Solution Title: “Clear the Air” – Smoking Cessation in Centering Pregnancy to Reduce Preterm Birth, Low Birth Weight and SIDS

Program/Project Description, including Goals: Maryland has a high incidence of preterm birth and low birth weight infants per the March of Dimes report card contributing to our national health care crisis. There is also a high incidence of smokers. The Maryland rate of women smoking was reported in 2011 as 22.6% and the US overall rate was 26.9%. A Survey of our patients revealed that 43% of our participants were smoking. Smoking can contribute to preterm birth, low birth weight infants and SIDS. Our Centering Pregnancy Program decided to implement a “Clear the Air Program” designed by us and incorporated into our Centering Pregnancy Program to help our patients quit smoking and also enhance behaviors that would reduce exposure to second hand smoke and promote a safe environment during pregnancy and post-partum.

Process: What methodology or process was used to develop the Solution? We developed a survey to identify smokers both tobacco and marijuana at entrance to the program. A follow up survey for post-partum was developed and administered during centering reunion. Peer recognition and support with a rewards system drives this endeavor.

Solution: What Solution was developed? How was it implemented? Session One of our Centering Pregnancy Program has a peer discussion on the hazards of pregnancy. Tobacco use and second hand smoke during pregnancy and around baby is discussed. Group activities that foster skills to change hazardous behavior and group goal setting and group support is initiated in the first session and is threaded continuously throughout all sessions. Models like “Smokey Sue” and “Hazards and the Placenta” were purchased to lend visual motivation. Hospital pediatricians are invited to session 7 to discuss the incidence of SIDS in AA county and safe sleep measures. Labor and post-partum nurses are trained to continue our efforts during their post-partum stay and office staff are also trained to support these efforts when participants have appointments and to encourage enrollment into our Centering Pregnancy Program.

Measurable Outcomes: What are the results of implementing the Solution? Provide qualitative and/or quantitative results to data. In our last data set of 115 patients 43% were smokers. After conclusion of the program 96% had quit and 4% had cut back. None of the smoking patients had a preterm birth or low birth weight infant. Patient satisfaction in the program was 100%. We included high risk clients in our program with a history of preterm birth, cerclage’s, twins, chronic hypertension, and Diabetes. Our clients ranged in age from 14-44. Our data mix was 33% low risk clients and 67% moderate or high risk. Despite our majority of high risk patients our preterm birth rate was 6 % and meets the 2020 healthy people goal of 8.1%. AA county MOD report card for preterm birth for 2015 was a B and we believe our program was part of this grade. Our cost savings estimate for this data set was $251,324.00.

Sustainability: What measures are being taken to ensure that results can be sustained and spread? We have expanded to two sites to offer this model of care to all of our pregnant patients. We have a steering committee that meets and administrative support dedicated to supporting this model of care based on our outcomes and increased patient satisfaction with this interactive model of care. The cost of this care was billed to Medicaid and private payers as part of their maternity services. The cost of implementation of the model and training to providers was funded by a March Of Dimes community grant.
**Role of Collaboration and Leadership:** What role did teamwork and collaboration play in the Solution? What partners and participants were involved? Was the organization’s leadership engaged and did they share the vision for success? How was leadership support demonstrated? Centering Pregnancy requires a team approach and visionaries seeking to change the delivery model of prenatal care. In our organization it required a committee of all the disciplines to implement such a change. It required the commitment to provide dedicated space large enough to accommodate groups of 10-12 pregnant women and their partners. We have had support to do this from our institutional leaders, our ob dept chair, our practice managers, our providers and the office staff as well as our community consumer representatives who sit on our steering committee. We have formed alliances with our AA County Health Dept, Storks Nest, our Pascal Women’s Center, The MFM’s at University of MD and our local March of Dimes chapter.

**Innovation:** What makes this Solution innovative? What are its unique attributes? Centering Pregnancy is not a new model. Literature abounds to support its efficacy as a better model of care to improve our maternal and fetal outcomes for the women we serve. What makes this solution innovative is that University of Maryland Medical Center and Baltimore Washington Medical Center has the first 2 certified sites by the Centering Health Care institute to offer this model of care in Maryland. Our program at UM-CMGWomen’s Health modified their existing program to include our “Clear the Air” initiative to put an increased emphasis on smoking cessation, avoiding second hand smoke and SIDS prevention. We continue our efforts to meet the triple aim in health care and to demonstrate how models of care can be changed to provide value based health care with measureable improved health care outcomes, patient satisfaction and health care cost savings. We are committed to this triple aim effect and our results speak for themselves.

**Related Tools and Resources:** Centering Health Care Institute data collection tool “Centering Counts”, March of Dimes Data Collection resource “Epicenter”, EMR “Epic” and Birth Tracks data collection tools. We also developed a pre and post survey to determine risk behavior and behavioral change with the program and “Clear the Air” initiative.

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