

**Assessment and Monitoring of
Breastfeeding-Related Maternity Care Practices in
Intrapartum Care Facilities in the United States and Territories**

OMB Control No. 0920-0743

Reinstatement with Change

Supporting Statement: Part A

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July 30, 2013

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Assessment and Monitoring of Breastfeeding-Related Maternity Care Practices in Intrapartum Care Facilities in the United States and Territories

Introduction

In this Reinstatement with changes ICR, CDC requests approval from OMB to conduct in 2013 and 2015 the national survey of Maternity Practices in Infant Nutrition and Care (known by maternity facilities, state and federal partners as the “mPINC” Survey).

The Reinstatement with changes request is based on previous experience with administration of a baseline mPINC survey in late 2007 (OMB No. 0920-0743, exp. 7/31/2009) and follow-up surveys in late 2009 (exp. 10/30/2010) and 2011 (exp. 12/31/2011). Approval from OMB for CDC to consistently administer the mPINC survey every two years has allowed CDC to be fully responsive to maternity facilities and other stakeholders in addressing their needs for biennial census data. This consistency has been important to CDC and has allowed CDC to foster and maintain important and responsive relationships with national and state health care leaders and organizations continued from earlier survey administrations.

The 2011 mPINC survey was conducted within a one-year OMB clearance period (12/05/2010 – 12/31/2011). The current Reinstatement request describes two cycles of data collection (2013 and 2015) over a three-year clearance period. Although the number of respondents is very similar for each cycle of data collection (2011, 2013, and 2015), the process of annualizing the 2013 and 2015 respondents over a three-year period results in a number of adjustments to previously approved estimates. This Reinstatement ICR includes changes such as a lower estimate for the annualized number of respondents and thus a lower estimate for the annualized burden to respondents.

This Reinstatement ICR also describes changes to mPINC survey administration. In previous cycles of data collection, two versions of the mPINC survey instrument were used: one for hospitals and one for birth centers. In 2013 and 2015, one instrument will be used for both hospitals and birth centers. There are no changes to survey content, other than the minor changes needed to produce a single streamlined instrument for all facilities. There is no change to the estimated burden per response (30 minutes).

Similarly, in 2013 and 2015 screening for eligible facilities will be conducted with a single screening instrument. In previous cycles of data collection, we used two versions of the screening instrument: one for hospitals and one for birth centers. In this Reinstatement ICR, we also present a change in the method of estimating screening burden. We provide separate burden estimates for ineligible facilities (which complete only a portion of the screening instrument), and eligible facilities (which complete the entire screening instrument).

OMB approval is requested for three years. Continuing the established pattern for biennial survey administration will enable CDC to maintain the high quality of data collected and extraordinarily high response rates that are supported in large part by the routine nature of this expected pattern.

A. Justification

A.1. Circumstances Making the Collection of Information Necessary

There is substantial evidence on the social,¹ economic^{2,3} and health benefits of breastfeeding for both the mother^{4,5} and infant^{6,7} as well as for society in general⁸. New objectives for *Healthy People 2020* reflect an increased understanding of the factors that affect any individual mother's ability to start and continue breastfeeding⁹ beyond simply measuring increased breastfeeding rates. *Healthy People 2020* also includes broad objectives to decrease health disparities, which is particularly important for breastfeeding, as the wide disparities in breastfeeding initiation and duration between African American and white women need to be eliminated. *Healthy People 2020* breastfeeding behavior objectives are to increase the proportion of all mothers who ever breastfeed from 74% (2007 estimate) to 81.9%, who breastfeed through 6 months from 43.5% to 60.6%, and to increase from 22.7% to 34.1% the proportion of mothers who breastfeed for at least 1 year.

Although CDC surveillance data indicate that breastfeeding initiation rates in the United States are climbing, rates for duration and exclusivity continue to lag, and significant disparities persist between African American and white women in breastfeeding rates. These data further illustrate persistent geographic disparities in breastfeeding rates independent of other socio-demographic factors, with rates in some states nearly double those in others (among 2009 births, only 47.2% of Mississippi infants were ever breastfed, versus 90.8% of Idaho infants).¹⁰

A Cochrane review¹¹ found that institutional changes in maternity care practices effectively increased breastfeeding initiation and duration rates. Birth facilities that have achieved designation as part of the World Health Organization/UNICEF *Baby-Friendly Hospital Initiative* (BFHI)¹² typically experience an increase in breastfeeding rates.¹³ In addition, DiGirolamo et al.¹⁴ found a relationship between the number of *Baby Friendly* steps (included in the *Ten Steps to Successful Breastfeeding* of BFHI) in place at a birth facility and a mother's breastfeeding success. The authors found that mothers experiencing none of the *Ten Steps to Successful Breastfeeding* required for BFHI designation during their stay were eight times as likely to stop breastfeeding before 6 weeks as those experiencing six steps.

In the United States, nearly all (>99%) infants are born in a hospital, and because breastfeeding is inextricably related to mothers' birth experiences and the time-sensitive nature of establishing breastfeeding, experiences in those first hours and days of life while in the hospital significantly influence feeding throughout infancy, such that mothers who are not able to establish breastfeeding well during the maternity hospital stay face substantial risk of not being able to be successful with breastfeeding later on. In most cases, however, these experiences reflect routine practices at the facility level, and new mothers rarely request care different from that offered them by health professionals. Prenatal education on breastfeeding can affect a mother's decision to even consider it as a feeding option. Medications and procedures administered to the mother during labor affect the infant's behavior at the time of birth, which in turn affects the infant's ability to suckle in an organized and effective manner at the breast. Infants who are put to the breast within the first few hours after birth continue breastfeeding longer than those whose first breastfeeding is delayed. Mothers who room-in with their infants will have many more opportunities to practice breastfeeding because of the infant's proximity.

Recognition of the hospital stay as a crucial influence in later breastfeeding outcomes led to the addition of a two objectives in *Healthy People 2020* to allow national monitoring of

improvements in support for breastfeeding during this time. These objectives are to reduce the proportion of breastfed newborns who receive formula supplementation within the first 2 days of life from 24.2% (2007 estimate) to 14.2%, and to increase the proportion of live births that occur in facilities that provide recommended care for lactating mothers and their babies, from 2.9% in 2009 to 8.1%.

Development of the CDC national survey of Maternity Practices in Infant Nutrition and Care began in 2003. In 2007, OMB approved an initial ICR, *Assessment and Monitoring of Breastfeeding-Related Maternity Care Practices in Intrapartum Care Facilities in the United States and Territories* (OMB Control Number 0920-0743, expiration date 7/31/2009) to administer a baseline and two-year follow-up survey to maternity facilities and disseminate findings back to those facilities that participated. The baseline survey was administered in late 2007. The initial survey established a baseline measure of hospitals' practices across the United States and Territories and the extent to which these practices vary by state.

In 2009, OMB approved a Revision ICR submission from CDC that included CDC's response to OMB's request for a report of findings (**Appendix C-7** in this ICR) from the baseline survey to be provided prior to CDC conducting the planned two-year follow-up survey (OMB Control Number 0920-0743, expiration date 10/31/2010). The follow-up survey was administered in late 2009.

In 2010, OMB approved a Revision ICR to field a subsequent iteration of the mPINC survey utilizing the methodology and survey instrument that had been developed and refined during the initial pilot and first follow-up phases (OMB Control Number 0920-0743, expiration date 12/31/2011). This survey was administered in late 2011 to overwhelmingly positive response from hospitals. The response rate to this mPINC survey was the highest seen so far, and the level of activity and interest in utilizing these data is unprecedented. Together these developments reflect hospitals' strong interest in participating in the mPINC survey and their increasing recognition of the survey's value to their work, as well as hospitals' and other stakeholders' consideration of this national system to assess and monitor hospitals' breastfeeding-related maternity care practices as essential to their own quality improvement efforts.

The Nutrition Branch of the Division of Nutrition, Physical Activity, and Obesity at CDC proposes to conduct follow-up surveys of maternity hospitals' care practices related to breastfeeding in 2013 and 2015. OMB approval is requested for three years. Consistent, recurring administration of the mPINC survey allows CDC to examine changes in practices over time. Information from the surveys will help inform hospitals, state public health departments, and CDC programs.

CDC thus requests OMB approval to conduct planned surveys in 2013 and 2015 of Maternity Practices in Infant Nutrition and Care (mPINC) matching the survey methodology of the prior surveys. Authority for CDC to collect this information is granted by Section 301 of the Public Health Services Act (42 U.S.C. 241) (**Appendix A**).

Privacy Impact Assessment

Overview of the Data Collection System

All health care facilities (hospitals and free-standing birth centers, referred to throughout this document as ‘hospitals’) in the United States and Territories that provide maternity care services are invited to participate in the mPINC survey. A brief screening interview is conducted by telephone to confirm each hospital’s eligibility and contact information (see **Appendix G**, Screening Telephone Call Script). Each eligible hospital receives a survey, (see **Appendix H**, Facility Survey Instrument – 2013 and 2015 mPINC Surveys).

Items of Information to be Collected

The mPINC survey is administered to hospitals (*not* individuals). Therefore, items of information to be collected are specific to hospitals as health care institutions and are unrelated to individual data. The items of information to be collected are facility size and other characteristics; number of staff devoted to breastfeeding support and their credentials; facility practices such as first feeding after birth, supplemental feeding, and rooming-in; the nature of breastfeeding education and support the health care facility makes available to mothers; staff training; and prevalence of specific facility policies that have been elsewhere identified as supportive.

Identification of Website(s) and Website Content Directed at Children Under 13 Years of Age

There is no website content directed at children under 13 years of age.

A.2. Purpose and Use of Information Collection

CDC works in partnership with states to promote optimal maternal and infant health through increased breastfeeding initiation and continuation. Consistent with this mission, and with clear evidence that breastfeeding-related maternity care practices influence breastfeeding initiation and continuation, it is necessary to better understand hospital practices related to breastfeeding across the United States. These critical data are used to effectively inform state and national programs. The initial survey, conducted in 2007, established baseline measures of the prevalence of specific practices related to breastfeeding in hospitals across the U.S. and Territories. From this baseline all subsequent data allow analysis of trends, changes, priority needs, and opportunities for collaboration and improvement.

This Reinstatement with changes ICR includes a sample of documents illustrating the variety of ways CDC strives to ensure full utilization of the data provided by participating maternity hospitals and support for partners and other stakeholders’ ability to examine their own data to determine how best to improve their maternity care practices related to breastfeeding. **Appendix C (Summary Report of mPINC Findings—2007-2011 Surveys)** synthesizes for OMB the overarching main findings from the first three mPINC surveys. This report is based on the overwhelmingly positive response from OMB to the overview report CDC provided in 2009 in response to OMB’s request (**Appendix C-7 OMB Results Report—2007 mPINC Survey**). **Appendix C-1 (CDC Website dedicated to mPINC Survey – www.cdc.gov/mpinc)** provides an overview of the dedicated website CDC created for facilities responding to the mPINC survey, state partners, researchers, and other interested stakeholders, including detailed web tables presenting frequency data on all mPINC score indicators, allowing broad access to the rich data available from the survey. **Appendix C-2 (2011 Survey customized Benchmark Report**

mailing) is a sample of the most recent customized information and data report that CDC creates and provides to every maternity hospital that participates in the mPINC survey. **Appendix C-3 (CDC MMWR: Vital Signs)** summarizes mPINC findings that were the anchor of all activities related to the CDC August 2011 Vital Signs activity, marking the first time that CDC decided to highlight improving hospital maternity practices as the CDC-wide public health priority for the month. **Appendix C-4 (2009 survey customized Benchmark Report mailing)** is a sample of the data report CDC created and provided to hospitals that participated in the 2009 survey. **Appendix C-5 (CDC MMWR: Breastfeeding-related maternity practices)** was CDC's first major scientific publication resulting from the information collection. **Appendix C-6 (2007 Survey customized Benchmark Report mailing)** was the first data report CDC created and provided to hospitals that participated in the 2007 survey. **Appendix C-7 (OMB Results Report—2007 mPINC Survey)** is the report CDC created in response to OMB's 2007 request for a report on results of the 2007 information collection prior to fielding the 2009 survey.

Maternity care practices related to breastfeeding are changing across the United States, and the rate of change in these practices has increased substantially in the past few years. Prior to administration of the first mPINC survey in 2007, the largest annual increase in number of births at hospitals in the United States that have been designated as part of the UNICEF/WHO *Baby-Friendly Hospital Initiative* was 8%. In the first year following the first mPINC survey, the number of U.S. births at such hospitals increased by 47%; already in 2012 nearly four times as many U.S. births are at BFHI hospitals than were in 2006, the year prior to implementation of the mPINC survey.¹⁵

The objective of the proposed ICR is to continue gathering information about hospitals' maternity care practices related to breastfeeding and analyze trends and changes by continuing the established pattern for follow-up surveys of all eligible hospitals in 2013 and 2015 in all U.S. states and territories. The design of this study remains a national census of hospitals routinely providing maternity care, based on careful review of advantages and limitations of various study designs as well as extensive input from stakeholders and experts in evaluation of hospital maternity care practices. Since the initial launch of the mPINC surveys in 2007, several major issues have highlighted the necessity of a continued national census. They are:

- In November, 2012, the Joint Commission (formerly known as the Joint Commission on Accreditation of Healthcare Organizations) expanded their performance measurement requirements for accredited general medical/surgical hospitals. Among the expanded requirements is that for all hospitals with 1,100 or more births per year, their Perinatal Core measure set will now be mandatory. Among the new mandatory perinatal measures is the proportion of infants exclusively breastfeeding at the time of birth hospitalization discharge. Hospitals across the U.S. will be required to comply with the new Joint Commission performance measure requirements by November, 2014. Future accreditation will hinge in part on hospitals' actual improvements in these measures over time as well as their reporting of quality improvement efforts in place to address low performance such as those that are readily identified using mPINC data.
- In November, 2011, Baby-Friendly USA (the independent non-profit organization responsible for Baby-Friendly designation in the U.S. as part of the international Baby-Friendly Hospital Initiative) expanded the scope of data they require from hospitals. Among these expanded requirements is that hospitals submit initial baseline data to Baby-Friendly USA illustrating both the current status of support for breastfeeding and

the staff understanding of the quality improvement tasks that will need to be undertaken in order to become eligible for a designation assessment site visit. The mPINC Benchmark Report is the core of these baseline data the hospital submits to Baby-Friendly USA. Although those that have not participated in the mPINC survey up to that point are invited to complete it on their own and review it for discussion with Baby-Friendly USA, hospitals see the benefit to them in the designation process of having available their mPINC Benchmark Report.

- State health departments have voiced a strong need to be able to conduct state and local level analyses to use these data to tailor public health breastfeeding interventions to their particular needs. A national census design allows for State-level analysis to address individual local research and policy needs. Wide variation in hospital practices and in breastfeeding prevalence across the United States makes these needs particularly salient.
- This survey provides individual hospitals with their own data, benchmarked against other facilities. Data from other hospitals is only provided in aggregate groups (national, statewide, and all facilities nationwide that have a similar number of annual births). This enables hospitals to take on their own issues locally. The practical utility of this is it allows for rapid and localized assessment of issues that can be tackled, whereas as sampling of hospitals would eliminate this aspect of the data utilization.
- The broad diversity among maternity care hospitals in the United States and lack of generalizability between them makes it problematic to identify and recruit hospitals that could legitimately be considered to be representative of other hospitals.

Since implementing the first mPINC survey in 2007, the strengths of the national census design have been obvious, and CDC's ability to address the above issues and provide timely and specific, action-oriented data to hospitals nationwide as well as to a wide spectrum of state-level stakeholders has spurred substantive and valuable changes at the hospital and state level.

- Provision of mPINC data has prompted concrete action from state health departments, statewide breastfeeding coalitions, and other statewide partners that has since directly resulted in improved maternity care practices. Collaborations between hospitals, researchers, and state agencies are now in place in every HHS region of the U.S.
 - Following in-depth analysis of the maternity care priorities in Massachusetts as identified by the mPINC survey, Massachusetts became the first state to launch an invitation-only statewide collaborative among the leadership of each of the major hospitals statewide in order to improve practices in their state. All participating hospitals initiated major quality improvement efforts, the number of BFHI facilities in the state soon doubled, and Massachusetts has since secured funding from a national non-profit foundation to expand their summits, create an interactive web-portal to facilitate collaboration between hospitals interested in improving maternity care, and pay the salary of a full time professional staff member to oversee their entire initiative.
 - Coalitions from 15 states have built upon the model from Massachusetts to support and encourage hospitals to work together and learn from each other to improve care. Within each state, the approaches differ slightly, reflecting different needs and priorities, and an ability to customize the collaboration opportunities to

best address the issues in a given state. Some have initiated statewide or regional quality improvement collaboratives focusing on improving maternity care practices related to breastfeeding and engaging hospital leadership in the necessary changes and improvements.

- The Interstate Collaborative for Widespread Implementation of the Ten Steps was launched by the Carolina Global Breastfeeding Institute to address the need to accelerate the systematic implementation of the Ten Steps to Successful Breastfeeding as essential maternity care practices associated with optimal breastfeeding. Initially a collaborative of a few states that had pioneered programs to improve maternity care across facilities using early mPINC data, this project was able to expand nationwide, thanks to recurring mPINC data and the engagement of hospitals and states as a result of the availability of these data. The short-term aims of the collaborative are to: 1) define best practices for implementation of the Ten Steps to Successful Breastfeeding on a state-by-state basis through collaboration among states with active programs, and 2) develop a specific research agenda for further study of opportunities and challenges to systematized implementation of evidence-based breastfeeding support in America's hospitals.
- Participating hospitals have used their benchmark reports to initiate internal improvement processes and prioritize activities for staff training and recruitment, as well as for identifying critical need areas that need to be protected in times of budget cuts.
- The availability of detailed, hospital-level data on maternity practices and logistics has been an invaluable element of pandemic and disaster response. During the H1N1 Influenza pandemic, the mPINC data were the only available data source for detailed information about the location of the mother and the baby throughout the hospital stay and helped estimate capacity of U.S. hospitals to shift care of mothers and infants during the maternity care hospitalization.

The 2013 and 2015 surveys will allow examination of trends in changes in practices over time. Specifically, goals of the mPINC survey are to:

- Examine point-in-time analyses of variation in breastfeeding-related maternity care practices across and between 50 States and Territories and by other hospital characteristics such as size and type of ownership;
- Examine changes in practices reported by hospitals every two years since 2007, including trends among hospitals that participated in all prior iterations of the survey as well as cross-sectional observations of change, ensuring full utilization of data from all participating hospitals, regardless of whether a given hospital participated in any prior mPINC survey.
- Describe the characteristics of those hospitals that consistently participate in the mPINC surveys as well as of those that do not, and characteristics of hospitals that consistently implement maternity care practices more and less conducive to promoting breastfeeding initiation and continuation as well as of those that have experienced significant changes in practices over time in either direction;

- Provide feedback to CDC, state health departments, and hospitals to inform programs and practices.

Without this information, CDC and state health departments are unable to know the extent to which hospitals implement specific breastfeeding-related maternity care practices that have been identified as supportive based on extensive empiric evidence.

CDC will use information from the mPINC surveys to identify, document, and share information related to incremental changes in practices and care processes over time at the hospital, state, and national levels. Data are also used by researchers to better understand the relationships between hospital characteristics, maternity-care practices, state level factors, and breastfeeding initiation and continuation rates.

Privacy Impact Assessment Information

The mPINC survey measures hospitals' practices. It does not measure or collect data at any point on any individual person's behavior or information. As such, participation in this survey has no effect on personal privacy.

Hospitals that wish to participate in the mPINC survey do so by providing to the CDC contractor the contact information for a contact person to whom that hospital's survey is sent. The only personal information that is requested or collected about this contact person as part of the mPINC survey is their name and contact information, for purposes of routing the survey to the hospital. This person's function and responsibility related to the mPINC survey is limited to receiving the survey (either via email or mail). This contact person is not required to be the person who fills out the survey on behalf of the hospital, nor is this person required to be the person who actually submits the survey back to the CDC contractor (or via the survey website). No data whatsoever are requested, required, or collected about who the actual person is who eventually fulfills these functions (completion of the survey and submission back to the CDC contractor) in any given hospital.

A.3. Use of Information Technology and Burden Reduction

A computer assisted telephone interviewing (CATI) system is used to screen hospitals identified as potential respondents to the mPINC survey. The purpose of the telephone call is four-fold: (1) to verify that the hospital provided maternity care in the previous calendar year, (2) to determine the most appropriate contact person for that hospital, (3) to obtain contact information about the contact person identified, and (4) to determine if the hospital provides maternity care at other locations, and, if so, to obtain contact information for the other sites. Use of the CATI reduces the burden to the contact person since it normally reduces the amount of time necessary to complete a screening interview and captures the data more accurately.

The hospital is offered two options for completing the survey: a web-based system from which each hospital's data are electronically submitted via a secure server directly to the contractor, or a paper survey, including a self-addressed envelope to send back to the contractor the hospital's completed survey. Upon receipt by the contractor, the paper survey data are entered into an electronic system. Both options are designed to minimize burden and obtain data as efficiently as possible. Both methods support an ongoing infrastructure for subsequent data collection waves.

A.4. Efforts to Identify Duplication and Use of Similar Information

Although a few small studies were conducted in individual states prior to the 2007 mPINC Survey,^{16,17,18} the CDC mPINC Survey is the only national source of information that provides facility-specific data for the vast majority of facilities in each state to assess and monitor breastfeeding-related maternity care practices across the United States and Territories. This type of information is not captured via birth certificate data or any other federal survey capturing hospital practices or women's experiences during the intrapartum period. To our knowledge, no other existing system captures this type of facility-level practice information in U.S. maternity care settings.

In October 2003, CDC convened an expert panel comprised of the researchers who conducted the previous, state-level studies as well as other researchers with specific experience in surveillance and monitoring of maternity care practices related to breastfeeding. The expert panel reviewed existing research and available data, identified current research, evaluation, and public health programmatic needs, various methodologies for a national assessment of breastfeeding-related maternity care practices at hospitals, and possible barriers to data collection. Attendees agreed that the survey needed to be a recurring national census of facilities routinely providing maternity care.

In October 2004, CDC convened another meeting of experts to discuss the draft survey instrument and implementation of the survey. As part of the discussion, experts again reviewed existing data sources and other studies that were underway and agreed both that no similar data collection system existed, and the need for such data is high.

Since beginning to plan and implement the 2007 survey, CDC has continued to communicate with external experts and sought to identify other data sources. Since fielding the 2007 survey, hospitals, state health departments, researchers, and other stakeholders have come to identify CDC as their expected source for this kind of information.

A.5. Impact on Small Businesses or Other Small Entities

Since the survey population includes all hospitals and free-standing birth centers in the United States and Territories, it includes some small businesses. Extensive effort has been made to minimize the burden of the survey on small businesses. In designing the survey instrument, the number of questions has been held to the minimum necessary for addressing the objectives of the survey. Skip patterns built into the survey allow small hospitals and birth centers to answer only the sections that apply to the types of care they provide, thereby reducing the burden on these facilities. For example, questions on surgical births (Cesarean sections) and neonatal intensive care can be skipped by those that do not perform surgical births or provide neonatal intensive care. Many smaller facilities fall into this category, thus these facilities will have less response burden and fewer items to which they need to respond.

The use of the CATI screening instrument and offering two options for completing the survey, a web-based option and a hard copy option, reduces the burden on participating small businesses. Approximately six percent of the survey population can be assumed to be small businesses – these are free-standing birth centers, whose birth populations are generally significantly less than 250 births/year (<1 birth/day).

A.6. Consequences of Collecting the Information Less Frequently

The initial survey was administered in 2007. This was the first of an ongoing systematic data collection for the continued assessment of breastfeeding-related maternity care practices. The survey was again administered in 2009, which created the first opportunity to examine changes in practices over time in addition to providing vital point-in-time assessments of hospital practices nationwide. Administration of the 2011 survey provided new point-in-time assessments of practices nationwide, and improved CDC's ability to support hospitals' improvement efforts while further enhancing our analytic opportunities to examine changes in practices over time. A further and vitally important role of administering and reporting on the 2011 survey was to maintain relationships and expected services among our partners. The positive response to mPINC reporting has made it clear that our partners have come to expect from CDC their own data benchmarked against peer facilities as well as their state's data benchmarked to facilities across the nation.

Changes in maternity care practices related to breastfeeding occur moderately rapidly. While CDC and our partners would prefer annual assessment of hospitals' practices, CDC has thus far determined biennial assessment to be adequate to characterize the major issues of concern without excessive loss of point-in-time data, in order to minimize the burden as much as possible on survey respondent facilities. CDC's experience since the first mPINC survey in 2007 has illustrated that assessment less than every 2 years would undermine the integrity of the data collected, as it would not be able to fully capture practice changes as they occur in real time, reducing the efficacy of analyses and introducing substantial waste of funding by forcing public health program planning to be less accurate and effective.

The goal of this work is to not only to continue biennial assessment of hospital practices related to breastfeeding as part of CDC's national system for monitoring, but to fully utilize the data gathered to date and provide meaningful results to participating hospitals, CDC, states, and other stakeholders.

Continued full implementation of this national system is instrumental to monitoring progress toward achieving Healthy People 2020 objectives and to reducing disparities in breastfeeding initiation and duration. Further, the biennial mPINC survey has come to serve as a national anchor for improving maternity care practices related to breastfeeding. As such, biennial data from this survey have now become integral elements of activities and initiatives by government partners at the Federal and State levels as well as national and community partner organizations and clinical and public health stakeholders alike. These partners and stakeholders now rely on these data because they are predictable, reliable, and well-suited to unifying communication and analysis of activities across multiple audiences.

Less frequent collection of these data would disrupt not only CDC's work to improve maternity practices related to breastfeeding but that of partners across the U.S. as well, inadvertently undermining their ability to carry out their intended and funded activities.

There are no legal obstacles to reduce the burden.

A.7. Special Circumstances Relating to the Guidelines of 5 CFR 1320.5

This study complies fully with the guidelines of 5 CFR 1320.5. No exceptions to the guidelines are requested.

A.8. Comments in Response to Federal Register Notice and Efforts to Consult Outside the Agency

- A. A 60-day Notice was published in the Federal Register on February 12, 2013, Vol. 78, No. 29, p. 9924. (**Appendix B**). CDC received emails/letters from 28 distinct stakeholders in response (via 31 emails/letters) containing 130 specific comments, including a request for an extension of the comment period, which was granted. The Federal Register Notice of the extension of the public comment period was published on April 22, 2013, Vol. 78, No. 77, p. 23766 (**Appendix B**), effectively extending the time available for commenting by 3 full weeks. During this extension, CDC received emails/letters from 5 additional stakeholders (via 7 emails/letters) containing 48 more specific comments. With one exception, all enthusiastically support this ICR.

Appendix B-1 summarizes responses by stakeholder group, professional credential, level of specificity, and described benefit of the mPINC survey. Six types of stakeholder groups responded: 27% of unique responses were from state/local health departments and 24% were from hospitals. Remaining responses were from individuals working in clinical care relevant to the mPINC survey, community members, community groups, and the International Formula Council (IFC)*. Nearly all included their professional credentials in their response, and two-thirds of those listed more than one professional credential: 70% were International Board Certified Lactation Consultants (IBCLCs), 42% were nurses, and 24% were physicians. Among the remaining professional credentials included, 12% each were dietitians and public health professionals (MPHs). Most commenters submitted comments that were general in scope, though nearly half also submitted specific comments. Nearly all commenters communicated that the mPINC survey is beneficial to the hospitals that participate in it, the next most common comment described benefits of the data gleaned from the mPINC survey, followed by the utility of the mPINC survey to improve hospital policy, and the ability of the mPINC survey to spur participation in and fidelity to the Baby-Friendly Hospital Initiative (BFHI).

A summary of 138 of the 158 specific comments received is provided in **Appendix B-2**. Content analysis of all comments revealed themes articulating different types of benefits of the mPINC survey broken into 11 distinct categories, 8 of which are most effectively characterized as “The mPINC survey is...” (in order of frequency): valuable, useful, important to continue without changes, necessary, motivating, credible, and supportive of BFHI. The remaining categories include suggestions for expanding the scope of the survey, concerns about it, and a series of comments from a community member. All comments received and CDC’s responses are summarized in **Appendix B-3**.

*Manufacturers and marketers of formulated nutrition products, e.g., infant formulas and adult nutritionals, based predominantly in North America. IFC members are:

- Abbott Nutrition (Similac)
- Mead Johnson Nutrition (Enfamil)
- Nestlé Infant Nutrition (Gerber Good Start)
- Perrigo Nutritionals (manufacturer of store-brand infant formulas)

The majority of comments received (94%) specifically requested that the mPINC survey be continued. The public comments requesting continuation of the mPINC survey were thorough and concrete, and most addressed multiple aspects of the data collection, survey design, and utility. Among the comments about continuing the survey, 93% stated concrete ways the survey uniquely helps hospitals improve their own care, 77% cited the unique ability of data from the mPINC survey to spur better and more robust related data collection and analysis, 60% have used mPINC data to improve health care in their own hospital, community, state, and region, 30% shared that participating in the mPINC survey directly resulted in their hospital pursuing Baby-Friendly designation, and 33% use the mPINC survey to make their own decisions for funding and staffing allocations, redesign care protocols, evaluate training plans, initiate collaborations, and improve connections with the outpatient care community.

- B. CDC benefits from ongoing exchange, dialogue, and coordination among all federal agencies whose work involves infant feeding. CDC values this relationship, allowing for review and feedback from sister agencies on the mPINC survey and ensuring synergistic utilization of data gathered from a wide variety of sources. This collaboration is a function of the Interagency Federal Breastfeeding Workgroup, established in 2011 and coordinated by CDC in response to Surgeon General Dr. Regina Benjamin’s guidance in her *Call to Action to Support Breastfeeding*, as follows:

“The federal government needs to play a central role in coordinating efforts to promote, protect, and support breastfeeding. No single federal agency can take full responsibility for breastfeeding because activities occur in so many different agencies, including those devoted to health, agriculture, labor, defense, and education. All of these agencies have roles and responsibilities related to the promotion and support of breastfeeding. The U.S. Department of Health and Human Services could lead an interagency work group to bring together relevant staff to plan, carry out, and monitor initiatives in breastfeeding.”

Although many members of the Interagency Federal Breastfeeding Workgroup had collaborated before the Surgeon General’s *Call to Action*, a benefit of the formalization of the Interagency Federal Breastfeeding Workgroup in 2011 has been recurring meetings among all participating agencies with both structured and unstructured time to discuss both established and emerging issues, among which the mPINC survey is a consistent priority. Relevant staff from the following federal departments and agencies are members of the Interagency Federal Breastfeeding Workgroup:

- U.S. Department of Agriculture: Food and Nutrition Service
- U.S. Department of Defense: Military Health System
- U.S. Department Health and Human Services:
 - ACF: Administration for Children and Families
 - AHRQ: Agency for Healthcare Research and Quality
 - CDC: Centers for Disease Control and Prevention
 - CMS: Center for Medicare and Medicaid Services
 - FDA: Food and Drug Administration
 - HRSA: Health Resources and Services Administration
 - IHS: Indian Health Service
 - NIH: National Institutes for Health
 - OMH: Office of Minority Health
 - OPM: Office of Personnel Management
 - OMB: Office of the Surgeon General
 - OWH: Office of Women’s Health
- U.S. Department of Labor: Wage and Hour Division

- C. A panel of experts in evaluation of hospital maternity care practices in the United States met in Orlando, Florida, on October 30 and 31, 2003, to discuss the future of assessment and monitoring of maternity care practices related to breastfeeding. CDC convened the meeting specifically to identify current research, surveillance, and public health program needs, discuss various monitoring methodologies, identify barriers to data collection, and explore future possibilities for national assessment and monitoring. This was the first such meeting bringing together diverse experts from across the country to help shape a national system of monitoring breastfeeding-related maternity care. The outcome of this expert panel meeting was a strong recommendation on the part of meeting participants to establish ongoing assessment and monitoring of maternity care practices related to breastfeeding among all facilities that routinely provide maternity care services. The final report of this meeting is attached (**Appendix D**).

A draft survey was developed based on recommendations of the Expert Panel at the October 2003 meeting and survey instruments used in past studies, such as the FDA Infant Feeding Practices Study (IFPS), the Maternity Center Association Listening to Mothers Survey, and the CDC Pregnancy Risk Assessment Monitoring System (PRAMS). The surveys used to collect state-level data in states such as California, Pennsylvania, Colorado, Oregon, New Jersey, and New York were also reviewed.

A follow-up meeting with experts was held in Boston, Massachusetts, on October 21, 2004, to discuss the draft survey instrument. Discussion included: (1) feedback on the survey plan; (2) general discussion of the draft survey instrument; (3) question by question observations on the draft survey instrument.

CDC is developing an external panel of experts to consult on longer range planning for CDC’s work to improve hospital maternity care practices related to breastfeeding, and continues to gather feedback from non-CDC experts in the content areas specific to the mPINC survey related to survey administration, content, utility, and potential improvements. Persons consulted about the mPINC survey are listed in Table A.8.B.

Table A.8.B. Non-CDC Experts Consulted

Date Consulted	Name, Title	Agency, Location
2003	Elizabeth Adams, PhD Assistant Professor	Colorado State University Fort Collins, CO
2003	Mary Applegate, MD, MPH Medical Director	NY State Dept of Health Albany, NY
2003-2011	Karin Cadwell, PhD Director	Healthy Children East Sandwich, MA
2003-2011	Andrea Crivelli-Kovach, PhD Director of Community Health	Arcadia University Glenside, PA
2003-2011	Eugene Declercq, MBA, PhD Professor	Boston U. Sch of Public Health Boston, MA
2003-2011	Jennifer Dellaport, RD, MPH WIC Breastfeeding Coordinator	CO Dept of Public Health & Envir. Denver, CO
2003	Ann DiGirolamo, PhD, MPH Research Assistant Professor	Emory University Atlanta, GA

2012	Patricia MacEnroe Executive Director	Baby-Friendly USA Albany, NY
2012	Paula Meier, PhD, RN, FAAN Director for Clinical Research	Rush University Medical Center Chicago, IL
2003	Anne Merewood, MA, IBCLC Director, Research Breastfeeding Center	Boston Medical Center Boston, MA
2003	Barbara Philipp, MD Associate Professor of Pediatrics	Boston Medical Center Boston, MA
2003-2011	Ken Rosenberg, PhD PRAMS Project Director	Oregon Dept of Human Services Portland, OR
2003	Laurie Tiffin, MS, RD Chief-Breastfeeding Promotion Unit	California Dept of Health Services Sacramento, CA
2003-2011	Cindy Turner-Maffei, MA, IBCLC National Coordinator	Baby-Friendly USA East Sandwich, MA
2012	Nancy Wight, MD, IBCLC, FABM Neonatologist	Sharp Mary Birch Hospital San Diego, CA

A.9. Explanation of Any Payment or Gift to Respondents

No payment or gift will be made to the respondents.

A.10. Assurance of Confidentiality Provided to Respondents

This information collection request has received IRB approval. A copy of the approval letter is included as Appendix I.

A. Privacy Act Determination. This ICR has been reviewed by staff in CDC’s National Center for Chronic Disease Prevention and Health Promotion, who determined that the Privacy Act is not applicable.

Because the mPINC survey is administered to hospitals and not to individuals, all of the data provided in the mPINC survey are at the hospital level, related to organizational practices across the entire population under that hospital’s care. Through the screening process, a contact person at each participating hospital is contacted. Minimal information in identifiable form (IIF) is collected from this contact person solely as a means to route delivery of the survey instrument and the benchmark report to that hospital. The IIF collected is: name, title, telephone number, email address, and mailing/FedEx address. CDC collects no data to allow identification of the individual(s) who actually fill out a given hospital’s survey. Although piloting revealed that this often is the ‘point person,’ this is not necessarily the case. As such, the IIF for each hospital’s contact person has no analytic or empiric value in connection to that hospital’s data. It is therefore maintained securely for routing purposes only, and is kept separate from all analytic files.

B. Safeguards. A contractor (currently the Battelle Center for Analytics and Public Health) screens eligible hospitals and gathers hospitals’ data on behalf of CDC. Great care is taken to treat the survey data in a secure manner. Contractor staff receive extensive training in data management and security.

The contractor assigns a unique study identifier code to each respondent hospital.

Although the survey packet containing the questionnaire is addressed to the contact person at that hospital, the completed survey returned to the contractor, as well as the electronic data files containing the survey response data, are identified only by the study identifier code and do not include any names or IIF. Hospitals are informed that data may be used for additional approved research purposes.

Hospitals that choose to complete their mPINC survey online are given a password for access to the contractor's website. All data submitted to the contractor's website travels via secure data sockets and is stored in a database behind the contractor's server firewall. Project files containing survey data are transferred to CDC using secure file exchange or are password protected and access at the contractor site is limited to authorized project staff. Completed paper questionnaires are stored in locked file cabinets.

No IIF or hospital names are ever used in any published reports of this study. CDC presents all survey reports and findings in aggregate so individual hospitals' responses cannot be identified. Data are treated in a secure manner, unless disclosure is otherwise required by law.

- C. Consent. Each hospital receives a cover letter (paper cover letter: **Appendix H-1**, email cover letter: **Appendix H-2**) that provides an overview of the project and requests the hospital's participation. This information is reiterated at the beginning of the actual survey instrument as well (**Appendix H** Facility Survey Instrument—2013 and 2015 mPINC surveys)
- D. Voluntary Nature of Response. Participation in the mPINC survey is completely voluntary. Hospitals are advised of the voluntary nature of response in the cover letter (paper cover letter: **Appendix H-1**, email cover letter: **Appendix H-2**). This information is reiterated at the beginning of the actual survey instrument as well (see **Appendix H** Facility Survey Instrument—2013 and 2015 mPINC surveys)

A.11. Justification for Sensitive Questions

No questions regarding topics that are typically considered to be of a sensitive nature or any other topic of a sensitive nature will be asked in this survey. Topics typically considered to be of a sensitive nature include personal sexual practices, alcohol or drug use, religious beliefs or affiliations, immigration status, and employment history.

We do not anticipate that the respondent hospitals will consider any of the questions about hospital practices to be sensitive, and no hospital has yet raised this concern in any of the previous three iterations of the survey; however, the processes described above have been implemented as further safeguards to respondent privacy.

A.12. Estimates of Annualized Burden Hours and Costs

A.12.A. Estimate of Burden Hours

Respondents are facilities that offer maternity care, i.e., hospitals and birth centers. We base all estimates of numbers of facilities contacted, burden hours, and costs on our data and experiences from fielding the mPINC survey in 2007, 2009, and 2011. Table A.12.A summarizes respondent

burden for two cycles of data collection in 2013 and 2015, annualized over the three years of the current clearance request.

Potential respondent facilities will be screened to confirm eligibility (see **Appendix G**, Screening Telephone Call Script). Approximately 2,570 facilities will participate in initial screening lasting one minute or less (see Part A of the instrument). Of these facilities, 86% (2,200) will be found to be eligible, and will complete the screening process (additional burden of four minutes per respondent; see Part B of the instrument). The total burden per response is 1 to 5 minutes, depending on whether the respondent completes the entire screening call (Part A and Part B) or only the initial portion (Part A).

We estimate that 1,825 facilities will respond to the Facility Survey (see **Appendix H**, Facility Survey Instrument – 2013 and 2015 mPINC Surveys). The burden for each Facility Survey is 30 minutes. The total estimated annualized burden hours are 1,103.

Table A.12.A. Estimated Annualized Burden Hours

Type of Respondent	Form Name		Annualized Number of Respondents	Number of Responses per Respondent	Average Burden per Response (in hours)	Total Burden (in hours)
Maternity Facility	Screening Telephone Call Script	Part A	2,570	1	1/60	43
		Part B	2,200	1	4/60	147
	mPINC Facility Survey		1,825	1	30/60	913
Total						1,103

A.12.B. Estimated Annualized Cost to Respondents

We estimate the total annualized cost to respondents to be \$36,986. We anticipate that staff responding to the Screening Telephone Call and returning the Facility Survey on behalf of their facility will be Registered Nurses or equivalent general medical and surgical hospital employees. The U. S. Department of Labor, Bureau of Labor Statistics¹⁹ estimates their median hourly wage rate at \$33.56 (see **Table A.12.B.** for detailed information).

Table A.12.A. Estimated Annualized Cost to Respondents

Type of Respondent	Form Name		Annualized Number of Respondents	Number of Responses per Respondent	Average Burden per Response (in hours)	Median Hourly Wage	Annualized Cost to Respondents
Maternity Facility	Screening Telephone Call Script	Part A	2,570	1	1/60	\$33.56	\$1,438
		Part B	2,200	1	4/60	\$33.56	\$4,924
	mPINC Facility Survey		1,825	1	30/60	\$33.56	\$30,624
Total Estimated Annualized Cost to Respondents=							\$36,986

A.13 Estimate of Other Total Annual Cost Burden to Respondents or Record Keepers

The data collection entails no additional costs to respondents or record keepers.

A.14 Annualized Cost to the Government

The surveys were designed in collaboration with the Battelle Center for Analytics and Public Health. Battelle will implement the 2013 mPINC survey through a contract with CDC. The contract for the 2015 mPINC survey has not yet been awarded.

Each cycle of data collection and analysis takes approximately eighteen months to complete (see Estimated Timeline – Table A.16.A) with reporting and benchmarking occurring in the last six months following data collection. The estimated annualized cost to the government to conduct two biennial surveys including administration, reporting, and benchmarking is \$426,167. The annualized CDC costs are estimated as follows: Salary \$144,000; Fringe (25 %); Travel \$2,000; Administration \$1,500. The cost of the Battelle contract (CDC Contract No. 200-2008-27956, Task Order # 21) for the 2013 survey is \$417,665 which covers the cost of survey administration, distribution and collection, data entry, coding and cleaning, data analysis, and reporting and benchmarking, and we expect that a task order with similar costs will be issued for the 2015 survey. The estimated annualized cost to the government is \$426,167.

Table A.14. Estimated Annualized Cost to the Government

Type of Cost	Annualized Amount
Contractual Costs	\$278,667
CDC Salaries	\$144,000 (includes fringe benefits)
Travel	\$2,000
General and Administrative	\$1,500
Total Annualized Cost to the Government	\$426,167

A.15 Explanation for Program Changes or Adjustments

This Reinstatement with changes ICR reflects a reduction in the number of respondents and a net reduction of 583 burden hours (from 1,686 in 2011 to an adjusted annualized estimate of 1,103 burden hours for 2013-2015). Reductions are primarily due to the effects of annualization, as described below.

The previous OMB approval covered one cycle of data collection in 2011 (OMB No. 0920-0743, exp. 12/31/2011). In the current Reinstatement with changes ICR, we request OMB approval for a period of three years to support two cycles of data collection in 2013 and 2015. Although the estimated number of participating facilities is almost identical for each cycle of data collection (2,690 facilities in 2011; 2,738 facilities in 2013; and 2,738 facilities in 2015), the process of annualization results in “apparent” reductions in both the annualized number of respondents and the total estimated annualized burden. However, there is only a minor adjustment to the estimated number of facilities participating in 2013 and 2015, and there is no change to the estimated burden per response (30 minutes).

Similarly, in 2011 we estimated that 3,989 facilities would participate in the screening process. For 2013 and 2015, we estimate that 3,856 facilities will participate in screening during each

data collection cycle. In addition to the slight absolute decrease in screened respondents, annualization results in an apparent decrease in the annualized number of respondents.

In this Reinstatement with changes ICR, we also distinguish between screening burden for eligible facilities (average total burden per response of 5 minutes), and screening burden for ineligible facilities (average burden per response of one minute). The previous ICR used a simple 5 minute estimate for all respondents who participated in the screening process. The result is a net decrease in total estimated annualized response burden for screening, although there are no substantive changes to the screening process.

As noted, there is no change to the estimated burden per response for participating in the mPINC survey (30 minutes). However, in previous cycles of mPINC we distributed two versions of the survey instrument: one for hospitals and one for birth centers. There were minor variations in wording for a few questions that reflected minor differences in the two types of facilities. In 2013 and 2015, one version of the instrument will be distributed to both types of facilities, and where appropriate, question wording has been revised to a multi-purpose format. For example, instead of using two versions of the instrument that reflect different position descriptions within hospitals (e.g., “nurses”) and birth centers (e.g., “birth attendants”), the revised instrument uses a modified question format that is inclusive of both position descriptions (“nurses/birth attendants”). There are no substantive changes to survey content.

A.16. Plans for Tabulation and Publication and Project Time Schedule

A.16.A. Project Time Schedule

Table A.16.A. Project Time Schedule

Activity	Schedule
<i>2013 Survey</i>	
Identify hospitals to be surveyed	Summer 2013
Conduct screening telephone calls	Late Summer/Fall 2013
Conduct survey	Late Summer/Fall 2013
Data coding, entry, and cleaning	Winter 2014
Data analysis	Spring 2014
Create and distribute final reports, manuscripts, benchmarking	Spring/Summer 2014
<i>2015 Survey</i>	
Identify hospitals to be surveyed	Summer 2015
Conduct screening telephone calls	Summer 2015
Conduct survey	Late Summer/Fall 2015
Data coding, entry, and cleaning	Winter 2016
Data analysis	Spring 2016
Create and distribute final reports, manuscripts, benchmarking	Spring/Summer 2016

A.16.B. Publication Plan

As with prior surveys, upon completion of the data analysis, a separate technical report (facility benchmarking report) is prepared for each hospital and each state. Each report describes the objectives of the study, methods of survey administration (including the response rates to the survey), and analysis results. (See **Appendix C-2** for the most recent facility benchmarking report) The results of the survey are also disseminated to stakeholders through the publication of manuscripts in peer-reviewed journals.

A.16.C. Analysis Plan

A.16.C.1. Calculation of Sampling Weights

As a census of all hospitals providing maternity care in all states and territories, weighting of the survey data need only be performed to reduce bias due to patterns of non-response. If non-response is low, or non-differential, the analyses will be unweighted. The extremely high response rate to the prior surveys makes weighting of new data unlikely to be necessary.

If it is necessary to adjust for non-response we will use sample weighting class adjustments. The variables that are the best candidates for the formation of weighting classes are those variables that are: (1) available for respondents as well as non-respondents; (2) highly correlated with the survey variables; and (3) highly correlated with the likelihood of non-response. Variables available for the non-response analysis will be limited to geographic location, variables obtained through the screening telephone interview (e.g. number of satellite clinics), and variables available from the American Hospital Association's Annual Survey of Hospitals (e.g. ownership type, number of obstetric beds, number of births).

These weights will be applied to all analyses described below if necessary. By using weights to adjust for non-response we will obtain estimates that will be unbiased and generalizable to hospitals providing maternity care.

For most analyses, the unit of analysis will be the facilities. However, for some analyses, it will also be of interest to estimate the number of births in the country experiencing different feeding related practices. For these analyses, the tables will be weighted by the number of births in the facility in the previous year.

A.16.C.2. Data Analysis

The survey data will be analyzed using standard univariate and bivariate descriptive statistics (e.g. means, frequencies, crosstabs) and multivariate analyses. Trend analyses utilizing data from all available surveys will be completed as well. The following types of variables are examples of data that will be examined:

Hospital practices: Survey items related to practices address staff training regarding breastfeeding-related maternity care practices, prenatal classes that include breastfeeding instruction, routine newborn procedures, breastfeeding instruction and lactation support, infant supplementation and feeding schedules, rooming-in, and information provided at discharge.

Hospital policies: Two items in the mPINC survey allow hospitals to describe ways their hospital

uses their own existing internal hospital policies to support their patients' intentions to breastfeed and how they go about informing their own staff about these issues.

Hospital characteristics: These items include total number of live births in the past year, total number of obstetric beds, staffing, number of deliveries by cesarean-section, teaching hospital, ownership, geographic location of hospital including urban or rural and state.

Composite indicator variables will be constructed using multiple survey questions to reflect the extent to which hospitals and birthing centers have policies and practices associated with breastfeeding initiation and continuation. For each composite indicator variable, we will create a score from 0 to 100, with higher scores reflecting more consistent application or more positive policies and practices.

See **Appendix E** for the algorithm used for scoring the mPINC surveys.

A.16.D. Table Shells

Selected table shells are located in **Appendix F**.

Benchmarking analyses

For each composite indicator, reports are generated to compare maternity care facilities by state and region.

Each hospital participating in the study receives an analysis of its own scores on these indicators compared to others of a similar type. Example of such reports are shown in **Appendix C-2** and **Appendix C-4**.

Univariate analyses

Univariate distributions and summary statistics are generated to describe hospital characteristics across the U.S. This is an essential first step in describing the sample and generalizing the findings to the respondent universe.

Univariate analyses are conducted on items in the remaining sections of the questionnaire and constructed indicator variables in order to describe hospital maternity care practices and policies related to breastfeeding.

Bivariate analyses

Bivariate analyses are conducted to: 1) obtain hospital subgroup percentages or means on survey measures, 2) test for subgroup differences on those measures, and 3) test for associations between hospital characteristics and practice and policy measures. In planning and conducting these analyses, hospital characteristics (e.g. number of births, cesarean section rates) can be referred to as independent variables. Practice (e.g. 24-hour rooming-in, medical record documentation of intention to breastfeed), and policy (e.g. having a formal written policy or policies on breastfeeding) can be referred to as dependent variables.

Bivariate analyses are also conducted to examine the variation in hospital scores by hospital characteristics such as having a level 3 neonatal intensive care unit, being a teaching hospital, and geography (state and region). Table Shells 1 and 6 are examples of bivariate analyses of facility scores. Table Shells 2-5 are examples of bivariate analyses of the first dimension of maternity care – labor and delivery. These tables are repeated for all of the other dimensions of

maternity care.

Trend analyses

Univariate and bivariate analyses are also carried out to evaluate changes in hospital practices over time. For hospitals that responded to previous iterations of the surveys, a comparison of scores given in each year of participation can be done to show where there have been improvements. National reports will examine trends overall and broken down by facility type and location.

A.17. Reason(s) Display of OMB Expiration Date is Inappropriate

No exemption from display of expiration date is requested.

A.18. Exceptions to Certification for Paperwork Reduction Act Submissions

No exceptions to certification are sought.

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