

MCH Innovations Database – Best Practice Submission Form



This form is for anyone interested in submitting a Best Practice to the MCH Innovations Database. Please complete all sections of this form unless otherwise indicated. For additional materials to support your submission, visit https://www.amchpinnovation.org/application-process/. If you are unsure if your practice is considered Best, use our Minimum Criteria Checklist or contact AMCHP for support.

A Note About Health Equity

To ensure all practices featured in the database contribute to improving health equity as an integral component of overall program sustainability, we have aligned our criteria and questions with the Racial Equity Impact Assessment, Is My Implementation Practice Culturally Responsive? Checklist, Foundational Practices for Health Equity, Race Equity and Inclusion Action Guide, and the MCH Leadership Competencies.

A Note About Equitable Language

AMCHP has recently made a formal commitment to anti-racism and racial equity, and we are working to operationalize this commitment throughout our organization. In part, we are focusing on the language we use and are committed to refraining from using terms that further perpetuate narratives that place and describe communities of color as deficit populations, (i.e. using the terms 'vulnerable', 'at-risk', or 'low-income' to describe a particular racial or ethnic group). Use of this language implies there is something inherently flawed in that community and places blame on the individual or a particular racial/ethnic group and not the system that has failed to invest in creating an optimal environment for positive health outcomes. Language should be respectful of communities and identify the system as the problem. We encourage you to consult our Glossary and the CDC's glossary when responding to the questions in this form to help ensure that your language centers rather than others the populations you work with. Note: This document is not to be shared and is intended to inform Innovation Hub materials only at this time.

A Note About Citations

Citations can be included throughout the application as necessary and appropriate but are not required or expected as they would be for submissions to peer-reviewed journals.

For submission support or for questions about this submission form or the submissions process, email evidence@amchp.org.

Best Practice Submission Overview

What is the name of your practice?	Count the Kicks	
Was this practice submitted previously to the MCH Innovations Database (formerly Innovation Station)?	 ☐ Yes, and it was accepted as a/an practice. ☐ Yes, but it was not accepted. ☒ No 	
What issues does your practice address? Select all that apply	 □ Access to Health Care/Insurance □ Family/Youth Engagement □ Telehealth/Emergency Preparedness □ Primary/Preventative Care □ Health Equity □ Health Screening/Promotion □ Mental Health/Substance Use □ Nutrition/Physical Activity □ Injury Prevention/Hospitalization ☑ Preconception/Reproductive Health □ Service Coordination/Integration 	
What populations does your practice serve/impact? Select all that apply	 ☑ Prenatal/Infant Health ☐ Child Health ☐ Children and Youth with Special Health Care Needs ☐ Adolescent Health ☑ Women's/Maternal Health ☐ Cross-cutting/Life Course ☐ Families/Consumers ☐ Health Care Providers 	
Is this practice supported by Title V either by direct funding or staff time? Note: This question is for AMCHP's reporting purposes only and does not affect your ability to submit.	⊠ Yes □ No	
Best Practice Submission Questions		

If your practice is accepted, information from this section will also be included in the handout that will be featured in our database. <u>Please aim to limit the responses to the submission questions to 17 pages total.</u>

Practice Description

1) As if you were explaining your practice to someone who has never heard of it before, provide a high-level description which also includes each of the following:

- The need your practice addresses, how it was identified (this does not need to be a formal needs assessment), any sources of information support this need and how you used/applied this to inform your practice development, and who was involved in the identification process
- The **key population** it impacts
- What it intends to accomplish
- Any relevant **background information** such as the history behind the development of the practice and/or any principles or values that support it

Please keep your response to approximately 1 page or less.

Count the Kicks is an evidence-based stillbirth prevention campaign that teaches expectant parents the method for and importance of tracking their baby's movement in the third trimester of pregnancy, with the goal of lowering the country's stillbirth rate and saving babies across the nation. Our mom-focused campaign offers home visitors, maternal health providers and our entire community a way to discuss the impact of stillbirth in an informative and empowering way. Count the Kicks is the leading U.S. resource for tracking fetal movement in the third trimester of pregnancy.

The core components of the *Count the Kicks* campaign include the FREE *Count the Kicks* app, which has been downloaded more than 125,000 times in all 50 states and more than 140 countries, and printed educational materials, including posters, brochures, and app reminder cards, that are available for maternal healthcare providers and social service agencies across the U.S. to share with the expectant parents they serve. Thanks to the generous support of our state partners, *Count the Kicks* educational materials are available for free to providers in 11 states, including Florida, Ohio, Illinois, Iowa, Indiana (St. Joseph County), Kansas, Missouri, Nebraska, North Dakota, South Carolina, and West Virginia. These materials are available at a low cost to providers in other states. *Count the Kicks* also provides trainings for healthcare workers and community partners and has a CE Training available.

The Count the Kicks campaign is a project of Healthy Birth Day, Inc., a 501(c)(3) organization dedicated to the prevention of stillbirth, that was founded in 2008 by five Iowa moms who all lost daughters to stillbirth or infant death in the early 2000s. After being connected through friends and pastors, a strong bond quickly formed between the women, and they decided to channel their grief into stillbirth prevention efforts to keep other families from facing the pain of losing a baby. Their efforts created the Count the Kicks campaign, which is based on public health research in Norway that demonstrated a 30% reduction in stillbirth by teaching pregnant women how to monitor fetal movement during the third trimester of pregnancy by doing kick counts on a daily basis.

Research shows that a change in baby's movement can be a sign of potential problems and is an indication that a baby should be checked by a provider. Many doctors believe fetal movement is a vital sign and should be monitored closely in the third trimester. When expectant moms use the *Count the Kicks* app daily in the third trimester of pregnancy, they will get to know what's normal for their baby (how long it takes their baby to get to 10 movements each day), so they can call their provider right away if there is a change.

According to the Centers for Disease Control and Prevention, we lose approximately 24,000 babies to stillbirth every year in America. Statistically, it means 1 out of every 167 pregnancies ends in stillbirth, with a disproportionate number of babies born still to African American, Hispanic, and Native American women. According to the CDC, a black woman is more than twice as likely to lose her baby to stillbirth, statistically a 1 in 94 chance of losing a baby.

In the first decade of *Count the Kicks* in Iowa when our non-profit organization worked closely with the Iowa Department of Public Health, the state's stillbirth rate decreased nearly 32% while the rest of the country remained relatively stagnant. Iowa went from the 33rd worst stillbirth rate to one of the lowest in the nation. If every state implemented our *Count the Kicks* program, we have the potential of saving 7,500 babies from preventable stillbirths each year.

Watch how Dana Morrison used Count the Kicks to get her daughter Nahla here safely.

The Count the Kicks app acts as an early warning system for expectant parents, giving them the peace of mind to know when to stay home and when to contact their provider. Over the years we have built a community of moms who are in tune with their bodies and their babies. Our founders started out with the goal of saving just one baby, and 12 years later we have stories from more than 70 moms in 19 states and three countries who have reached out to share how Count the Kicks helped to save their baby. All because five women --- armed with research --- used their strength and determination to prevent other families from enduring what they went through. To learn more about our founders and their stories, please view the following videos:

- 1. Iowa reaches lowest stillbirth rate on record.
- 2. Co-Founder Janet Petersen, in her own words
- 3. Co-Founder Tiffan Yamen, in her own words
- 4. <u>Co-Founder Kerry Biondi Morlan, in her own words</u>
- 5. <u>Co-Founder Jan Caruthers, in her own words</u>
- 6. Co-Founder Kate Safris, in her own words

It is also important to recognize the dads as well that have endured the loss of stillbirth. As you know, stillbirth effects the entire family unit and 40% couples are likely to get a divorce. Please view this important <u>video</u> that the Founding Dads of *Count the Kicks* completed in honor of Father's Day this year.

Finally, please see below for images of our kick counting app and images of our materials for your reference:







Core Components and Activities

Core components are essential practice elements which are both observable and measurable. These may also be referred to as essential functions, practice elements, or active ingredients. Collectively, they help articulate the underlying logic of your practice (why it does/should work and for whom) and lead to intended outcomes. Click here to watch a short video explaining core components in more detail.

Example: The goal of our program was to improve the number of perinatal depression screens among OB/GYN providers. We did this by conducting a yearlong practice improvement program for OBGYN practices across the state. The core components of this program included virtual training by a nurse educator, provision of a referral sheet tailored to the local area for positive screened women, and follow-up with practices by our program manager.

2) What are the core components that indicate your practice is "in place"? Write a paragraph describing these components.

Response:

The core components of the Count the Kicks campaign include the FREE Count the Kicks app, which has been downloaded more than 125,000 times in all 50 states and more than 140 countries as of January 2021, and printed educational materials, including posters, brochures, and app reminder cards, that are available for maternal healthcare providers and social service agencies across the U.S. to share with the expectant parents they serve. Thanks to the generous support of our state partners, Count the Kicks educational materials are available for free to providers in 11 states; Florida, Ohio, Illinois, Iowa, Indiana (St. Joseph County), Kansas, Missouri, Nebraska, North Dakota, South Carolina, and West Virginia. These materials are available at a low cost to providers in other states by visiting CountTheKicks.org. The Count the Kicks app acts as an early warning system for expectant parents, giving them the peace of mind to know when to stay home and when to contact their provider. Over the years we have built a community of moms who are in tune with their bodies and their babies. Count the Kicks also provides trainings for healthcare workers and community partners and has a CE Training available.

3) Complete the table below for each core component you identified in question #2, including listing relevant activities and any operational details. You can add more rows if needed. Two example core components are also provided.

Core Component	Activities	Operational Details
Free mHealth app	Daily kick counting session where mom taps a footprint every time, she feels a kick, jab or roll. Daily strength measurement where mom will keep track of how strong baby's movements are during each session. Mom sets up daily reminders to remember to count kicks around the same time every day.	 The app times how long it takes to get to 10 movements. As soon as mom hits the footprint to begin her session a timer starts. After mom gets to 10 movements a chart is shown that is easy to understand and shows mom how long each session is taking. After 5 sessions mom will start to see a trend of baby's normal movement. The ability to see 3 weeks' worth of data on a chart is key and empowers mom to truly understand and know what is normal for her baby (and a red flag if something changes). Push Notifications are set up, so mom never forgets to count.

		 Ability to send session history to a provider eother via text or email.
Customized Count the ikcs Materials and translations of materials and app if applicable	 Count the Kicks offers a full complement of printed educational materials that healthcare providers and social service agencies across the U.S. may use to implement Count the Kicks in their offices and birthing hospitals. The resources offered help start the kick counting conversation. Using the contact list of providers in the state, Count the Kicks implements a mail and call campaign. 	 States provide logo to Count the Kicks to co-brand materials. Once state approves digital proofs Count the Kicks will print brochures, posters, and app cards. Materials are housed in a secure fulfillment center in the Midwest. State approves launch letter and press releases. Working with our Communications Specialist on media lists if needed to send out launch press release. State is provided with talking points with state specific stillbirth data and additional press release templates to be used throughout the year. Share free educational materials during all trainings and share orders with state partner.
Trainings	Provide trainings to healthcare professionals in state. This could be in the format of live and in person, live webinar(s), or Continuing Education Online Courses.	 No matter what type of training selected all participants will learn the following: How to have the kick counting conversation with expectant parents. How to download and use the Count the Kicks app. The free tools and resources available to them. How to best utilize the free tools and resources available to them. What to say or do if an expectant mom tells them they are experiencing reduced fetal movement. The most frequently asked questions related to kick counting and how to answer them. The powerful stories of what happens when expectant parents learn to kick count and how they can use that knowledge to help save their baby.

Practice Foundation

4) What theories, research, standards/guidelines, frameworks, programs etc. did you use to develop and/or implement your practice?

Response:

We did not invent kick counting, but we have developed evidence-based tools and resources to help health providers have the kick counting conversation with expectant parents. Doctors have known for decades that tracking fetal movement is important and this 2007 study from Norway proves its effectiveness, with a 33 percent reduction in the stillbirth rate in the cohort of expectant mothers who were educated on tracking fetal movement. Through this research, and medical guidance from Iowa providers, our founders created the Count the Kicks public health campaign. Another research study stated that "Maternal ability to detect clinically important changes in fetal activity seemed to be improved by fetal movement counting." We know that tracking fetal movement is research-based and a best practice for all pregnant women.

Research also states that "Tracking fetal movement is a non-invasive way for expectant parents to monitor their baby's health in the third trimester of pregnancy ... babies can be saved when expectant parents are educated on getting to know their baby's normal movement pattern starting at 28 weeks and to speak up if they notice a change." ¹Additional research articles on the importance of tracking fetal movement show that tracking fetal movement has also helped identify fetal growth restrictions. Fetal movement monitoring only enhances the chance that mom will have a better birth outcome. With the rise of maternal mortality, we know that being aware of something going on with your baby can help to alert mom and her provider to other issues that might be going on, such as preeclampsia, placental abruptions and umbilical cord complications. Maternal Mortality and stillbirth go hand in hand, and we have the tools to help empower moms to speak up if they notice a change in what is normal.

To view the above-mentioned research and multiple research studies on the importance of fetal movement monitoring please visit the Research page on our website.

There are many factors researchers have indicated that lead to the disparities that persist in stillbirth but ultimately until we address systemic racism and implicit bias the maternal mortality and stillbirth rate in America will continue to rise.2

Therefore, we work to provide culturally competent educational materials; our app is available in 12 languages and our staff and Board of Directors are trained in implicit bias and anti-oppression. We are currently working with health systems in our state to ensure all health workers are also trained in implicit bias and anti-oppression --- and are taking it a step further to investigate with them the barriers that women of color face in accessing OBs, midwives and doulas early in pregnancy to get critical preventative care. Research shows women of color disproportionately visit emergency rooms or OB emergency departments as a means for primary care instead of utilizing an OB, midwife, or primary care provider. It is estimated that one-third of emergency visits by women of color during pregnancy could be addressed if they had access to a primary care provider or OB. In 2021, we will create a campaign that connects expectant women of color to key prenatal providers and preventative care in our area by addressing the roadblocks that have been created. When proven successful, we hope to implement the campaign in all 50 states.

We also address SDoH by working with several key organizations that focus on SDoH. The Iowa Aces Organization focuses heavily on Adverse Childhood Experiences (ACEs). ACEs are incidents that can create a toxic level of stress for a child. Children from birth to age 1 are two times more likely to suffer abuse than any other one-year age cohort. We also address SDoH through our work with the One Economy workgroup here in Iowa. Our organization participates in the One Economy Health Workgroup, which works to eliminate racial, economic, and other disparities in the African American community by directly addressing five key areas: Employment, Financial Inclusion, Education, Housing, and Health. We know to get more babies of color here safely, and for them to have promising futures, they need the very best start. Here's part of the solution:

- 1. America needs to create a pathway to produce more doctors, nurses, midwives, and doulas of color.
- 2. Health care providers need to listen to and address the concerns of Black women at every visit.
- 3. America needs a health care system that invites all Black women to seek affordable, quality care.

The experiences of America's Black expectant mothers must reflect the better world they deserve to live in. At Healthy Birth Day, Inc., our work to reduce the racial disparities that persist in birth outcomes started by listening to women of color. We continue to listen and learn from them, to center women of color in our campaign and to amplify the stories of people like Rev. Stephaney Moody who helped save her granddaughter Luna and leads our faith-based efforts with Black houses of worship in our home state of lowa. We are intentional with outreach to communities of color through campaigns like Feel the Beat, which shows a strong Black couple who saves their baby by paying attention to her

¹ Tveit JV, Saastad E, Stray-Pedersen B, et al. Reduction of late stillbirth with the introduction of fetal movement information and guidelines - a clinical quality improvement. BMC Pregnancy and Childbirth. 2009;9:32. DOI: 10.1186/1471-2393-9-32.

² Worcester Sharon. The American maternal mortality crisis: The role of racism and bias. https://www.mdedge.com/obgyn/article/221705/obstetrics/american-maternal-mortality-crisis-role-racismand-mortality-crisis-racismand-mortality-crisis-raci bias May. 5 2020

movements and speaking up when they notice a change. We hope to be a part of the solution, but we do not have all the answers, which is why we look toward partner organizations and women of color to lead us, like our friends at the Black Women's Health Imperative. We elevate and center voices, work within a community coalition to lead and facilitate change, and to create system level engagement.

Practice Collaborators and Partners

For the purposes of this submission, AMCHP considers a collaborator or partner to be a person or organization who has a vested interest in the success of your practice. This can include but is not limited to practitioners/those implementing the practice, those who will be impacted by the practice, state agencies, and those with lived experience related to the need the practice is addressing (community members, families, and youth).

5) Who are your collaborators/partners AND how are they involved in decision-making throughout practice processes such as development, implementation, quality improvement, and evaluation? Please indicate if each collaborator/partner has lived experience related to your practice focus or reflects the community/key population impacted by your practice.

Collaborator/Partner	How are they involved in decision-making throughout practice processes?	Does this collaborator/partner have lived experience or come from a community/key population impacted by the practice? Please explain your answer.
Medical Advisory Board (MAB)	Our MAB consists of 11 individuals ranging from doctors to midwives to childbirth educators. Members on our MAB are implementing our <i>Count the Kicks</i> campaign in their office. This means not only do they put up our educational materials and hand the brochures and app cards out, but they are practicing motivational interviewing techniques and talking to their patients about fetal movement. They are discussing <i>Count the Kicks</i> and the app in the 3 rd trimester. One of our MAB is a childbirth educator for one of the largest hospital systems in the state, MercyOne. She has trained all her other educators on <i>Count the Kicks</i> and they all include it in their classes for parents. We use the MAB to guide our programmatic work and to inform us on changes to prenatal care, especially during Covid. To view our Medical Advisory Board Members please visit this webpage.	
State Partnerships (GA, AL, MS)	We work with 11 states currently and have several other states interested in our campaign such as Georgia, Alabama, and Mississippi. Our goal is to bring <i>Count the Kicks</i> to all 50 states, to remove the cost barrier of ordering material, to be trained	

on the importance of fetal movement monitoring and how to talk to expectant parents and to shine a light on stillbirth and stillbirth prevention. Our state partners aid us in implementing our campaign and it is because of our partnership and work with states that we are able to have things like education in Haitian-Creole and Marshallese, or connections to FIMR groups across the nation. Networking, building data, providing education, and creating systemic change is what we do with our state partners.

We have a strong relationship with:

- Iowa Department of Public Health
- Florida Department of Health
- Ohio Department of Health
- South Carolina Department of Health and Environmental Control
- Nebraska Perinatal Quality Improvement Collaborative
- West Virginia Department of Health and Human Resources
- Missouri Department of Health and Senior Services
- Kansas Department of Health and Environment
- North Dakota Department of Health
- Fetal Infant Mortality Review Program, St. Joseph County, Indiana

App Users

We surveyed all our Count the Kicks app users in August to understand what they like and/or did not like about the app. This helps understand our users and look for potential funding to make any necessary updates. Along with surveying our app users we survey all the individuals that have ordered materials in the last 12 months and held focus groups with three sets of people.

Yes, app users are expectant parents who come from lived experiences and are who the app is designed to reach.

Partner Agencies

We also have strong partnerships with the Black Women's Health Imperative, Mahmee, CelebrateOne in Ohio, Des Moines University, the Harkin Institute to name a few. We develop and partner with agencies like those mentioned here

Yes, these partner agencies work directly with expectant women in their states.

because they work directly with expectant women in their states, and we want to educate and empower not just individuals but also organizations.

Ambassadors

One of the most important stakeholders are our Ambassadors, a trained group of volunteers consisting of 36 powerful



Yes, these women are our boots on the ground in their home states. Many of these women are loss moms, like Kari Davis in Ohio or Emily McConnell in South Carolina. Or they are baby save moms, who found out about Count the Kicks through a provider, friend or even on social media and contacted their provider about to reduced fetal movement.

6) How, if at all, has your organization created structures and processes for meaningful participation of these stakeholders? Please include any tools you have used if relevant.

Response:

We have sample Memorandum of Understandings that we use with other organizations such as Mahmee and Black Women's Health Imperative that help outline exactly what we expect from our partnership with one another. We also have several organizations that like to share our information and education on their own websites, so we have created a Licensing Agreement for situations like that. We have a job description for our Medical Advisory Board members. Because our hallmark tool being our app, we need to ensure that we have the very best minds and input working on the app, which is why we are working to create a Tech Advisory Board to aid staff in updates to the app and testing of the app.

Finally, our Ambassador program has a comprehensive structure in place that includes step-by-step guide for staff when onboarding new Ambassadors as well as a guide for the new Ambassador. These trained volunteers are required to fill out an agreement to adhere to our Best Practices, a confidentiality agreement, to complete our CE Training and are provided with a toolkit of resources, including digital and printable resources.

The structure we have in place for our Ambassador program has truly allowed for meaningful participation and impact. Without our Ambassadors we would have never made some of our other partnerships happen. For instance, our Ambassador in California connected us with Mahmee, which delivers data-driven care coordination and personalized support to new moms, everywhere. Per their website, "Moms and babies are falling through the cracks of our fragmented healthcare system. Preventable issues are not being caught fast enough because patient data is siloed, making collaboration across specialties difficult." It is through this new partnership brought to us by our California Ambassador that we will be linking Mahmee users into our Count the Kicks app. A new and exciting development with a like-minded organization. Mahmee is the glue that connects the maternal and infant health care ecosystem together and fills in the gaps in care.

We also have utilized our stakeholders, specifically our Medical Advisory Board, in the creation of our new program called Count the Kicks Academy for Providers and Count the Kicks Academy for Parents. Once again, using research and best practices we created to telehealth pieces so that providers and parents had everything they needed regarding Count the Kicks at their fingertips. This means quick access to videos, education, data, FAQ and more, which is especially important during a time when more and more prenatal appointments are getting stretched out or are virtual completely. To view the Count the Kicks Academy for Providers click here, and to review the Count the Kicks Academy for Expectant Parents click here.

Evaluation Data

AMCHP recognizes many forms of evaluation as valid methods for showing your practice is effective. While there is a tendency to only consider using experimental (randomly assigning people into experimental and control groups) or quasi-experimental evaluation designs (use of a comparison group), AMCHP values other methods which include, but are not limited to, pre-post assessments, collecting and sharing the experiences of participants/those impacted by the practice (testimonials), and qualitative data from focus groups and key informant interviews with impacted populations and communities.

7) Describe your overall evaluation design, including data collection methods.

Response:

We use a variety of metrics and tools to help collect our data. Our largest source of data is through a system called Tableau. A data scientist on our Board of Directors created a Tableau platform for us to measure everything from app downloads to demographics of our app users to materials ordered to zip codes of material order locations. It is through this online data system that we can track by state and can drill down to the county and zip code if we need too.

We also work with our app developers, QCi, to set up an online Admin Portal system where we can track app users, control daily messages and track downloads by language.

The reduction in our country's stillbirth rate is the most important outcome we measure. As important as that data is there are several other outcomes, we measure to demonstrate the effectiveness of the *Count the Kicks* program.

- 1. Number of *Count the Kicks* app users (currently over 125,000 world-wide)
- 2. Number of Count the Kicks app users downloading the app in a language other than English (close to 2,000)
- 3. Number and percentage of non-white Count the Kicks app users
- 4. Survey of Count the Kicks app users on their birth outcome (From Nov. 2019- October 13, 2020, 3,575 users have filled out the survey)
- 5. Star rating in the iOS and Google Play Store of the free Count the Kicks app (iOS is 4.7-star rating with 2,500 ratings and Google is at 4.3 with 340 reviews).
- 6. Number of educational materials distributed and the number of pieces, including the number of unique orders, broken down by zip code. (1.6 million)
- 7. Number of state contracts (11)
- 8. Number of babies save stories (75 known baby saves; we only hear about these when mom contacts us)

Those are few of things we measure on a quarterly or yearly basis. We are also working on two research projects.

- 1. The first research project we are working on with Des Moines University and the Harkin Institute. Although we are not able to share everything, yet we can share the following:
 - a. App supports healthy pregnancy and increased knowledge
 - b. Demonstrates effectiveness of an mHealth app in pregnancy to track fetal movement

- c. Benefits extend to family members as well as the mother
- d. App data used to facilitate care seeking and communication with health care providers

The 2nd research project is with a researcher from the United Kingdom. He will be taking data from Iowa Department of Public Health to review the stillbirth rate decrease in Iowa in the decade since the inception of Count the Kicks and the correlation or trend between the decrease and our stillbirth prevention campaign. He will also analyze smoking rates in lowa, obesity rates etc. to determine trends in stillbirth decrease or increases over time in Iowa.

For the data we receive and gather from Tableau and our app metrics we review that internally. That data is used anecdotally and for states and partners to track increases and help measure the success of things like a social media campaign.

For the 1st research project, the data was analyzed as follows per our Primary Investigator Dr. Pamela Duffy's notes: "The study was designed so that the app user tracking data could be matched with the responses to a survey about the mother's characteristics and birth outcomes. App users were those women who downloaded a free mobile app "Count the Kicks" and agreed to sharing their kick counting data. Survey responses were collected in SurveyMonkey and consisted of Multiple choice, yes/no, and open-ended questions.

The research was conducted in three phases. During Phase I, the survey was developed, and pilot tested. In Phase 2, the revised survey was deployed to 19, 214 women who had due dates in 2017. The response rate for Phase 2 was 1.37% or 264 responses. While this is considered a good response for email surveys according to marketing consultants, additional responses were desired for analysis. During Phase 3, additional follow-up questions on pregnancies in which the app user did not use the Count the Kicks app were added, and the survey was sent to a total of 51,224 app users with due dates from 2015 through 2019. The response rate in Phase 3 was 2.34% or 1,199 participants. All phases of the project were approved by the Des Moines University Institutional Review Board and by Drake University through a cooperative inter-institutional agreement."

The 2nd research study the data will be analyzed several ways that are currently being determined through an MOU. We believe through qualitative and quantitative; our researcher and his data statistician will review all the data we are able to share with him through Iowa Department of Public Health and our own data.

8) Provide evaluation data that demonstrate an improvement in outcomes for your key population. Include data that demonstrate any impacts your practice had on addressing health inequities and systemic oppression that exist within your key population.

Response:

The preliminary findings we can share publicly regarding our research study with DMU and The Harkin Instituted are limited, but we hope to be able to share more by the end of the year or early 2021.

The app allowed the women to view their historical kick counting data. From the survey responses, overall, 69% reported that the app helped them acquire knowledge about their baby's movements. 74% of participants who consulted a health care provider when they were concerned with a change in the baby's normal movement pattern were more likely to do so for decreased fetal movement. There was a statistically significant difference for pregnancy for which she used the app versus some other pregnancies where Count the Kicks was not used. Preliminary results appear to show a reduced rate of stillbirth in the pregnancy in which they used the app compared to pregnancies in which she did not.

Although we do not have research yet showing the direct correlation of our campaign directly lowering the stillbirth rate in Iowa, we do have fetal death data that does in fact show a decrease from 2008 to 2018 by nearly 32% in the fetal

death rate while the rest of the country has remained stagnant. We are most proud of the data that shows lowa's African American stillbirth rate was reduced by a promising 39 percent in the first five years of our campaign. Public Health officials at Iowa Department of Public Health have stated that there was nothing else going on in Iowa --- no other initiatives or interventions --- that would have made such an impact on the stillbirth rate. We invite you to watch this short video by Kim Piper, Executive Officer for the Center for Congenital and Inherited Disorders and the State Genetics Coordinator for the Iowa Department of Public Health.

We also have our wonderful baby save stories. Over 75 women saying things like Eva's mom, "I am very grateful that Count the Kicks made me aware of the importance of paying close attention to baby's movements and also that my provider took my concerns seriously and took action."

Or Thatcher's mom; "I am thankful to God that I had heard about the Count the Kicks campaign and app from my friend, Amy Ray, who is the Alabama Ambassador for Count the Kicks. I look at Thatcher now, and I know he is a true miracle." Or Nahla's mom; "I think about it every day --- just what if, what if, what if? Definitely pay attention to Count the Kicks. Had I not, Nahla would not be here. Do not second guess yourself. Do not feel bad or stupid, do not worry about insurance or the emergency room bill, go check on your baby because your baby might not be here. Just pay attention, seriously. It is your baby's life."

Or any of the dozens of other moms on our Baby Save page that share their powerful story of how Count the Kicks helped save their baby's life.

Bias can occur when we interpret our data findings a specific way based on our points of view. This can cause us to disregard other valid interpretations. Some examples of bias include conducting an evaluation survey that was not written in someone's native language, excluding certain populations from participating in an evaluation, respondents providing responses they think evaluators want to hear or which seem favorable, etc.

9) Describe any biases that may have affected how your practice is implemented, your data, or how you interpreted your practice's outcomes. Note: Responses must include any that may be due to cultural or racial/ethnic differences.

Response:

There are many factors researchers have indicated that lead to the disparities that persist in stillbirth but ultimately until we address systemic racism and implicit bias the maternal mortality and stillbirth rate in America will continue to rise.3

Therefore, we work to provide culturally competent educational materials; our app is available in 12 languages and our staff and Board of Directors are trained in implicit bias and anti-oppression. We are currently working with health systems in our state to ensure all health workers are also trained in implicit bias and anti-oppression --- and are taking it a step further to investigate with them the barriers that women of color face in accessing OBs, midwives and doulas early in pregnancy to get critical preventative care. Research shows women of color disproportionately visit emergency rooms or OB emergency departments as a means for primary care instead of utilizing an OB, midwife, or primary care provider. It is estimated that one-third of emergency visits by women of color during pregnancy could be addressed if they had access to a primary care provider or OB. In 2021, we will create a campaign that connects expectant women of color to key prenatal providers and preventative care in our area by addressing the roadblocks that have been created. When proven successful, we hope to implement the campaign in all 50 states.

³ Worcester Sharon. The American maternal mortality crisis: The role of racism and bias. https://www.mdedge.com/obgyn/article/221705/obstetrics/american-maternal-mortality-crisis-role-racismand-mortality-crisis-racismand-mortality-crisis-raci bias May. 5 2020

10) Describe any unexpected or unintended outcomes (both positive and negative) of practice activities, including differences in outcomes for individuals from different racial/ethnic groups. How did you identify these, and did you make any changes because of them?

Response:

One unintended outcome was being featured on Good Morning America and other national media outlets in 2017. Baby Ruby was saved in 2017 when her mom noticed reduced fetal movement and spoke up to her provider. Her daughter, Ruby, had the umbilical cord wrapped so tightly around her neck she was unable to move her extremities. She was born via emergency C-section and brought into the world safely. Here is her story that aired on Good Morning America. Once that story aired, we had a 3,500% increase in Count the Kicks app downloads. We have remained at about 2,500-3,000 app downloads per month since then.

Another unexpected result is the creation of our Low Literacy materials, which were created share our campaign with refugees and individuals where English is not their first language and those with lower education levels. We realized that even though our materials were written at a 5th grade reading level, we also need an option for at least a 2nd grade reading level. We worked with PictureImpact in Minnesota which specializes on creating educational pieces at lower reading levels to create our Low Literacy educational pieces. This includes a brochure and poster in English and Spanish. It is being piloted in Iowa with great results and feedback and two states have contracted with us to bring the materials to their states in 2021.

Finally, one more unintended outcome from this campaign is the expansion into other states. We now implement Count the Kicks in 10 additional states (and more to come) either through public health departments and their Title V funds or through Perinatal Quality Care Collaboratives and FIMRs. While it was always the intent of the Founders to reach as many expectant women and providers as possible, I do not think any of them envisioned such an amazing expansion so quickly. In the last 2 years we have gone from having 2 states we contract with to a total of 11 states. With those expansions also comes outreach and positive impact on disparities. For instance, we launched in Florida earlier this year and they wanted our app and materials translated in Haitian-Creole due to the large number of individuals that speak Haitian losing babies to stillbirth. Now we have our app and materials in that language as well. It has become so popular that we have had to place three additional print runs of our Haitian Creole materials.

Health Equity

The Robert Wood Johnson Foundation defines health equity as "... everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care."

11) How has your practice contributed to reducing health inequities and systemic oppression (including structural racism) that impact your key population? Provide evaluation data that demonstrate this. Examples of this can include but are not limited to demonstrating a change or shift in power in a relationship with a community, whether those most "in need" in the key population were served equitably, developing new policies or procedures that operationalize equitable activities, so they are now seen as standard practice, etc.

Response:

As mentioned earlier the African American stillbirth rate decreased nearly 39% in the first five years of the launch of the campaign in Iowa. Additionally, we are active participants on a group in Iowa called One Economy which works to eliminate racial, economic, and other disparities in the African American community by directly addressing 5 key areas:

Employment, Financial Inclusion, Education, Housing and Health. We sit on the Health workgroup and one of the primary goals is to lower infant mortality and stillbirths within this population, we are also listed as a Best Practice in the Plan.

For the past few years, Count the Kicks has actively been working to address the racial disparities that persist in stillbirth through awareness building campaigns and direct outreach to the communities most impacted by these disparities. We have also held focus groups to better understand attitudes and behaviors of women of color towards maternal healthcare during their most recent pregnancy; and provider experiences in teaching these diverse patient groups.

Through direct outreach in our local communities, we have educated over 70 faith leaders of primarily Black churches and at least 30 primarily Black beauty salons on how to talk to their community members and clients on Count the Kicks. In August 2020 we created an entire social media campaign dedicated to race disparities called #WhyWeCount, focusing on educating black women on the huge gap relating to stillbirths and the importance of tracking their baby's movement. Please view a few of our videos created for this campaign.

- 1. #WhyWeCount, Tira Mays
- 2. #WhyWeCount, Faith Leaders urged to share hope and save lives by sharing Count the Kicks.
- 3. #WhyWeCount, The Founders

Lastly, we invite you to view our Feel the Beat campaign, which shows how expecting parents of color can help save their babies in an effort to reach mothers most at-risk of having their babies born still.

We are striving toward equity when race is no longer a predictor of stillbirth. We have been intentional in building strong relationships with organizations that are directly focused on the health of Black women, and currently have an active MOU with the Black Women's Health Imperative. In fact, we were asked to speak on a panel focused on Black Maternal Mortality during the BWHI Anniversary Week Celebration in late July 2020 to share and educate on the large disparities within the African American population regarding maternal health and stillbirth.

In the wake of George Flloyd's death this year, we released a strong statement on racial disparities, which can be viewed here, and our organization as a whole is currently undergoing a race equity audit, including our Board of Directors. This includes reviewing our policies, hiring practices, outward communication and more.

All these different strategies and tools have led to real systemic change. Change like featuring us in the One Economy Report as a Best Practice to lower the stillbirth rate among Black women. Creating presentations and intake question for Home Visitors to include in their outreach with their pregnant clients. Creating motivational interview examples for I-Smiles Coordinators who educate on oral health and who now will also be teaching their clients the importance of fetal movement. To finally, adding Count the Kicks into discharge papers at MercyOne when a pregnant woman comes in citing, she has noticed reduced fetal movement.

All are examples of system change, but we are not done yet. We have several other exciting initiatives on the horizon, including undergoing additional research studies on stillbirth prevention and the Count the Kicks campaign. Working with states to launch our campaign is systemic change. Creating a campaign in a state that has no previous stillbirth prevention efforts is in its truest form, systemic change.

Continuous Quality Improvement (CQI)

A CQI process includes identifying a problem or desired change, developing a plan, carrying out the plan, reflecting on whether this action worked, and determining a course of action based on whether this worked.

12) Describe how you implemented a continuous quality improvement process. Please include:

- Who was involved in this process;
- What, if any, tools were used to implement this process; and
- A description of at least one change you made to the practice because of this process.

Response:

The creation and implementation of *Count the Kicks* followed a specific CQI plan.

Identifying the problem: Too many babies are dying from preventable stillbirth in the U.S. 24,000 babies are born still every year in the U.S. alone, according to the CDC. One in 167 pregnancies end in stillbirth. Our five founders, all of whom experienced stillbirth or infant loss knew first-hand that stillbirth is more common than people think. In fact, it is 10 times more common than SIDS. Racial disparities persist with Black women at two times greater risk of losing a baby than white women.

Who was involved: The five founders, all Central lowa women understand the problem and have a solution based on evidence and mounting research. They created an educational stillbirth prevention campaign for providers AND

expectant parents. Working with researchers like Dr. Ruth Fretts of Harvard, Dr. Collins (leading umbilical cord complications researcher in Louisiana), Iowa Department of Public Health staff including, Kimberly Piper who is the Executive Officer for the Center for Congenital and Inherited Disorders and Stillbirth Surveillance and PI for the stillbirth registry to name a few. Additional people and organizations involved in the creation of our campaign included Strategic America, a local marketing company in Iowa and Former U.S. Senator Tom Harkin who helped the founders create the first Stillbirth Registry in the Nation.

What, if any, tools were used to implement this process: Using research as their guide the founders created educational tools and resources to create this program. This involved creating a brochure at a 5th grade reading level and posters and later app reminder cards. The hallmark tool for Count the Kicks is the free kick counting app. This app was created in 2015 and now has over 125,000 downloads in all 50 states and 140 countries. With an almost 5-star rating in the iOS store and Google Play store it is one of the most important tools of the campaign. Additional tools include creation of trainings to train and educate providers, nurses, midwives, doulas, home visitors, and others on the importance of including



Count the Kicks in their current system and HOW to do that. Another tool that was used to implement the process was the use of research and data. Working with IDPH Vital Statistics to get accurate and reliable stillbirth data and finding research around the importance of educating on reduced fetal movement has helped shape this campaign.

At least one change to the practice: We did not invent kick counting, but we did create the tools and resources for providers to talk to their moms about kick counting and the tools and resources to count their baby's movements. In the field of maternal health, we have significantly changed the stillbirth rate in Iowa. This was done by mass mailings of the educational materials to all birthing centers and clinics in Iowa. One change to the practice is now we can get reliable data on how many providers are asking about fetal movement. We worked with IDPH to include questions in the PRAMS survey on fetal movement. Another change within the system is with one of the largest hospital systems here in lowa, MercyOne. MercyOne created a Labor and Delivery Emergency Department and within their triage discharge papers they have implemented Count the Kicks. So when expectant women come into the OBED with reduced fetal movement after they go through the proper medical protocol if it's found out mom and baby are OK to go home they release them with specific instructions on their discharge papers on how to count baby's movement and what to do if they noticed reduced fetal movement again. Finally, we made several changes to our messaging around COVID-19 and speaking up during a global pandemic. Due to responses from our app surveys and focus groups we determined that we needed to

create more assertive language for women to speak up to their providers. Please see below for an example of what was created and is on social media, in toolkits and provided to women via community baby showers. We also created education for providers in how to effectively listen to patients and communicate with them to address their concerns. We have taken what research has said about monitoring strength of baby during kick counting and will be adding a strength component to our app. Utilizing research and assistance from our Medical Advisory Board we will add a strength component to our kick counting app soon.

Replication

For the purposes of this submission, replication entails implementing the core components of your original practice in a new site or location. You are welcome to share information about any replication of your practice done by your organization or by another organization, community, state, etc.

- **13)** Describe how your practice has been replicated in another location.
 - Provide evaluation data that indicate your practice is successful or is working as you intended.
 - Describe how these results are the same or different from when you implemented your practice originally.
 - Describe any adaptations or changes you made to your practice as a part of replicating it.
 - Review the core components you described at the beginning of this submission form. Did you need to change any of these when you replicated your practice? How so?

Response:

We currently have contracts in place in 10 states; Iowa, Ohio, Nebraska, North Dakota, West Virginia, Florida, Kansas, Missouri, Indiana, and South Carolina. Many of these contracts are through state health departments and a few are through Perinatal Quality Care Collaboratives or FIMRs. We also received grant funding to provide free materials to Illinois.

Over the past 24 months we have worked hard to collaborate and partner with other states to bring our Count the Kicks programming to their state. Count the Kicks is low-cost, evidence-based and turn-key. Our goal is to replicate exactly what was done in Iowa in all 50 states, which would save 7,500 babies from preventable stillbirth each year. Our data shows that we are saving 1 in 3 at-risk babies from preventable stillbirth. We have created standard contracts and practices for a state to review and purchase our campaign to implement in their state. The replication of our program looks like this:

Preparing for launch:

- In the initial phase, we work collaboratively to gather information necessary to effectively launch the campaign in the state.
- We gather contact information (names, titles, mailing addresses, phone numbers, and email addresses) of known maternal health providers and birthing hospitals in the state for inclusion the call and mail campaign. Success has also been seen when social service providers that regularly interact with pregnant women are included.
- Review and edit announcement letter to be sent to contact lists along with sample Count the Kicks educational
- Provide state health department logo for inclusion on mailing and Count the Kicks educational materials

Core Launch Components:

Customized Count the Kicks Materials

Providers and individuals ordering Count the Kicks materials will receive Count the Kicks brochures, posters, and app download reminder cards co-branded with the state health department logo.

Translations of Count the Kicks Materials and App

Currently, the core Count the Kicks printed educational materials are available in English and Spanish for a state and the mobile app is currently available in 12 languages.

- Printed materials can be translated into additional languages to meet the strategic objectives of the partner and made available for order in your state.
- The Count the Kicks app can also be translated into additional languages and is always available for free to all
- After customizing the Count the Kicks educational materials, a special print run is conducted to print enough brochures, posters, and app download reminder cards to reach every pregnant woman in the state over a 12month period. The recommended quantity is based on the annual number of live births in the state. You will be notified when approximately 80% of the printed inventory has been distributed and provided the opportunity to re-print materials at an additional cost. Providers will then be able to order materials on our website, have them shipped to their offices, and implement them within their practice at no out-of-pocket cost to the provider. The costs associated with this deliverable include the printing and warehousing of the customized materials; fulfillment of online orders received from providers; and the staff time associated with overseeing the distribution and monitoring of materials over the course of the contract.

Call and Mail Campaign:

Call and Mail Campaign to Reach Maternal Health Providers in the State

After receiving the requested contact lists, announcement letter, and customizing the educational materials, Count the Kicks will conduct a call and mail campaign announcing the launch of the program in your state, providing free sample materials and directing recipients where to order additional materials online.

- Mail announcement letter and sample Count the Kicks educational materials to providers included on contact
- 7-10 days after the sample materials go out, call every provider on the list, and ask if they would like to order Count the Kicks materials (call script template attached). Callers will instruct providers on how to place orders online and will offer to place an order for the provider right on the phone.

Email Campaign:

An email campaign will be sent to all addresses provided on the contact list. Count the Kicks can also provide a draft email to be sent directly by partnering organizations willing to share about the launch to their constituents. This email announcement allows recipients to click directly through and order materials online.

Personal note from your designated leader about the importance of kick counting, the evidence behind it, and how Count the Kicks will help empower moms and save babies in your state (can be similar to announcement letter)

Clear direction to order materials online. Then reads rest of screen about what is included in email.

In addition to the call, mail, and email campaigns, awareness of the Count the Kicks campaign is increased when state partners highlight the launch of the program in the media.

Annual Public Relations Bundle

- Count the Kicks will provide an annual series of press release templates surrounding major dates (the launch of Count the Kicks, Mother's Day, Stillbirth Prevention Month, etc.) that the state can share via its communication
- Count the Kicks will provide talking points tailored with your state's specific data and information

Targeted Social Media

Strategic placement of social media posts on Facebook and Instagram to reach expectant moms in your state, encouraging them to download the free Count the Kicks app.

Training:

We offer three types of trainings for health workers in your state (in-person, quarterly webinars, CE course). In addition to making Count the Kicks educational materials available and directing expectant mothers to the free mobile app,

training for healthcare providers on how to effectively implement the campaign and have the kick-counting conversation with patients has proven to be a key component of an effective launch. Participants will learn:

- How to have the kick counting conversation with expectant parents
- How to download and use the Count the Kicks app
- How to best utilize the free tools and resources available
- How to respond if an expectant mother says they are experiencing reduced fetal movement
- How to answer the most frequently asked questions related to kick counting
- How to share the powerful stories of what happens when expectant parents learn to kick count and how they
 can use that knowledge to help save their baby.

Those are the steps to launching in a state or area that we do, but it does not just stop there we also have several inkind offerings for our partners:

In-Kind Offerings:

- Free Count the Kicks mobile app available in 12 languages
- Social Media Toolkit with suggested posts to facilitate sharing the Count the Kicks campaign on partner social platforms
- Digital Provider Resources available on the Count the Kicks website
- Monthly and annual data reports regarding the progress of the campaign in your state
- Regular status calls regarding the progress of the campaign in your state

We track the same metrics for the states that we do for lowa, things like material orders, app downloads, website hits etc. All this data is sent monthly to the state contact and we also send Quarterly Reports and finally a Year end report. Those reports and data are not on any public facing site so unfortunately, we cannot link them. However, we would be happy to share PDFs of the reports should you request it.

We also track one of the best metrics or all, baby saves. In fact, we have had two so far from our partner states. One in Kansas and one in Ohio. One of the best metrics are media hits like this one in Ohio. It is hard to really evaluate baby saves in the scientific sense, all we know is that when a baby is saved because his or her mom knew about *Count the Kicks* and spoke up is a by far the best positive outcome.

Dissemination

For the purposes of this submission, AMCHP considers dissemination to encompass a variety of methods such as peer-reviewed journals (may be in the process of being reviewed), a published external evaluation or report on your practice outcomes, inclusion in a legacy product or "best practices" toolkit from a CollN or other type of collaborative, etc.

14) How has your practice contributed to the evidence base? Please include citations and/or links to any articles, toolkits, reports, external evaluations, etc.

Response:

We are currently working with Des Moines University and the Harkin Institute on a research project that has not yet been published. Therefore, we cannot say much about the research study other than a few key points that are being shared at the APHA Conference in October of this year. We feel that the research from the study on our *Count the Kicks* app as a mhealth will show that the use of our app has a positive impact on birth outcomes. As soon as the manuscript is released, we will be sure to share with AMCHP. We can share the four main findings that the researcher, Dr. Duffy will be sharing at the APHA conference:

- 1. Mobile app enhanced experience of monitoring fetal movement.
- 2. Frequency of fetal movement tracking associated with women's report of awareness of baby's movement pattern.
- 3. Concerns about change in movement pattern prompting health care visit most often associated with decreased fetal movement.

4. Preliminary results show statistically significant differences in stillbirth rate for pregnancies using mobile app compared to some pregnancies without app use.

Additionally, we have had several news stories and publications written about us or for us. If you visit our News Page on our website, you will see any news piece that ran on *Count the Kicks* dating back to 2008. Well over 75 news stories have been published about our campaign. Here are a few we would like to specifically share:

- 1. <u>Good Morning America</u>: Mom Credits App with Saving Baby's Life, also shared on <u>Inside Edition</u>, Fit Pregnancy, Scary Mommy, The Bump and the Des Moines Register.
- 2. Today Show: Pregnant Iowa woman counted her unborn baby's fetal kicks and saved her life
- 3. The Birth Hour Podcast: Planned Homebirth turned Emergent Hospital Induction
- 4. WHO Channel 13: Des Moines University Researching How Women Use App to Reduce Stillbirths
- 5. O-Magazine: Article written by Glennon Doyle Melton

Additional features include articles in Huffington Post, Washington Post and more, for the full listing please visit our News Section.

Finally, as mentioned earlier our baby save stories absolutely contribute to the evidence base of this project. We have an entire YouTube channel focusing on baby saves and here are a few we want to specifically share.

- 1. Meet Nahla!
- 2. Grandmothers Save Story
- 3. Meet our Baby Saves

Lessons Learned

15) What important lessons have you learned (both positive and negative) through implementing your program that you can share with others who may seek to use or replicate this practice?

Response:

Our stillbirth prevention campaign is a turnkey operation, with the Count the Kicks team implementing proven tools and resources we have available. It is important that we work closely with our state partners and other organizations within the state to ensure we have a good list of health providers and key partners, and that they help share this message via communications and other avenues. It is also essential that the healthcare professionals talking about Count the Kicks do so on a consistent basis. We know that Count the Kicks works best when discussions about fetal movement are ongoing between patient and provider.

Our program is evidence-based and easy to implement. Fetal movement monitoring is non-invasive, and an easy way to monitor the health of a baby. It is also a great way to bond with a baby, and many of our app users report that regular use of the app reduced their anxiety during pregnancy. The fact that this campaign is turnkey and cost effective is also an asset. We simply want to save babies and we are the only organization in the country with the proven tools and resources to do that, making it simple for our state partners and organizations to quickly start making an impact in their state. Each year we hear from dozens of expectant moms who reach out to share how Count the Kicks helped them to save their baby. These powerful stories are living proof that kick counting works. These stories are an asset because they provide strong motivation for other expectant women to download the app and start counting. We can provide a sole source letter and have seamlessly worked with our partner states to start the campaign.

Too many babies are dying from preventable stillbirths in the U.S. Approximately 24,000 babies are born sill every year in the U.S. alone according to the CDC. Yet, few people are talking about this health issue. The founders of our organization knew they needed to change this. They understood the problem and created a solution based on evidence and mounting research that allows providers and parents the tools they need to talk about stillbirth in an educational and empowering way. The additional challenge was how would a small, grassroots nonprofit organization get this information and education in the hands of maternal health providers? By creating a plan of action, they were able to

saturate maternal health provider offices with this information and continue to grow their impact and raise awareness by building a strong network of passionate volunteers, donors, supporters and providers to encourage others to Count the Kicks.

We did not invent kick counting, but we did create the tools and resources for providers to talk to expectant parents about kick counting and a FREE app for expectant moms to count their baby's movements. In the field of maternal health, we have significantly changed the stillbirth rate in Iowa. This was done by mass mailings of the educational materials to all birthing centers and clinics in Iowa. One change to the practice is now we can get reliable data on how many providers are asking about fetal movement. We worked with IDPH to include questions in the PRAMS survey on fetal movement. Another change within the system is with one of the largest hospital systems here in Iowa, MercyOne. MercyOne created a Labor and Delivery Emergency Department and within their triage discharge papers they have implemented Count the Kicks. So, when expectant women come into the OBED with reduced fetal movement after they go through the proper medical protocol if it's found out mom and baby are OK to go home, they release them with specific instructions on their discharge papers on how to count baby's movement and what to do if they noticed reduced fetal movement again.

What were some of the challenges or problems you experienced in implementing and carrying out your practice, and how did you address them?

Response:

The COVID-19 pandemic has exacerbated the maternal health crisis in the U.S. Prenatal appointments are being reduced and patients are seeing providers less frequently before delivery, missing out on critical prenatal care. We have the proven tools and resources to help bridge the gap between patient and healthcare provider. Through social media and other direct outreach to expectant parents in your state, we teach about the importance of fetal movement monitoring and paying attention to baby's movements every day in the third trimester. With Count the Kicks, moms have the peace of mind to know when things are OK and when things have changed.

We currently have contracts in place to implement the Count the Kicks campaign in 10 states: Iowa, Ohio, Nebraska, North Dakota, West Virginia, Florida, Kansas, Missouri, Indiana, and South Carolina. Many of these contracts are through state health departments and a few are through Perinatal Quality Care Collaboratives or FIMRs. We also received grant funding to provide free materials to Illinois.

Over the past 24 months we have worked hard to collaborate and partner with other states to bring our Count the Kicks programming to their state. Count the Kicks is low-cost, evidence-based and turn-key. Our goal is to replicate exactly what was done in lowa in all 50 states, which would save 7,500 babies from preventable stillbirth each year. Our data shows that we are saving 1 in 3 at-risk babies from preventable stillbirth. We have created standard contracts and practices for a state to review and purchase our campaign to implement in their state. The replication of our program looks like this: We work with each of these state partner organizations to implement a plan catered to the population and needs of their state. Each contract includes customized Count the Kicks educational materials, and a call, mail and email campaign sent to a targeted list of maternal healthcare professionals in their state. Contracts also include trainings (webinars or free CE training codes), PR, social media advertising, and translations of the app and/or printed materials. We also offer our state partners a tailored social media toolkit to help promote the campaign, plus monthly and annual reports on the progress of the campaign.

Next Steps

16) Describe any plans you have for continuing or expanding this practice.

Response:

We are continually seeking state partners to bring this lifesaving and cost-effective program to expectant women and providers until we reach all 50 states. We invite you to reach out to Executive Director Emily Price at price.emily@healthybirthday.org to inquire about partnering.

Describe any future improvements or modifications you hope to make to the practice.

Response:

We are continually looking at new research around stillbirth prevention and doing our own research studies on the effectiveness of Count the Kicks (three research studies anticipated to come out in the coming 12-15 months). Based on research we can easily adapt and make changes to the program, such as adding a strength component to the app because research now says not only should expectant women be monitoring their movement but also how strong baby is during their sessions. However, the underlying core components will never change.

Next Steps if Accepted

Thank you for taking the time to share your practice with others so we can work towards improving the lives of MCH populations. Your submission will be carefully reviewed by a team of three MCH experts. You may be contacted for follow-up if the reviewers have questions or need additional information while reviewing your submission. After the review, you will also be asked to complete a short survey on the submission form and submissions process, so we can provide a more streamlined submission experience in the future.

Please note that if accepted to the MCH Innovations Database, you will be asked to complete 1) a practice summary and implementation handout as well as fill out 2) the Database Entry Survey. Collectively, these will be featured in the database and will provide useful information to database users.

If accepted, you may also be eligible to participate in other promotional opportunities including: writing an article for AMCHP's Pulse newsletter, presenting at a conference, receiving one of our Innovation Hub awards, or providing technical assistance to states/territories interested in replicating your practice through AMCHP's Replication Project.