Comment: While reading through the section on problems with breastfeeding, I thought of two clarify points that might make a casual reader less likely to misinterpret what is said. One, it may be important to remind readers that the interviews are done about 5 weeks postpartum, so the results are skewed towards issues that only encompass the first month. Second, just because they identified it as a problem doesn't mean it was the ultimate reason for introducing formula. Third, reviewing the actual questions again, the way the two-part question is set up sort of leads women into say "latch" The question asks, did you have any problems when you FIRST tried to breastfeed this baby. In my experience the emphasis in the first feed is always latch, and so I think moms recall this regardless of how big a problem it really was. I'm also not sure whether you're using survey questions 13 and 13a as your data source or question 24?

Chapter	Page	Section	Paragraph	Sentence
6	112	6.4.1	Last	2 nd to last

Comment: There's a small typo, should be feeding instead of feeling.

Chapter Seven

Chapter	Page	Section	Paragraph	Sentence
7	124-125	7.2	Last	

Comment: I feel somewhat uncomfortable with the conclusion that women responded to the

partial breastfeeding package becoming less attractive. I'm not clear that women were really offered the one-can option, as 2 states disallowed this and others strongly discouraged its use. I feel like it's a big leap to say that package choices responded to changing incentives after implementation.

Chapter	Page	Section	Paragraph	Sentence
7	125	7.3	Last	first

Comment: I feel this first sentence is a key point and could be discussed in greater detail in the policy section.

Chapter	Page	Section	Paragraph	Sentence
7	124-125	7.2	Last	

Comment: I was surprised by the short length of the policy implication section. I think with all the data collected there are quite a few areas in which recommendations could be made. I was more surprised to see the main focus of policy implications still centering on retail value of the food package. The participant interviews made it clear that worries about weight gain or perceived inadequate milk supply were the main reasons for introducing formula. If this is the case, how would making a steeper gradient in the food packages change this? I would appreciate more discussion about changes within WIC and the larger environment that need to take place in order for more mothers to exclusively breastfeed for six months and beyond.

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1. The process evaluation qualitative data derived from the interviews with local WIC agency staff before/after implementation is quite relevant and interesting. Yet, there is practically no methodological information provided in chapter 2. Key questions are:
 - How were WIC staff participating in interviews selected?
 - Were they the same individuals before and after?
 - How many individuals conducted the interviews?
 - How were interviewer(s) trained?
 - Did they use a structured guide when conducting interviews?
 - Were interviews recorded and then transcribed?
 - How were the themes being presented selected?
2. There is no information on sample size estimations
 - Why only 16 LWAs were included? What are the implications of having 3 times more strata (N=48) than actual sites (p. 16, 2nd paragraph)? Isn't this sampling framework approach quite unusual?

- How was sample size estimated for survey data? Clearly there is not enough statistical power for many of the outcomes [see for example “non-significant” difference in spite of twofold pre/post difference for ‘too painful/uncomfortable’ in exhibit 6.4, p. 101; also note how authors have to struggle with the poor statistical power issue (p. 82, 2nd paragraph; p. 124, 1st paragraph)].
3. Authors need to reconsider whether it is a good idea to sometimes present results for 17 agencies (e.g., p. 43, p.47) when at the end of the day only 16 participated in the full study (p. 19, 2nd paragraph). There are even instances when it is unclear if the agencies for which results are reported include or exclude the agency that did not participate in study (p. 51, 2nd paragraph; Exhibit 4.2).
 4. Why is WIC administrative data sometimes drawn from 2006 (e.g., p. 17, 4th paragraph; p. 86) and most often from 2008 data? Ideally all data should be 2008. Right?
 5. Validity of WIC participants’ self-reported government program participation data is strongly questioned by the authors themselves. See for example SNAP variable discussions (p. 36, last paragraph; p. 80, last paragraph; p. 96, last paragraph). Yet these data are used in multivariate regression analyses and inferences are being drawn from these relationships. Is this appropriate?
 6. A major shortcoming of study design is the strong possibility that not enough ‘post changes’ time had elapsed for the WIC packages changes to have been fully implemented and for the new system to be stable (p. 125, 4th paragraph). For example the authors report that a significant fraction of WIC recipients still did not understand well the package changes when they were interviewed (p. 98, 3rd paragraph, lines 3-4). If this is the case then findings from this study focusing on influence of WIC package changes on infant feeding choices need to be interpreted with extreme caution. And authors should recommend for post-phase of study to be replicated once WIC recipients understand well their package options as a function of their infant feeding choices. A key issue then becomes how best to determine when the system is finally ‘stable’ and ready for reassessment.
 7. Can the authors explain (speculate about) the infant age X WIC package change interaction on formula use they found (p. 77, 1st paragraph)?
 8. It is unclear why in Exhibit 5.11a (p. 81) the OR of 2.195 for receiving full BF package post implementation was not statistically significant even though it was higher than for FF (OR=1.443) and the latter was statistically significant. Full BF and FF package findings are based on 77,123 observations, thus this is unexpected. Authors do not report 95% CIs anywhere so this unexpected finding is indeed difficult to understand.
 9. Should multivariate analyses based on survey data adjust for site characteristics, as clearly there were important differences across them (p. 107, last paragraph)?
 10. In terms of knowledge gaps remaining I think that future studies in this area need to test for race/ethnicity X WIC package change interaction on infant feeding choices with an adequate sample size. Clearly several of the report findings strongly suggest effect modification by race/ethnicity (e.g., Exhibits 5.11a, 6.21, 6.23, 6.24).

Report structure

1. Report needs an executive summary that clearly summarizes relevance of questions, study design, key findings, main study limitation, policy implications and knowledge gaps.

2. A diagram is needed on pp. 17 and 29 to understand study design at a glance. Study lists very specific questions that were answered (p. 13) with either: WIC pre/post survey data, WIC administrative data, and/or interviews with LWAs staff. An explanation of this in a diagram can help the reader understand at a glance where the data for answering each study questions came from.
3. The description of the WIC packages is quite long and convoluted (pp. 5-10). This section needs to be simplified for the average reader to benefit from it.
4. The section explaining Odds Ratios reads like a basic statistics textbook and doesn't flow well with report (pp. 27-28). If the authors think that it's necessary to include I would move it to the Appendix section.
5. Several Exhibits report huge difference in pre/post sample sizes (e.g., p. 69, Exhibit 5.2 a, $n(\text{pre})=3,336$, $n(\text{post})=19,383$). May be useful to include a brief explanation in footnote as to why this is the case.

Typos/Edits/Specific Queries

Page	Paragraph	Line(s)	Issue	Comment(s)
8	4	1-2	Thousands of State packages	Is this correct? Thousands!?
9	2	4-5	If he/she more than half...	Word missing
13	2	5 th bullet	'Domain 4'	Should be 'Domain 5'
15	3	2	'WIC PC'	PC in full, assuming its first time it appears
17	3	3	28 respondents at each time period	Which time periods?
20	3	Last 3	'Interim Rule...after the Interim rule'	Awkward sentence. Unclear why this is relevant
21	3	1-2	'number of pregnant based'	Missing word
21	6	2	'2006 and'	Missing word
26	1	1	“”	Delete extra “
30	1	6	'an assessment the...'	Insert 'of' before 'the'
37	Exhibit 3.8	--	Metro East is clearly an outlier for Medicaid	Why?
39	2 nd and 3 rd	--	LWAs, 'Local agencies', 'Local WIC agencies'	Standardize nomenclature
39	5	5	Move 'certifications' to end of sentence	
39	5	Next to last	'of the burden'	Should it be 'or the burden'?
41	Exhibit 3.10	Rows 4 and 6	Avoid using double negatives. Improves clarity and is consistent with rest of statements in table	Present data accordingly
48	1	2	'the equivalent 104 fluid ounces'	Insert 'of' before 104
49	5	1-3	three states, one State	Capitalize all?
50	6	1	'say they discussed'	'said they discussed'
51	1	1	'tell women'	'told women'
51	2	5	'(The other LWA'	Delete '('
53	3	1	'In addition States...'	Insert 'to' before 'States'
59	3	3 rd bullet	Bold 'LWAs' in heading.	
62	1	8	Should 'bulgar' be 'bulgur wheat'?	
63	2	1	Should 'allayed' be 'addressed'?	

64	last	1-2	'...affected women's decisions to change from exclusive breastfeeding to another package'	Not sure what this means
69	Exhibit 5.1		Food Stamps	Change to SNAP? Need to correct several Exhibits.
73	Exhibit 5.5		'a', 'b' should be indicated as superscripts	
73	2 & 3		Very awkward transition from one paragraph to the next	Harmonize grammatical structures and provide a logical transition sentence
75	3	3	'was the nearly same'	'was nearly the same'
76	Exhibit 5.7		Footnote d	I don't see any missing values in table. Need to verify rest of Exhibits as well.
80	Exhibit 5.10		'Birth month' in title but 'months 1 and 2' in footnote	Please clarify
82	2	Last 2 lines	'...we consider the more spare models....more authoritative'	Why? what do you mean by sparse?
83	Exhibit 5.11c	footnote	Note 3	Which interactions they are referring to? Needs to be addressed in subsequent exhibits as well.
92	Section 5.3		Remind reader how BF initiation rates were derived from administrative records	Re WIC participants asked to self-report? Based on WIC package they choose?
93	Exhibit 5.15		Are footnotes 'e' and 'f' switched?	
95	Exhibit 5.7		Several footnotes do not seem to belong to table	
96	2	3	What do you mean by 'preliminary' analyses?	
98	3	3-4	Why these results are not shown in Table format	This is a key finding that needs to be highlighted. Please see substantive concern # 6
101	1	1	Is 12% truly a 'large fraction'?	
101	2	Last line	Should 34.3% be 38.2%?	

101	Exhibit 6.5		I would present responses within each of the 3 categories sorted by prevalence (high to low)	
102	Exhibit 6.6		Ditto. Also, table needs to follow a logical arrangement and categorization of themes. For example, baby not gaining enough weight, not enough milk, baby not satisfied, and baby not getting enough to eat can be presented under a 'Perceived Insufficient Milk' heading.	Talk to a lactation consultant to help you group items in a way that makes sense
108	Exhibit 6.11		Why the chi-square test could not be estimated for BF/4 mo for West sites?	
112	2	Next to last line	'feeling' should be 'feeding'	
114	1		Text missing at end	
118	Exhibit 6.21		Figure missing in income row	
119	last		'we found small increases in BF....'	I don't think multivariate analyses support this statement. Shouldn't these analyses carry more weight than bivariate analyses?

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I noted specific comments in the text of the report itself, using track change (see attached). However, I thought I'd highlight some general comments:

1. I have some concerns about the analysis being based on information on the mother's package (which, as I learned in the report, is not synonymous with breastfeeding, or even whether the infant is getting all formula, some formula, or no formula). My concern relates to the large proportion of mothers who do not receive a postpartum package – some have not changed from the “pregnant” package, some are not enrolled in WIC, and some have “unknown” food packages. And those package “types” provide absolutely no information about how much formula the infant is receiving (what I would consider a proxy for breastfeeding). In some regions, over half of the mothers do not have a postpartum package! Among the survey respondents, 63% do not report a postpartum package! The report basically ignores those

dyads (even though it presents information on them), which means that the analysis is really using only about half of the sample in some regions. Furthermore, it seems to me that differences and changes in the prevalence of mothers not receiving postpartum packages can affect the prevalence of mothers receiving a postpartum package. For ex., Table 5.4 shows that the prevalence of mothers without a postpartum package declined by 4.6 percentage points in the post-implementation period – which automatically means that the prevalence of mothers receiving postpartum packages also increased by 4.6 percentage points. To what extent is the 7.4 percentage point increased prevalence of full breastfeeding package a result of fewer women without a postpartum package?

It may be worth considering whether to incorporate information from the infant package to determine if the infant is receiving no formula (which would be equivalent to a “full breastfeeding “ package), partial formula (perhaps anything less than 100% for the pre-implementation period, and, post-implementation, whatever amounts would qualify the mother for the partial breastfeeding package), or more than partial formula (which would be equivalent to the full formula feeding package). If the study aims to evaluate the impact of the food package changes on breastfeeding (rather than on the proportion of women receiving the full breastfeeding package), it seems like it should not ignore what happens among women not receiving a postpartum package. If that is not possible, would it make sense to compare the % of the various packages using only the women receiving the actual postpartum packages, that is, the sum receiving (fully breastfeeding + partial breastfeeding + full formula)?

2. I had problems with some of the terms – for ex., what is a “WIC mother”? (particularly since in some tables the mother is not enrolled in WIC herself); also, I sometimes got confused as the “sample” being analyzed– sometimes it was birth-month infants, sometimes it was infants < 6 months... I don’t remember seeing a definition of the concept of analysis month 1, 10, etc, and am not sure why sometimes used 1-2 months of data for the pre-analysis but 8 months of data for the post-analysis (e.g., using analysis months 1-2 and analysis months 5-12).
3. Because the report contains a lot of information, some of the chapters were very long and I had problems retaining all of the information. Sometimes I’d move on to another section within the chapter and totally forget what the previous section had found. And I did not like being referred to earlier sections for findings or definitions. I wonder if the information could be made clearer by (a) simplifying the writing, (b) re-arranging some of the material within the chapters, and (c) separating the topics into more chapters.
 - a) Sometimes the writing is wordy and repetitive (there are lots of instances, but, for ex., the first sentence in section 6.4.2. states the obvious. I also find it wordy to state “Exhibit xxx presents findings from the multivariate logistic analysis.... – consider rewording to “The multivariate logistic analysis found that, or “the multivariate logistic analysis examined...” and then state the findings and list the table number in parenthesis at the end of the sentence); it would also help to be consistent, accurate, and clear with the terminology (i.e., do not refer to “WIC mothers” when some of the

- mothers are not on WIC; consider using “survey respondents” instead of “WIC participants”, etc).
- b) Consider presenting the various analyses in order of “complexity” – descriptive, cross-tabs, multivariate regressions, etc. Also, discuss the findings in the order in which the tables are presented (for ex., discuss tables 6.17-6.19 before describing what’s in table 6.20).
 - c) Consider having a separating chapter for each “topic”. I see no reason why all the analysis, on 3 different “domains”, must all be presented in one long chapter. Having each topic be a different chapter would help me (and perhaps other readers) be more aware that you are changing topics. And if each chapter ended with a summary of the main findings it would help me understand the main points before proceeding on to the next set of analysis. (although chapter 5 does provide a short summary of the findings, it is too broad and general. I believe a little more detail and perhaps some caveats would be useful – for ex., including a summary of the findings on the amount of infant formula, and perhaps some of the regression results).

One possible way of separating the topics into different chapters would be to treat each “domain” as a separate chapter. For example,

- chapter 4 would describe the actual implementation – what States/LWAs did, the challenges they faced, training, etc. Consider the possibility of integrating the description of what States/LWAs did with the discussion of the challenges they faced (it seems to me that I first read about how they did training, and then later I read about the challenges associated with doing or not doing training). And, by the way, I didn’t feel the description of the infant packages fit in this chapter;
- convert section 4.8 into a separate chapter on staff insights about participants’ experiences and outcomes (and label all figures to clarify that these are based on staff opinion, not actual participant reporting);
- convert section 5.1. into a new chapter focusing on the impact of food packages on participant characteristics;
- similarly, convert section 5.2. into a separate chapter focusing on the impact of food packages on food package choices (perhaps the description of the package changes might fit better as an introduction to the chapter; consider also whether section 4.6 would fit better in this chapter).
- convert section 5.3. into a separate chapter on breastfeeding initiation; explain how “initiation” was defined (is it in the admin data?)
- similarly, convert chapter 6 into 3 separate chapters: one describing the survey respondent characteristics and the general descriptives about perceptions, factors, and so forth; one on duration, and one on intensity. Consider moving earlier sections into the relevant chapters, so that the reader has most of the information together that is needed to understand the analysis. For ex., could the definition of duration be moved to the chapter on duration?

Appendix B – Tables B1 and B2 appear to be very similar to tables currently in the report, except that they provide more details. And the titles should be “Food Packages”, not “Food Packaged”.

Appendix A – there’s a lot of information from the surveys that would have been interesting to have included in the analysis. For ex.,

- (a) characteristics of the LWA (all staff vs some staff trained in breastfeeding; peer counselors meet with WIC mothers in hospitals after delivery or go to WIC mothers’ homes; LWA provides/lends breast pump; state allowed formula in birth month; etc);
- (b) participant’s demographics (i.e., where born); and
- (c) participant’s experience (whether someone helped with breastfeeding in hospital; knowledge that breastfeeding package provides more foods; etc).

Looking at the survey instruments also made me wonder if the variable “previous breastfeeding experience”, used in the multivariate analysis, might be too naïve. For ex., is a short previous breastfeeding experience -- a few days, a few weeks – likely to have a positive impact on current breastfeeding decisions? Perhaps a better variable might be whether previously breastfed more than xx (I have no idea what a reasonable duration might be -- 2 months? 3 months? 6 months?).

I also wondered how accurate were the perceptions by LWAs that 5%, 20%, or more than 20% of the postpartum women changed their food package in the first month; similarly, how accurate were the perceptions by LWAs about the impacts of the food package changes on breastfeeding outcomes. And did the LWAs that actually collected data have better outcomes than those that didn’t?

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The year 2009 marked an historic change to the WIC program in increasing support of breastfeeding and aligning the WIC food package with the 2005 Dietary Guidelines for Americans. For women and children, changes were made to the food packages to include fruits, vegetables and whole grains, and limit milk purchases to lower fat for all women and all children over 2 years of age. For postpartum women and infants, significant changes were made to the food packages to better incentivize breastfeeding. These included postponing complementary foods, increasing the value of the WIC package for mothers who fully breastfeed, reducing the amount of formula in the package for mothers who partially breastfeed and calibrating formula amounts to infants by age. These recommendations were adopted in the Interim Final Rule for the new WIC food packages. A related recommendation of no routine issuance of infant formula to breastfeeding mothers in the first month did not become part of the Interim Rule, but has been adopted to varying degrees by various Local WIC Agencies (LWAs) across the country. Given

the magnitude of the changes to the food packages for the postpartum mother/infant dyad, and their potential to significantly influence the breastfeeding rates of WIC mothers, it is critical to examine the impacts of these policy changes. This report is a thorough account of the background, hypotheses, methodology and outcomes of a very important study conducted by Abt Associates Inc. under the leadership of Parke Wilde, Anne Wolf, Meena Fernandes and Ann Collins.

The beginning of this review will focus on elements of the study that merit further explanation or enhancement in the text prior the report's final publication. There are a few areas where either the interpretation of outcomes requires some expansion or the description of the data is not clear enough to be confident in the interpretation. The latter portion of this review consists of a list of page-by-page edits and stylistic questions/recommendations for the authors. These range from minute (e.g. typographical errors) to more substantial.

Elements that merit further attention:

1. Timing of the pre and post data collection.

The authors appropriately state the limitations of pre/post designs that lack a control group (p 12) and it is clear that while a control group would have been the gold standard, a randomized controlled study was not an option given that the Interim Rule required states to change all food packages at one time and states could not withhold the new packages from any individuals for any period of time. As such, the study design selected is adequate in order to assess the hypotheses. My concern, however, is the lack of clarity in the report regarding the specific timing of the pre versus post data collection.

On page 17, the authors state "data collection began in April 2009 and was completed in May 2010". The federal requirement was for states to adopt the new food packages by October 1, 2009, so one assumes that the "April 2009 – May 2010" data collection period specified would include 6 months pre-changes and 8 months post-changes. However, at other points the report states "pre-implementation interviews were conducted one to two months prior to the implementation of the interim rule". In fact, throughout the many Exhibits the actual data collection months are unclear. Most Exhibits in Chapter 5, for example, note "Analysis months 1 and 2 define the pre-period and analysis months 5-12 define the post period". Exhibits 5.1, 5.2a, 5.2b and 5.3 all report administrative data. However, 5.1 and 5.2a report sample sizes that would suggest that the pre-period was about 1/3 the length of the post-period (e.g. 5.1: Hispanic sample size 9,827 pre vs 34,884 post), but 5.2b and 5.3 suggest equal samples pre and post, or in fact a higher N in the pre-period (e.g. 5.2b: 29,969 pre vs 18,038 post; 5.3: Age 72,753 pre vs

71,997 post). These discrepancies in sample sizes lead to some concern. A detailed timeline of the analysis periods for the administrative data and the survey data are missing and, in my view, are essential. Further clarification of sample sizes for each table are also needed.

The primary reason for the importance of clearly articulating the timeline for data collected is that, while the food package changes did not take place until a specified date (October 1, 2009 in most states), all LWAs underwent fairly extensive training on topics *prior to the changes* that ranged from changes to the computer systems that generate the food packages to conducting a breastfeeding assessment with mothers of newborns. Thus, with data collection taking place in the one to two months prior to the policy changes, there could well have been changes already happening at the LWA level to support the policies that were about to happen. For example, a mother delivering in September (in the pre period of data collection) who is already informed by staff about the upcoming policy changes in October may be influenced to select a different food package based on the knowledge of the upcoming change.

Having conducted a pre-post WIC food package change in California, I very much appreciate the challenges accompanying the “rush” to obtain pre-data before the food packages changed.

Getting final approval on contracts, paired with extensive sampling work and required IRB clearances, is no small task and the research team should be commended for obtaining survey data prior to implementation of the Interim Rule. That said, the possibility that this very late data collection may have had some effect on the pre-implementation group needs to be addressed more explicitly. In addition, clarification of the timelines for data collection is essential.

2. Infant Age

On p 87 the authors state “it is reasonable to think of later food package decisions as dependent on earlier food package decisions”. This is a critically important point that merits a more nuanced discussion. In a low-income culture where the ability to get family needs met can change from day to day, making decisions based on a food benefit that won’t be realized for a full six months seems tenable. Certainly some benefit is available to mothers immediately, with a slightly enhanced food package for herself in comparison to the mother choosing a full formula package, but the majority of food benefits come from an extension of the period the mother receives food from 6-12 months and the added foods for older 6-11 month-old infants of fully breastfeeding mothers.

3. Increase recognition and discussion of geographic differences.

The sampling frame nicely enables the authors to examine study outcomes by region, racial/ethnic group and % partially breastfeeding. The data are presented in useful tables, and often include descriptions in the text about outcomes as they relate to each of the three strata. However, more needs to be done to highlight the differences between regions, as has often been done in studies examining breastfeeding rates (of both WIC participants and all moms) nationwide. These publications often note higher rates of breastfeeding in the West, as evident on Exhibit 6.20, and suggest the impact of the policy changes may differ among regions. Most notably, as shown in Exhibit 5.12b, the West stratum does not show an increase in the full formula package from pre to post. Thus, it seems that the intention of the new policy to increase full breastfeeding and reduce partial and full formula packages may have been more successful in the West than in other regions.

This study’s findings from the West are very consistent with our work in California. I have included a chart below of the breastfeeding rates of mother/infant dyads at enrollment into WIC

at PHFE WIC, the largest LWA in the US, serving over 300,000 participants every month. Each month, over 5000 infants are enrolled into the PHFE WIC Program and their mothers select one of three food packages (as so

nically explained in the report). As you see in the chart below, we have not witnessed an increase in the full formula package (green line) and instead show a small but significant decrease in issuance of the full formula package at infant enrollment into WIC. Clearly, the full breastfeeding line (in blue, the term “exclusive” is used in place of “full” breastfeeding on this chart), has increased significantly and the partial/combo line (red) has dropped dramatically. We track these data closely and in February 2011 the full breastfeeding packet issuance at enrollment crossed above 50%, with the formula only line continuing to drop. PHFE WIC represents 23% of the California WIC population and an examination of these data statewide illustrates the same trend for the whole state. Paired with the findings for the West in this report, the new WIC policies supporting breastfeeding truly do appear to be increasing breastfeeding *without* increasing full formula use in the West. (The vertical red line on the chart indicates the date of the food package change in California.)

In summary, I hope these data from California encourage the authors to look more closely at their data by region as I do believe our work and this study tell the same story for the West Region, and suggest the food package changes have had the intended effect of increasing the use of the full breastfeeding package without increasing the use of the full formula package.

4. Conceptual framework.

The conceptual framework for the study is shown on p 11. While I agree with the directionality of the framework, with policy decisions directly affecting all the outcomes of the study, there is no inclusion of agency-level or individual-level factors that may influence the impact of the policy. I bring this up because of what we witnessed at PHFE WIC *prior to* the policy changes. An examination of the full breastfeeding line on the chart above (blue line) illustrates that the rate of selection of the full breastfeeding package by new mothers started to measurably increase six months prior to the policy change. This corresponded to when staff and participant training related to the new food packages began. The focus on breastfeeding was enhanced prior to the policy changes, staff received extensive training and were taught to use an enhanced breastfeeding assessment with new moms, and participants began to be educated about the changes to the packages and what the new infant food packages would be. On the one hand, one might argue that the Interim Rule affected outcomes prior to its actual implementation. On the other hand, evidence of behavior change prior to implementation of the Interim Rule suggests that staff behavior was critically important to the success of the changes and individual/agency level factors should be added to the conceptual model.

This study possesses a wealth of agency level information collected both before and after the policy change. While the pre-surveys were undoubtedly affected by their proximity to the date of the policy change (point 1 above), construction of a covariate that captures agency-level factors would be very illustrative. Section 2.4.2 outlines numerous covariates constructed from survey and administrative data, but all relate to participant level variables. Development and inclusion of an agency-level covariate may demonstrate very clear associations with outcomes. In fact, success with the new breastfeeding policy is inextricably linked to WIC staff and their success at both supporting breastfeeding and explaining the new packages. How these messages were delivered to participants is a crucial variable not to be overlooked.

5. Potential for validation of administrative data

While this activity would likely fall outside of the study aims, this is one of very few studies that has collected extensive survey data that could be used to validate administrative data.

Characteristics ranging from racial/ethnic group and poverty to family size and participation in TANF, Food Stamps/SNAP & Medicaid were collected through both administrative records and survey methodology. As such, the multiple statements in the report such as “these very low SNAP participation rates may not be accurate, as they are based on reporting by WIC participants during the certification process” (p36) could potentially be addressed in a very meaningful way.

General Edits and Stylistic comments:

Throughout document: Perhaps because different authors wrote different sections, the text goes back and forth between using LWA and spelling out “local WIC agency”. Once LWA is defined the first time, use that throughout.

1.1, second paragraph. “incidence” is used, whereas rest of document uses “initiation”

1.3.1, Sentence “Many new mother find bf both possible and rewarding...” requires a citation.

1.3.2, middle of page 4, refers to “51 States and DC”. Clarification of the 51st state would be helpful.

1.4.2, Titles “Changes Intended to Improve Nutrition” and “Changes Intended Specifically to Promote Breastfeeding” are further subsections. 1.4.2a and 1.4.2b may be one way to go, or underline these titles in addition to the italics.

1.4.4, Food package options c) is missing the word “receives”

Exhibit 1.3, Title says 2002, Note says 2005. Clarification needed.

1.6, top of page 13, “between before and after implementation” is challenging to interpret as written. Using the terms pre- and post-implementation would help the “between before” problem.

Exhibits 2.1 & 2.1 & 3.1 use “Harbor – UCLA Research & Education Institute, CA”. Exhibits 3.3 onward use “LA Biomed”. Please make consistent.

2.2, “Data collection began in April 2009 and was completed in May 2010”. This may be a good place to better clarify the data collection timeline.

2.3, I defer to another reviewer with expertise in sample weighting to comment carefully of this section.

2.3.2, page 21 six lines from the bottom, extra “of” to be removed

2.4.1, Throughout this section, it would be helpful to identify the data source either in the first sentence or in the title line of each subheading. E.g. Mother’s Food Package Choice (administrative data)... Duration (survey data)

2.4.1, “Mother’s Food Package Choice” includes a mother’s certification category of pregnant (bottom of p 22). This is explained later in the section but would be more helpful earlier, particularly for readers less familiar with the fact that moms can retain their pregnancy certification for 6 weeks postpartum.

2.4.2, Text states that “explanatory variables were constructed the same way using administrative and survey data”. However, my experience with admin vs survey data is they often don’t give the same answer, particularly for income, race/ethnicity, household size, SNAP participation, etc. While it is clear that for some analyses you used admin data and others you used survey data, some discussion of the discrepancies between the two is warranted. This gets back to my point above about you having the ability to do some validation work of WIC admin data. If that is beyond the scope of this report, the divergence between measures at least warrants some notation.

2.4.2, Income section. The high amount of missing income data is concerning, particularly in light of the fact that income eligibility is a federal requirement. My assumption is that missing income data is due to allowances due to adjunctive eligibility. A nuanced discussion of this is critical such to address concerns that income eligibility requirements are not being followed by LWAs. This issue comes up in numerous other sections, including 3.1.3 and 3.3.3.

2.4.2, Household size, extra “the” in last sentence of this section.

2.4.2, Employment and Education. Construction of this variable is for very high levels of education: some college/2 yr degree, 4 yr graduate, more than 4 yr college graduate. In our recent study of California WIC participants, 47% have less than a high school education, 28% are high school graduates and 25% have more than high school education. Unless California has a significantly less educated WIC population than the nation, It would seem the education categories in this report do not adequately represent the WIC population.

Exhibit 2.2, typo for 4th bar: “better”. Also, heading says 2009-2010, but footer says prior to the implementation of the interim rule, so would not all data collection be in 2009?

Exhibits 2.2. and 2.3, why are all data only for the period prior to the implementation of the final rule? Why is post change not included, either as a 2nd bar for each indicator, or aggregates with pre-data if there were no changes from pre to post?

2.5 last paragraph. Here you outline the 2 models you tested. This section would benefit from a more prominent heading as this last paragraph is quite important.

Chapter 3: Description of the sample, you outline that these data are from the information collected prior to the implementation of the Interim Rule. Throughout the section I wondered how these data compared to the post implementation data. You do a nice job in later chapters presenting post-data in

comparison to pre-data, but it would be helpful to add a sentence to the Chapter 3 intro stating that the later chapters will present the post-data in comparison to these pre data.

Exhibit 3.4. Missing income data comes up again, need to be sure to address why these 3 agencies not included were missing so much income data as this could be perceived as a significant red flag.

Exhibit 3.4, The note states “racial/ethnic composition” and should say “poverty rate”.

3.1.3, last sentence. I don’t understand the comparison between “smaller LWAs” and “smaller agencies”.

3.1.4, Family size. While family size of 1 is common for pregnant moms on WIC, I’m not clear how a family size of 1 could be possible for the focus of this study: The postpartum mother/infant dyad. The use of “two or fewer” for the postpartum/infant dyad is confusing, though the use of that category in describing the overall WIC population is certainly appropriate. This also applies to Exhibit 3.5.

3.2, This section is not a description of the sample, which is the goal of Chapter 3. This is also the only section of this chapter to discuss pre-post comparisons, which leads the reader to want to see the pre-post comparisons throughout the chapter. I would suggest this section be lifted out of this chapter, probably to chapter 4.

3.2, top of p39 “WIC staff reported few changes pre and post *in breastfeeding promotion activities+”. I find this short statement both astounding and requiring further discussion. I recognize that the LWA I’m affiliated with is significantly larger than all other WIC agencies and, as such, is likely not representative of LWAs nationwide, but we also work closely with many other small LWAs in California. Changes in breastfeeding promotion activities in California were extensive prior to the food package changes, and started six months before the change. This speaks to my comment above that the timing of the pre-assessments may have been too late to address some changes that had already happened at LWAs. I think this simple statement of “few changes pre- to post” needs to be examined carefully, with at least a nod toward the potential that by the time the pre interviews/survey occurred, changes may have been underway.

3.2, p 39 last sentence of “WIC Staff Training about Breastfeeding”, should the “training of” be “training and”?

3.2. Local Hospitals section. Excellent idea to include this, though not clear how these qualitative data are used in the analysis and the report would benefit from adding clarity to how these data were incorporated into the outcomes analysis. The California WIC Association has an excellent report on breastfeeding support of all hospitals in CA at

http://www.calwic.org/storage/documents/factsheets2011/CALWIC_One_Hospital_2011.pdf

Exhibit 3.10 says Winter 2010. Were data not collected before the FP change? From 2009-2010 there have been some significant changes in hospital policies at some hospitals, so would be beneficial to note if any were hospitals in the catchment areas of the sampled LWAs.

3.3.1, top of p42, “with one exception” should instead say “with the exception of census region”. Later in that same sentence, Midwest was also off by 7% and merits listing.

3.3.2, “Finally, although the pattern of reported participation... add “in other assistance programs”... is similar in both...”

3.3.2, End of paragraph says “do not differ with regard to family size” with no mention made in the text to breastfeeding initiation rate, which is included on the table. Either delete last sentence, or add bf initiation rate to the sentence.

3.3.3, bottom of p44, “Overall, the characteristics...” missing a “the” at end of this line. Then this is first use of “corresponding sample”. You discuss the large file, small file and comparison file early in the manuscript, is one of these what the corresponding sample refers to?

Exhibit 3.13, I found myself wanting to see post data on the same table.

Chapter 4, use of a dash in post-partum in the 2nd paragraph. Postpartum with no dash is used in most of the manuscript. Make consistent throughout.

4.1.2, “earlier” used twice in last sentence.

4.2 , bottom of p47, CA gave up to 9 cans of formula prior to FP change, manuscript reads eight cans.

4.7, Intro paragraph. What about the other 1 state and 8 LWAs? Did they report significant challenges? This paragraph would benefit from including the challenges the others brought up.

4.7.2, last bullet, **LWAs** should be in bold type.

4.8.1, paragraph under Exhibit 4.6 states “by far the most widely noted participant concern...change from whole to lower fat milk”. In fact, looking at exhibit 4.7, the concern about formula quantities looks equal in magnitude to the concern about whole to lowfat milk.

Intro statement should be reworded.

5.1, bottom of p67, corroborate should be past tense. Not sure this paragraph is needed.

Exhibit 5.2b and 5.3, this is where the sample sizes start to be confusing/concerning. Why so many pre cases here compared to post?

Exhibit 5.7, First time the reader sees that full breastfeeders have a value >0 for formula. Why this can happen is described later (bottom paragraph of p 77), but should be included in the notes on the exhibit. Also include a similar note on Exhibit 5.9.

5.2.2, bullet 2 on p76 could be more clear. How about “the percentage of ppts receiving less formula than the maximum amount...” Similarly, on p77, 2nd to last sentence, how about “fewer dyads received less than the maximum amount of formula post-implementation.

Exhibits 5.11a, b, c, d say “Food Stamps”, though it’s consistently referred to as SNAP in the text. Choose one and stay consistent.

Exhibit 5.11c is the model where consideration of agency level factors would be a benefit. If not able to include a measure, then disclose that this model does not address agency level factors.

Exhibits 5.13a and b. Need to include somewhere in the tables that the numbers are %s. Also, I would find it easier if pre- and post were next to each other, rather than on separate tables. Thus, infant age = 0: Pre and post together, then infant age =1 pre/post, etc. I do recognize that the intention of these tables is to show transitions by age, but the transition by age pre-post are what I was more interested in seeing.

Exhibit 5.13b, when was the post? The whole 9 month period? Just the last few months of the study period? This is written clearly on p 90, center of the page “the sample was comprised of infants born during analysis month 10”, but this falls after the exhibit so I cannot assume relates to the table. More statements clarifying time period are necessary throughout, and this sentence on p90 is an excellent example of how to write these clarifying statements.

5.2.4, bottom of p 90. 23.7% (pre) and 40.0% (post). According to Exhibit 5.14a, the 40.0% should be listed as 39.5%.

Exhibit 5.6, Headings of Month 1, Month 2... Month 5 is confusing, as it sounds like analysis months. Would suggest change this to Age 1 months, Age 2 months, etc. This table is particularly challenging given points 1 and 2 in my earlier comments : With pre-data collection in the 2 months prior to the change, mother’s decision may have been influenced by the upcoming changes.

Exhibit 6.2, Immediate question is whether this differed by mom’s feeding status. Were the 20% reporting “not very” and “not important” all full formula feeders? Seems this association is important to explore.

6.2.2, last sentence on p99, “report” should be past tense.

6.2.2, p 100 2nd paragraph, should this paragraph have a heading called “WIC Advice”? It isn’t describing BF knowledge like the previous paragraph.

6.3.1, last sentence p103, “breastfeed” should be “breastfed”.

6.3.1, p104 last paragraph “For all infants, the percentage still being bf at 9 weeks of age was 13 percentage points higher (55% vs 42%).”. I’m not finding confirming evidence of this on Exhibit 6.7, which this sentence seems to be referring to.

6.3.1, bottom of p107 and Exhibit 6.11. Seem to be significant increases in the West in bf to 4 weeks. Why is this not noted in the text or Exhibit Chi square and p values?

6.4.2 Extra period in paragraph 2.

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Thank you for the opportunity to review the *Evaluation of the Birth Month Breastfeeding Changes to the WIC Food Packages Draft Final Report*. Overall, I think the study is very comprehensive and well designed. There are some valuable findings, which I think will be of interest to a broad audience. The study addresses an important question -- the impact of the Interim Rule on WIC food package choices and breastfeeding outcomes. While the pre- and post-implementation assessment did not reveal major changes in breastfeeding practices, it would be interesting to see if the effects would be greater over a longer implementation period. I did not see recommendations for further study, which I think would have helped to strengthen the report.

It is not clear to me who the intended audience is for the report and how FNS plans to use it. As written, I think the document serves well as a final project report. If the document and its

findings are to be shared more broadly, I would suggest that consideration be given to including an Executive Summary. Given the complexity of the study and the length of the report, I think the findings could potentially get overlooked in this voluminous document. The methodology discussion in Chapter 2 is particularly detailed and may be more information than the average reader would need. Including some of the detailed discussion on methodology as an Appendix might be helpful. While I thought the report was technically sound and the data exhibits were good, some editing to improve readability and to reduce redundancy (e.g., references that describe the organization of the report are repeated throughout the document) may be beneficial if the report is to be broadly disseminated. Some specific examples are noted below.

pg. 1, Section 1.2, 4th Paragraph -- "FNS" acronym needs to be defined.

pg. 3, Section 1.3.1, 1st Paragraph -- CDC stands for The Centers for Disease Control and Prevention.

pg. 3, Section 1.3.1, 2nd Paragraph -- Some rewording might add clarification; e.g., "This practice raises concern because early supplementation...."

pg. 4, 2nd Paragraph -- LWAs previously defined on pg. 1.

pg. 9, 3rd Line -- Word seems to be missing; e.g., "Mother's assessment regarding the relative merits...."

pg. 9, 1.4.4c -- Word seems to be missing; e.g., "...if she/he receives more than half of the full formula allocation.

pg. 12, Exhibit 1.3 -- Chart appears to be dated (2002) and, thus, somewhat confusing. "Current Food Package" could be misinterpreted as being the post-Interim Rule package. Updating the table to compare the Pre-Implementation Food Package with the Revised Food Package (not the IOM Proposed Package) would make the table more current and meaningful.

pg. 13, 1st Sentence -- In several places of the report, personal pronouns are used.

pg. 30, Section 3.1 -- Characteristics selected to be examined are good.

pg. 33, Exhibit 3.3 -- On a black and white copy, the "Other" category cannot be easily distinguished from the "Hispanic" category. (Similar comment on pg. 100, Exhibit 6.3 -- hard to distinguish between "important" and "very important".)

pg. 53, 2nd Full Paragraph, 1st Line -- Word seems to be missing ; e.g., "In addition to States' policies...."

pg. 73, First Bullet at bottom of page -- Clarification is needed for the following sentence: "The percentage of participants receiving the full breastfeeding package was slightly higher after implementation for dyads where the infant was 1 to 2 months old, while there was no pre/post difference for dyads where the infant was 3 to 5 months old." Exhibits 5.5 and 5.6 seem to indicate that there was a slight difference for the older infants. The note on pg. 75 states that the

pre/post differences were "statistically significant", although they were small in practical magnitude.

pg. 93, 3rd Paragraph -- "One plausible interpretation" is provided. This section would have been enhanced by a discussion of other potential explanations. For example, the WIC program historically attracts Mothers who feed their infants formula and who value the supplemental formula that is provided by the WIC program. As Mothers become increasingly aware of the enhanced breastfeeding package, could more breastfeeding women potentially be drawn to the program over time?

Chapter 7, Sections 7.1-7.4 -- Results are well presented and the main findings summarized. This section is very helpful in understanding the true outcomes of this study.

The breastfeeding text is fine. I am glad they did not make it as stringent as the IOM. On page 7, Solid Foods going with the 6 month solids might not be the best for all infants. The AAP Committee on Breastfeeding states 6 months but the Committee on Nutrition was 4 to 6 months, unless they changed it and I missed it. If they did not change it then it could be a bit misleading.