

COLORADO
DEPARTMENT
OF PUBLIC
HEALTH AND
ENVIRONMENT



A Summary of 16 Key Informant Interviews



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Introduction

Making sure that women of reproductive age are healthy before and between pregnancies increases their chances of having healthy pregnancies and remaining healthy throughout their lives. The Maternal and Child Health (MCH) Program at the Colorado Department of Public Health and Environment strives to improve preconception health among women and men of reproductive age with a focus on intended pregnancy and healthy weight.

A 2010 needs assessment completed for the federal Maternal and Child Health Block Grant (Title V) identified nine priorities for Colorado's efforts during the 2011-15 grant cycle. To inform the strategic planning process for this priority area, staff members identified existing programs and innovative strategies for preconception health promotion throughout the United States and hired a contractor to complete key informant interviews with identified contacts.

Interviews revealed that states are using innovative strategies and partnering with other programs, agencies and collaborative groups to maximize tight budgets and promote preconception health. Guided by the social determinants of health model, they are targeting high-risk communities for education, outreach and counseling in clinical settings. Some are using primary service delivery strategies such as vitamin giveaways and handouts, while others are using more comprehensive communication campaigns incorporating mass marketing and social media.

The results of these interviews will guide program work during the next several years. Incorporating the technological, communication and education strategies learned here, the Colorado Maternal and Child Health Program can move forward together with dedicated partners to improve the health of young adults and their progeny.

Method

MCH staff members distributed an electronic survey to states that identified preconception health as a priority in their Maternal and Child Health needs assessments, agencies identified by the Association of Maternal and Child Health Programs as doing work in preconception health and other contacts who presented on preconception-related activities at a variety of national conferences in recent years to identify state preconception health activity.

The pre-survey (see Appendix B) collected basic information about the activity or intervention and asked respondents if they would be willing to be contacted again for further follow-up. Staff members identified 13 contacts from the pre-survey and added four contacts after the survey had been completed for a total of 17 potential key informant interviews. Each state contact received an information letter via email requesting a phone interview about preconception health activities taking place in their state. Two contacts did not respond to email or follow-up phone calls within the project timeline. The MCH contractor conducted one additional interview with a California contact for a total of 16 interviews (state participants are listed in Appendix A).

A semi-structured interview protocol guided telephone interviews, ranging in length from 30 to 60 minutes. The majority of interviews lasted approximately 45 minutes. The contractor asked key informants to describe program successes, challenges, lessons learned, and program effectiveness and evaluation data (see Appendix C). Contacts who had not previously completed the electronic survey were asked to respond to the same 12 pre-survey questions ahead of time. All interviews were audio taped. Notes were taken throughout the interview process.

A content analysis approach was used to organize the data thematically. Salient themes and examples of key strategies, success factors, challenges and recommendations are detailed in this report. When evaluation data is available, outcomes or results from the evaluation are included. Additionally, individual summaries on each state initiative were compiled along with the information collected from the pre-survey and can be accessed here.

Identified Strategies

Integration of Preconception Health into Clinical Settings

Several states successfully integrated preconception health care materials and/or reproductive life planning into clinical services for individuals served at Title V, Title X and/or other community health clinics. Although it is too early to tell if these interventions are improving preconception health indicators, all states listed below indicate favorable progress.

- Over the three-year project period, *California's* Family Health Council worked to integrate reproductive life planning and preconception care into family planning clinic protocols and practices. Three clinic sites piloted a model preconception counseling intervention. Results show that providers found the protocol easy to use and women, primarily Latinas aged 18-40 years, found the information timely and important.
- *California* and *North Carolina* require preconception health planning, counseling and staff training to be included in work plans and contracts of all Title X agencies.
- **Delaware** provides enhanced reimbursement to providers who administer Centers for Disease Control and Prevention (CDC)-recommended preconception health assessments and counseling (e.g., domestic violence, alcohol and drug abuse) using validated instruments to women enrolled in the Healthy Women, Healthy Babies Program. To qualify for this program, women must meet at least one eligibility criteria such as: Black race, low income, less than a high school education and at least one prior pregnancy with a poor outcome. Private and public providers receive reimbursement for four bundles of services: (1) preconception counseling, (2) mental health counseling, (3) prenatal services, and (4) nutrition services. With the additional reimbursement, the Delaware Division of Public Health requires clinicians to enter individual-level data on all women enrolled in the program into a database. The database interfaces with the state's birth, death, and birth defect/newborn screening data systems.
- **North Carolina's** reproductive life plan booklets include a self-assessment that women complete in the clinic waiting room. The reproductive life plan booklets are available in English and Spanish at all Title X clinics. DVDs about reproductive life planning are also played in clinic waiting rooms.
- Rhode Island's Reproductive Health and Wellness Program enlists providers in family planning clinics, community health centers and Planned Parenthood clinics to counsel patients during office visits about reproductive life planning.
- *Wisconsin* is pilot testing a tool called "Prescription for a Healthy Future." The tool is used by residents and office staffs to educate women about preconception health during visits at a women's prenatal clinic located in a high-risk community. Based on the success of the pilot, the clinic is integrating the tool into its electronic medical record system.
- In *Arizona* and *Ohio*, women who have a negative pregnancy test receive preconception health counseling at local health departments and community health clinics.

Inter-conception Programs Targeting High Risk Parenting and/or Pregnant Women

Six states are implementing programs providing interconception care and/or education to women with a history of or at high risk for poor pregnancy outcomes. Some states offer grant opportunities to coalitions and community-based nonprofit organizations to create preconception health tools for local populations. Examples of strategies:

- *Ohio* has an ongoing successful program to increase public awareness of the harmful effects of gestational diabetes. Clinicians developed a gestational diabetes protocol for the program. In addition, the program aims to improve postpartum diabetes screening, treatment and referral of women who were diagnosed with gestational diabetes.
- **Wisconsin's** statewide pilot called "Women's Health Now and Beyond Pregnancy" achieved success in making contraceptive planning during prenatal care a clinical standard for women.
- **Florida** provided funding to 32 Florida Healthy Start Coalitions to develop and pilot evidence-based community outreach, provider education and direct service interventions promoting appropriate birth spacing. Coalitions created booklets, pamphlets and referral information for women. Some activities occurred in high-risk communities where health disparities exist. Many of the initiatives continue to be implemented.
- Arizona, Florida, Ohio, and North Carolina integrate preconception health materials (reproductive life planning, family planning, smoking cessation, weight control, etc.) into home visiting, Healthy Start or targeted case management programs. For example, Healthy Start programs in Florida provide information about access to care, birth spacing, nutrition, physical activity, maternal infections, chronic health problems, substance abuse, smoking, mental health and environmental risk factors to high-risk women. Although all states continue evaluation efforts, Arizona's program success is attributable to technical assistance and trainings by departmental staff provided to early childhood visitors about the concept of preconception care. In addition, home visitation, Healthy Start or case management programs are required to cover preconception health concepts in two monthly visits during a two-year period.
- A large safety net hospital in *Arizona* is implementing an inter-conception care program targeting women with low birth weight babies. The most successful strategy is the development of a hospital clinic that partners with new moms to identify preconception health risk factors and provides targeted education, support and treatment. The goal of the program is to improve maternal health prior to the next pregnancy and encourage appropriate birth spacing.
- *Indiana* is implementing the Pregnant and Parenting Adolescent Support Services program that aims to build infrastructure that supports pregnant or parenting girls aged 15-19 years and increases birth spacing to at least 18 months. After a grant process, the Department of Health contracted with six organizations to provide substance abuse, food stamps, nutrition counseling and child care support services to parenting or pregnant teens.

Vitamin Giveaways

Two states distribute free vitamins with folic acid to women as part of a social marketing and/or provider education campaign. Distributing vitamins and educating providers about folic acid supplementation is perceived as "low hanging fruit." The projects are particularly effective in reaching high-risk audiences and motivating preconceptional women to use vitamins regularly.

• In *Utah*, a contracted social marketing firm developed *Power Bags*. The bags include a preconception health magazine, a Power Your Life bracelet, and a free bottle of vitamins for women. The vitamins and *Power Bags* are advertised using traditional media, social media and community-based partners. The Department of Health received 10,000 bottles of free vitamins.

Free vitamins serve as the centerpiece for getting women to the Power Your Life website. Approximately 10,000 *Power Bags* with vitamins were distributed to Utah women. Furthermore, respondents who were aware of the campaign rated folic acid intake as more important than did those who were not aware of the campaign. Of the 409 respondents who received a bottle of vitamins directly from the website, 94 percent took them an average of six days per week.

• In *Florida*, a collaborative effort between the Florida Department of Health and the March of Dimes focuses on educating women and health care professionals about the importance of folic acid supplementation prior to pregnancy to prevent neural tube defects. Through this grant, more than 500,000 bottles of multivitamins were distributed statewide through health and social service entities serving women with inadequate resources to purchase folic acid. Most of the women receiving the vitamins were under the age of 29 (71 percent). Data indicate this age group is least likely to consume a multivitamin with folic acid. More than 2,500 health and social service providers were trained on the importance of preconception health, including folic acid.

Other Community-Based Programs and Social Marketing Campaigns

Three community-based preconception programs targeting health disparate populations show success in increasing exposure to and awareness of preconception health concepts. One program conducted in rural communities in Pennsylvania showed changes in behavior.

- Arizona, in collaboration with the Black Nurse Association, Tanner Community Development
 Corporation, churches, barbers, beauticians and community colleges, implemented a social
 marketing campaign called "First Things First." The campaign includes radio spots, brochures,
 posters, promotional materials, community presentations and a female poet/advocate. Pre- and
 post-focus group formative research indicates that women exposed to community
 presentations were most likely to recall the "tag line" and were more likely to report significant
 increases in awareness of issues and the importance of preconception health.
- Pennsylvania funded a multidisciplinary team of researchers from the College of Medicine at Pennsylvania State University to conduct research related to improving women's preconception health. Researchers conducted a six-session small group educational intervention called "Strong Healthy Women." The educational sessions taught healthy eating, physical activity, coping with stress, pregnancy planning and appropriate alcohol consumption. The intervention was primarily successful at changing attitudes and behaviors about nutrition and physical activity. Specifically, during the 12-month follow-up period, women who received the intervention lost more weight than women in the control group. Among a subset of women who became pregnant and delivered a singleton full-term baby during the follow-up period, women in the intervention group gained less weight during pregnancy. Factors contributing to the intervention's success include the use of trained, college-educated facilitators, on-site child care and ongoing contact with participants between sessions.
- With the assistance of separate contractors, *California* implemented three culturally competent social marketing campaigns: "Cada Mujer, Cada Dia," "Be Well Women" and "Today is For Tomorrow." Social marketing campaigns included radio ads, text messaging of healthy tips, a website with fact sheets and information on reproductive life planning, and a video contest. Campaign strategies targeted Latinas, African Americans and youth, respectively. As part of the video contest, youth were asked to create short videos about how they could make a "change today to improve health tomorrow." Overall, there was an increase in awareness among the sub-populations enrolled in campaigns about the importance of being healthy before pregnancy. Department staff members attribute the success of their campaigns to a strong

guiding life course framework, contractors with expertise in the sub-population culture, and a dedicated state-level Preconception Health Coordinator to spearhead initiatives, provide technical assistance to local health care jurisdictions and conduct outreach to community-based organizations.

Integration of Preconception Health into Health Education Curriculum

Two states are working to enhance school health education curriculum with preconception health topics. Evaluation data is not yet available on the effectiveness of school curricula in improving knowledge or awareness, or changing behavior.

- Because of increasing overweight/obesity and mental health issues among the adolescent population, *Utah* put together an Action Learning Collaborative with March of Dimes, Planned Parenthood Association of Utah and Utah State Office of Education. The purpose of the collaborative is to refine a reproductive life plan for students called "Teen Life Plan" and develop preconception health core standards. Although the life plan was not approved as a mandatory requirement by the state curriculum review board, some school teachers and school boards voluntarily adopted the essential questions. Department staff members recently trained health education teachers from around the state on the essential questions.
- *Missouri* is enhancing an existing "Ounce of Prevention" curriculum resource guide to include more content on healthy relationships, sexually transmitted diseases (STD) and substance abuse all topics of interest to students. Their key partner, University Extension, is responsible for updating the curriculum, training Family and Consumer Science teachers statewide and evaluating the project using pre- and post-tests.

Provider Education and Trainings

Seven participants reported great success with preconception health conferences and trainings targeted to health care providers and community health workers. In most cases, modules and PowerPoint presentations developed for providers are posted online for broad distribution. Nearly all state staff members feel it is important to educate all disciplines that work with women, including pediatricians, family and internal medicine physicians, obstetrics and gynecologists, early childhood workers and public health practitioners, to make sure they incorporate preconception health into their practices. Examples of promising provider education strategies being implemented include:

- Arizona and Florida staff members noted the success of their grand rounds on preconception
 health topics in reaching private OB-GYNs, pediatricians and family practice physicians around
 the state. Partnerships with the local American College of Obstetrics and Gynecology (ACOG)
 chapter, March of Dimes, or individual clinicians at large university hospitals make the grand
 rounds possible.
- North Carolina's Preconception Health Coalition work group developed a modular training program called "Ready, Set, Plan!" This training program is targeted to community, health care and faith-based workers. Training includes information about the basic tenets of healthy living and reproductive life planning. The training was so successful, the coalition work group received additional First Time Motherhood grant funding to replicate the training for Healthy Start and Healthy Beginning staffs in several counties around the state.
- *Nebraska* is using a "Tune Your Life" website to expand outreach to providers working with youth. The website was originally designed for young women aged 16-25 years to share music

- and artistic story-telling. State-contracted providers are trained on preconception health and website materials, including a reproductive life plan.
- In *Utah*, a social marketing firm, in partnership with a large health care provider and school of medicine, was hired to plan and organize a three-hour continuing education conference to educate more than 150 providers about preconception health.
- In October 2011, *Indiana's* Maternal and Child Health Program and Office of Women's Health Division held a continuing education conference called "Health Care Practice across the Life Course." The conference included educational offerings about preconception and interconception counseling, prenatal substance abuse, mental health and domestic abuse for physicians/providers and public health practitioners.
- *California's* training of family planning providers on preconception health counseling is effective because clinicians are directly involved in developing counseling tools. An assessment done prior to the roll-out of tools determined training needs and gaps. The program manager for the project serves on the state's Preconception Health Council.
- **Florida** and **California** developed effective campaigns encouraging health care providers to address preconception health issues with women of reproductive age at every medical visit ("Every Woman Every Time" campaign). Both states developed websites that serve as portals for patient and provider information, screening tools and resources.

Collaborations/Task Forces/Networks

At least eight state participants indicate that the creation of internal teams comprised of subject matter experts is critical to the success of preconception initiatives. The internal teams include individuals from departmental divisions whose work is associated with preconception health topics such as nutrition, physical activity, domestic abuse, injury, genetic defects, birth defects, chronic disease, diabetes, sexually transmitted infections and HIV. Departmental divisions include the Office of Minority Health; Women, Infants and Children (WIC); the Office of Adolescent Health; the Office of Women's Health; Early Childhood and Home Visiting programs; and the Nurse Family Partnership. Several state key informants recommend starting with an internal team and expanding to build external partnerships.

Most interview participants emphasized the importance of drawing from and connecting to existing networks or quality improvement initiatives, such as Healthy Birth Outcomes, Infant Mortality Task Forces, Patient-Centered Medical Home Initiatives, Perinatal Quality Improvement networks, and state and national preconception health councils. These networks are critical in mobilizing energetic, passionate people to focus on preconception health and build clinical and state-level support. Many of the task forces successfully came together to develop strategic plans with sets of priorities and policy recommendations related to preconception health.

All state contacts highlighted successful external partnerships developed to increase awareness of preconception health among the public and promote preconception health programs and/or policies at state or regional levels. Key external partners include state departments of Education, March of Dimes chapters, Teen Pregnancy and Prevention partnerships, Planned Parenthood Association chapters, local nurse and provider associations (e.g., Black Nurse Association, American College of Nurse Midwives, ACOG chapter), local community clinics, county health departments, university departments and health centers, Family Health Councils and Title V or Title X administrators. A few states partnered with mental health and domestic abuse coalitions. Additionally, community-based organizations play a key role in dissemination of campaign information and preconception programs. Leaders from the CDC Preconception Care Work Group and the Select Panel on Preconception Care assisted at least four states in developing preconception

health indicators and program evaluation plans. Highlighted examples of effective collaborations are listed below:

- Ohio's Collaborative to Prevent Infant Mortality includes representation from public and private sector providers, health care organizations and associations, advocacy groups, state agencies and the business community. The collaborative established recommendations to promote preconception health, including increasing public awareness about the effect of preconception health on positive birth outcomes and providing comprehensive reproductive health services and service coordination for all women and children before, during and after pregnancy. The co-chairs of the collaborative support a Medicaid State Plan Amendment from the Centers for Medicare and Medicaid Services that provides broad reproductive health care coverage for consumers who do not meet current Medicaid eligibility guidelines.
- The *Ohio* Department of Health (ODH) formed a Maternal and Child Health/Chronic Disease Collaborative among the Division of Family and Child Health Services, the Office of Healthy Ohio, Ohio Medicaid and the state's Epidemiology Office. The goal of the collaborative is to prevent or delay the onset of type 2 diabetes mellitus in women who have a history of gestational diabetes. The team formed in spring 2010 when ODH competitively applied and was selected to participate in a national year-long learning collaborative.
- *Utah* formed an Action Learning Collaborative with funding from the Association of Maternal and Child Health Programs that strengthened the relationship with the state's Office of Education. The collaborative provides an opportunity to learn about the limitations when adopting new health education curricula.
- **North Carolina's** Preconception Health Coalition work group created a statewide preconception health strategic plan and successfully received a First Time Motherhood grant. Activities of the grant aim to: (1) increase training of community providers, faith-based workers, health care providers and home visitors on preconception health topics; and (2) implement a social marketing campaign that influences target audiences in six counties to develop a reproductive life plan.
- *California's* Preconception Care Council establishes broad state-level partnerships that support and coordinate preconception care in California. The council and partners ensure preconception health messages are consistent and integrated into family planning clinics. The council also promotes the Every Woman California website.
- Florida established a statewide Preconception Health Council within an existing Prematurity Work Group modeled after California's Preconception Care Council. The Florida council participates in an eight-state consortium called Every Woman Southeast. The consortium aims to share best practices and develop expertise with women's wellness; preconception and interconception health project, policy, research, service delivery, awareness and evaluation strategies. In March 2010, the consortium came together in Atlanta, Georgia, to develop a strategic plan focusing on four priorities: (1) implementing the life course model, (2) addressing racism and disparities, (3) leadership training, and (4) advocacy and policy. Every Woman Southeast Consortium has a website and Facebook page that encourages beneficial collaborative partnerships to advance preconception health activities.

Formative Research

Most key informant interview participants described formative research as critical to inform strategy and select a target audience. Formative research methods include surveys, interviews, focus groups and secondary analysis of public data. In many cases, graduate student interns or a

contracted social marketing firm helped departmental staff conduct the research. Examples are detailed in the table below.

Additionally, states described other types of research or theories to inform their strategy, such as CDC's Morbidity and Mortality Weekly Report, Department of Health and Human Service's Equity Period, Perinatal Periods of Risk Approach, Life Course Theory and other states' strategic plans.

State	Formative Research	Findings and Strategy Formation
California	 The state conducted a survey to assess preconception health practices in family planning clinics and methods of preconception health training provided to clinical staff. Public data were analyzed to identify subgroups of women of reproductive age who were experiencing health issues relevant to preconception health (low folic acid use, high rates of smoking and overweight and obesity). 	 Clinics were doing about 75 percent of CDC's recommendations, particularly STD screening, weight assessment, and birth control counseling. However, vaccinations, medications, and folic acid counseling needed significant improvement. The California Family Health Council's training focused on these practice gaps. Data show that Latina women have the lowest use of folic acid and highest prevalence of neural tube defects. African-American women have high rates of smoking, overweight and obesity status. The department conducted two social marketing campaigns targeting these populations.
Nebraska	To inform messaging on its "Tune Your Life" website, a social marketing firm conducted focus groups with young women and men to determine barriers to good health and tools needed to help consumers plan for future childbearing.	 There are several challenges for young men and women to plan their lives. Projects focus on the transition from adolescence to motherhood of women ages 16-25 years. Music is used to help girls achieve their goals. The marketing plan encourages women to "stop and listen," using music as the "hook" to engage them. Artists create music to share stories online.
Utah	 A social marketing firm conducted 27 statewide interviews with community-based organizations, 10 focus groups and interviews with more than 100 women and four focus groups with health care providers. The firm analyzed data from the Pregnancy Risk Assessment Monitoring System (PRAMS) to determine which populations were most at risk for poor pregnancy and birth outcomes. 	 The target audience for the campaign was women aged 18-24 years. Data show this population as the most vulnerable to unintended pregnancy. The target population is least knowledgeable about the importance of vitamins prior to and during pregnancy, how to track their menstrual cycle, birth control and nutrition. Data led to development of an ovulation video and education of women about the importance of vitamins and nutrition prior to pregnancy. The state designed a preconception health website for people at different phases of their life (single, married, in a relationship).
Pennsylvania	 A university center conducted a telephone survey of women ages 18-45 years in Central Pennsylvania. A smaller household survey was conducted with women in the Amish community. Surveys collected the most prevalent health problems in women of reproductive age that may impact pregnancy outcomes. 	 There were significant health issues in the surveyed population, including high rates of overweight/obesity, binge drinking, smoking, sexually transmitted diseases, nutritional deficits, physical inactivity, failure to engage in pregnancy planning activities and a high level of psychosocial stress. Based on survey data, identified behaviors became the focus of a community-based intervention. Because the data showed the vast majority of pregnancies were among younger women (but not teens), they chose to target women ages 18-35 years.
Missouri	Missouri partnered with Family Community Career Leaders of America, a connection made through the Department of Education, to survey teachers about preconception health training needs. More than 500 students were surveyed about preconception and general health topics of	Students selected four topics of interest: healthy relationships, pregnancy, drugs and sexually transmitted infections. Adolescents specifically wanted to learn about partner communication, effective ways to break up, dating violence and healthy relationships. Teachers desired additional training opportunities. Missouri's Youth Risk Behavioral Survey statistics

	interest.	showed youth were sexually active and not very healthy.
Rhode Island	 More than 50 in-person key informant interviews with a variety of providers were conducted to identify practice barriers to preconception care, the provider comfort level with providing preconception care and available community referral resources. The state plans to conduct focus groups with women aged 18-35 years, uninsured women, women with Medicaid and those with low educational attainment. 	 Providers face issues with keeping long-acting contraceptive methods in stock and confidentiality for adolescents seeking birth control. Providers felt it took too much time to provide preconception care during the clinic visit. Providers were more likely to cover preconception topics during the annual visit; however, most of their patients came in only when they were sick. Residents said more training is needed on preconception care. They are less comfortable talking about preconception and contraception topics with adolescents or women who were not planning pregnancy.

Other Work

Nearly all states reported a preconception health priority within their maternal and child health needs assessments. At least five states (*Florida, Delaware, California, North Carolina, and Ohio*) also developed state-specific frameworks and/or performance indicators (e.g., unintended pregnancy, sexually transmitted diseases, exclusive breastfeeding, birth spacing, tobacco use, obesity, overweight, binge drinking, folic acid use, preconception health counseling, physical activity among women aged 18-44 years) to track and monitor the impact of their interventions. A few states have dedicated websites and reports that track the status of preconception health in their states based on a set of predefined indicators. Other states have created databases as well. *Indiana* noted the success of a database staff members developed on all women who come in to community clinics for a free pregnancy test. As an example of data collected, they learned that last year 85 percent of women who came in for a free pregnancy test did not want to be pregnant. *California* added questions to existing state surveys to better assess the impact of their preconception health awareness campaigns.

Challenges and Recommendations

Key informants were asked to share challenges encountered and recommendations for addressing those challenges. The table below highlights common themes.

Challenge	Key Informant Recommendations to Address Challenges	
Preconception health is a difficult term to understand and pay attention to: Many young women believe they do not need to listen to preconception health messages if they are not actively planning a pregnancy. Most adolescents do not understand what preconception health means.	 Frame preconception health messages as a general public health or women's health issue. Do not connect the messages directly to "preconception", "pregnancy" or "reproduction", particularly for adolescents. Conduct formative research with the identified target audience to tailor campaign messaging to needs of diverse populations. 	
It is difficult to get providers passionate about this topic: Some family planning providers are concerned that the term preconception health means that all women are perceived to be a vessel for babies, and some do not think preconception health is part of their jobs. Some only associate preconception care with prenatal care.	 Frame preconception health as critical to high quality clinical care (e.g., "You might miss an opportunity to promote your client's health, whether or not she is seeking pregnancy, if you do not do this work). Educate providers on how preconception care differs from prenatal care. Create websites like Every Woman California and Every 	

- Many feel like they do not have sufficient time during their clinical visits to incorporate all the assessments and counseling topics and are concerned they are not getting reimbursed for these services.
- Some do not want to perform additional risk assessments without having local resources to address the risks that are identified.
- Woman Florida.
- Implement interventions that can easily be integrated into a clinical visit, such as adding questions to existing tools and using web-based data systems that interface with state and clinic systems. Consider funding clinicians to enter new data.
- Obtain clinician input on tools or risk assessments developed to prevent duplicative tools or questions and to gain buy-in.
- Connect to statewide quality improvement efforts (e.g., patient-centered medical homes; perinatal quality improvement efforts) to build clinical support for preconception care.
- Pilot test interventions among providers that provide comprehensive women's health care.
- Convene continuing education conferences or provide continuing education courses online to offer incentives for providers to learn about the topic.
- Enhance and identify reimbursement for providers who conduct CDC-recommended assessments and counseling.

There are several issues associated with implementing health education interventions in schools:

- State departments of education may not enforce existing health education guidelines.
- In many states, health educators have too much to cover during the school year due to mandatory testing requirements and limited hours dedicated to health education.
- Schools are facing pressures to meet certain academic standards, making health education a lower priority.
- The state board of education may not approve the curriculum developed if it includes contraception or other sensitive topics.
- Schools want curricula to address boys and girls.
- Proposed curriculum may require an internal approval process that eliminates important content for students due to individual viewpoints.

 Work closely with the state's Department of Education, teachers and parent groups and make refinements based on feedback, as necessary.

- Understand the state's core health education curriculum to ensure any proposed additions or modifications align with existing curricula.
- When developing resources for schools, obtain buy-in and approval from the state curricula review board prior to completing the final versions.
- Be aware of limited time teachers have for health education.
- Identify essential preconception health topics and standards to make it easy for teachers to incorporate the messages within existing core curriculum.
- Ensure curriculum includes content relevant to boys and girls and is value neutral.

There are a variety of issues and considerations when implementing social marketing and media campaigns:

- Not all websites can be viewed on a hand-held device, which is essential in reaching a wide audience.
- Social marketing firms are usually good at developing a creative campaign, but may not be as skilled in promoting, integrating, sustaining and evaluating the campaign.
- Social marketing and media campaigns are expensive and require a lot of initial and ongoing planning.
- Women who are drawn to a preconception health website to receive free vitamins may not take the time to read the other materials.
- Campaigns take a long time to change cultural norms and influence behavior, making it difficult to evaluate longterm behavioral change outcomes.

- Be sure your website is compatible with a handheld device and other technologies.
- Ensure the right technical contractor(s) are hired; consider all expertise needed to design, implement, promote and evaluate the campaign. Build these costs into the budget.
- Require women to complete a short preconception self-test assessment and plan prior to receiving free vitamins as part of a campaign.
- Ensure the evaluation plan includes tracking and monitoring of behaviors over the long-term among target populations.
 If possible, consider adding questions to an existing statewide survey to meet this need.

Medicaid reimbursement issues prevent access to care for women across the life course:

- There is no Medicaid reimbursement for well visits, postpartum intrauterine device (IUD) insertions or postpartum primary care visits.
- Partner with the state Medicaid program and large private insurance companies to work on policies to increase access to health care/insurance throughout the life course, in particular the postpartum period.
- Apply for a Medicaid Family Planning State Plan Amendment to support expanded coverage of family planning services to low-income populations.

	Leverage expertise and power of coalition members to build political will.
Limited budgets, time constraints, and bureaucratic processes within the division/branch/department stymie success.	 Leverage existing infrastructure and coalitions (e.g., Healthy Start coalitions, infant mortality or prematurity task forces) or curriculum (e.g. Ounce of Prevention and the State's core health education curricula). Hire student interns to work on small projects (surveys, interviews). Integrate preconception health materials and guidelines into existing programs (e.g., health department and/or Title V/X clinics' work scopes). Define and agree to parameters for the topic and leverage internal expertise and external thought leaders (CDC's Task Force members) to help focus on two to four priorities for implementation and develop an evaluation plan. Develop 10 or fewer state-specific performance indicators for monitoring and evaluation. Apply for grants to support a dedicated staff person to focus on preconception health at the state-level and/or strategic planning, provider education, evaluation and social marketing. Ensure relevant contractors are at the table at the beginning of the project and are aware of lengthy departmental review/approval policies and budget constraints.
 There are challenges associated with starting and maintaining task force/collaborative participation: It is difficult to maintain leadership interest and passion over time. Collaborations within one state or from other states can be challenging. People may come to the table with differing agendas. 	 Meet to develop a strategic plan and identify two to four priorities as focus for the group; hire an objective, independent facilitator or use a student intern to guide strategic planning process. Produce and disseminate a report that provides a comprehensive look at the status of preconception health among women of child-bearing age over time. Include energetic, passionate people to participate on committees/advisory boards. Host webinars and video conferences to offset face-to-face meetings. Create a website for individuals on the task force to go to for information. Work as a group to apply for competitive grants for projects; money is a great motivator to move things forward. Try to keep the leadership new and diverse. Touch base regularly with leadership to determine the value of the work and priorities. Before starting a regional collaborative, ensure sufficient networks exist in the individual states.

Conclusion

States are implementing a variety of innovative strategies in the face of tight budgets and departmental constraints. Nearly all use and support life course and social determinants of health models to guide their work. Most states are organized around preconception health within state preconception health councils or coalitions, infant mortality or prematurity task forces. Many also leverage expertise within their organizations to create internal teams that share best practices. By

making preconception health a priority, most states are able to weave the concepts into many of their existing programs.

The most common direct service strategies implemented by state are preconception health counseling, materials, booklets or DVDs incorporated into clinical settings; enhanced targeted case management and targeted patient education of high-risk pregnant and parenting women; preconception awareness campaigns in high-risk communities/counties where health disparities exist; and provider education and trainings to address knowledge and practice gaps identified through formative research.

The provision of toolkits and trainings and the growth of patient-centered medical homes and perinatal quality improvement networks help keep clinicians engaged. Additionally, provider education on folic acid and vitamin give-away campaigns appear to be easy wins for states to increase regular folic acid use among women. Well-planned and executed social marketing campaigns were successful in increasing awareness of the importance of preconception health among large populations and sub-populations with health disparities. However, the campaigns were challenging and expensive to plan and sustain without continued funding; it can take several years to measure changes in cultural norms and behavior. The cornerstone of campaigns were catchy names, tag lines and websites, with free vitamins, contests, music, community presentations, or social and traditional media primarily used to attract women to their sites.

Finally, the most salient recommendations included:

- Create a website (e.g. Every Woman Florida/California) to keep providers, women, men and partners well-connected and informed.
- Provide technical assistance, training and tools to local county health departments, clinical settings, etc. on reproductive life planning, ideally by a dedicated paid staff member.
- Dedicate time to educating partners outside of public health on the concept of preconception health.
- Work with a coalition, task force or advisory group to define the strategic parameters, identify two to four priority areas and leverage this group to apply for grant funding.
- Conduct formative research with providers and women to develop a strategy and target audience, with the assistance of student interns and/or contractors.
- Develop a comprehensive evaluation plan and logic model up-front and select state-specific performance indicators to measure the impact of strategic efforts.

Appendix A: List of State Interview Participants

Arizona

Toni Means, Office Chief for Women's Health at Arizona Department of Health Services

Sara Rumann, MPA, Health Start Program Manager, Arizona Department of Health Services

California

Flojaune Griffin, PhD, MPH, Preconception Health Coordinator, California Department of Public Health

Connie Mitchell, MD, MPH, Branch Chief for Policy Development in Maternal, Child, and Adolescent Health Division, California Department of Public Health

Melanie Ridley, Director of Fund Development, California Family Health Council

Maryjane Puffer, MPA, Executive Director, Los Angeles Trust for Children's Health

Delaware

Alisa Olshefsky, Title V MCH Director and Section Chief of Family Health and Systems Management, Delaware Division of Public Health within the Delaware Department of Human Services

Florida

Kris-Tena Albers, CNM, MN, Director of the Infant, Maternal and Reproductive Health Unit, Florida Department of Health

Indiana

Charrie Buskirk, MPH, Public Health Administrator of Women's Health, Indiana State Department of Health

Missouri

Patti Van Tuinen, M.Ed., State Adolescent Health Coordinator, Missouri Department of Health

Jennifer Farmer, Health Educator, Adolescent Health Program, Missouri Department of Health

Nebraska

Linda Henningsen, State Adolescent Health Coordinator, Nebraska Health and Human Service

Paula Eurek, Administrator for the Life Span Health Unit, Nebraska's Title V Director, Nebraska Health and Human Services

North Carolina

Alvina Long Valentin RN, MPH, Women's Health Network Supervisor, Women's Health Branch, North Carolina Division of Public Health

Ohio

Jo Bouchard MPH, Chief of the Bureau of Child and Family Health Services, Ohio Department of Health

Lori Deacon Assistant Chief of the Bureau of Child and Family Health Services, Ohio Department of Health

Joel Knepp, Birth Outcomes Improvement Consultant, Ohio Department of Health

<u>Pennsylvania</u>

Carol S. Weisman, PhD, Distinguished Professor of Public Health Sciences & Obstetrics and Gynecology, Associate Dean for Faculty Affairs, Pennsylvania State University College of Medicine

Rhode Island

Tricia Washburn, Title X Family Planning Program Manager, Rhode Island Department of Health

Utah

Lois Bloebaum BSN, MPA, Manager, Maternal & Infant Health Program, Family Health and Preparedness Division, Utah Department of Health

Cathy Schechter, Principal, SUMA/Orchard Social Marketing, Inc.

Southeast Region

Sarah Verbiest, DrPH, MSW, MPH, Executive Director, University of North Carolina's Center for Maternal & Infant Health, Co-Founder of Every Women Southeast Initiative

Wisconsin

Kate Gillespie, RN, BSN Maternal and Perinatal Nurse Consultant, Wisconsin Division of Public Health

Terry Kruse, MCH Unit Supervisor, Wisconsin Division of Public Health

Patrice M. Onheiber, MPA, Director, Disparities in Birth Outcomes, Wisconsin Division of Public Health

Appendix B: Key Informant Pre-Interview Survey

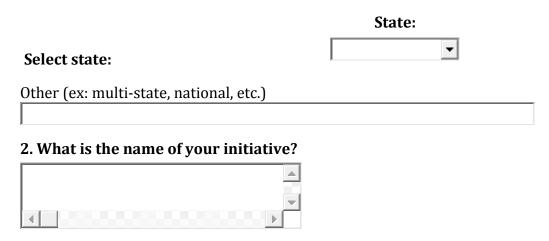
NATIONWIDE PRECONCEPTION HEALTH INITIATIVES SURVEY

The Maternal Wellness team at the Colorado Department of Public Health and Environment is currently developing a strategic plan to expand programming in the area of preconception health. We are conducting this survey to identify and learn from existing initiatives in other states. We greatly appreciate you taking 5-10 minutes to answer the following questions prior to our key informant interview call.

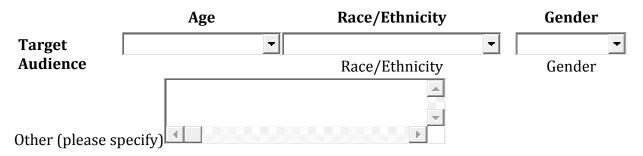
The term "initiative" is being applied broadly to encompass any work such as reports, committees, tool kits, programs, campaigns or other activities related to preconception health. If you have more than one initiative, please complete the survey separately for each initiative.

Thank you for your time!

1. In what state is your preconception health initiative focused?



3. Please provide information on the target audience for your initiative (age range, race/ethnicity, gender). If your initiative was not directed toward a specific audience, you may select "not defined" in the drop down lists below.



4. What is the focus of your preconception health initiative? Check all that apply.		
Oth	Alcohol Chronic Disease Clinical Practice/Recommendations Diabetes Folic Acid Intended Pregnancy Obesity/Healthy weight Reproductive Life Planning Substance Abuse Tobacco er (please specify)	
5. V	What outreach strategies are you using for your initiative? Check all that apply.	
Oth	Peer-to-Peer Education Client Education Provider Education Social Marketing Social Media (Facebook, Twitter, YouTube, etc.) Systems Building Policy er (please specify)	
	f applicable, in what type of setting/s have you implemented your initiative? eck all that apply.	
	Case Management Program Community-Based Program Family Planning Program Federally Qualified Health Center	

Healthy Start Home Visitation Program Medical Practice Public Health Department School-Based Health Center University or College Campus Women, Infants & Children (WIC) Worksite Wellness Program Other (please specify)				
7. Have you, or do you plan to, evaluate the initiative?				
YesNo				
8. Are there any publications, reports or other materials describing your initiative?				
Yes				
No If yes, and available electronically, please provide link:				
9. Do you have a specific website dedicated to your initiative?				
• Yes				
• No				
If yes, please provide the link:				
10. What is the funding source for your initiative? Check all that apply.				
Local County Funding				
State Funding				
Maternal & Child Health Block Grant				

Other Federal Fundament Private Funding March of Dimes Other (please specify)	ding (non-MCH)	
11. What is the appro	ximate budget for you	r initiative?
Less than \$5,000 \$5,001 - \$15,000 \$15,001 - \$25,000 \$25,001 - \$50,000 \$50,001 - \$100,000 \$100,001 - \$200,000 \$200,001 - \$500,000 \$500,001 +		
12. Please provide co Please provide contact information: Name:	ntact information:	
Organization:		
Address:		
Address 2:		
City/Town:		
State:	select state	▼
ZIP:		
Email Address:		
Phone Number:		

Appendix C: Key Informant Interview Questions

- 1. Tell me briefly about your role with the preconception health initiative.
- 2. Can you describe for me the strategies you have employed to address preconception health?
- 3. What strategies do you feel have been most successful?
 - a. From your perspective, what factors made them successful?
- 4. Can you describe how your strategies address health disparities?
- 5. How did you select your specific strategies?
- 6. How did you select the target population for your strategies?
- 7. Can you share some of your most significant challenges and key lessons learned from the work that has been done so far?
- 8. Who have been some of the key strategic partners involved in this work?
 - a. How are they involved?

If they responded on the initial survey that they have evaluated the project...

- 1. What methods were employed to evaluate your strategies/project?
- 2. If you have results from your evaluation efforts, would you be able to send us a copy of your evaluation report and copies of tools/surveys?
- 9. Is there anything you else have learned from your preconception health efforts that would help a state health department exploring new programming in this area? What advice would you give to other states implementing similar strategies?
- 10. May we follow-up with you again in the future, if needed?

I will be compiling information from these interviews into individual state summaries as well as a final combined summary report. Is it okay if I identify you in these reports as the key contact for the information collected about your work around preconception health?