Identifying Problems and Possible Solutions to Address Poor Birth Outcomes in West Virginia:

Results of the Key Informant Survey and the Central Advisory Council and Strategic Planning Meeting of 2013

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The objective of the Key informant Survey of 2012 was to identify the major problems related to poor medical outcomes for West Virginia pregnant women and their infants and to identify potential solutions. The objective of the May 2013 meeting was to prioritize the solutions recommended through the Key Informant Survey and to utilize these priorities in developing a five year West Virginia Perinatal Partnership Work Plan.

Overview

In October 2012, the West Virginia Perinatal Partnership initiated a Key Informant Survey. Over a five month period, information from a variety of professionals, including health care providers, policymakers, advocates, and other professionals working with pregnant women and newborns was elicited. One important purpose of the survey was to identify the major barriers to positive perinatal outcomes in West Virginia. In addition, the survey sought to identify potential remedies that the Perinatal Partnership might be able to initiate.

On May 17, 2013, the Central Advisory Council and other experts met at Coonskin Park Club House in Charleston to review and prioritize the findings of this survey. Supporting research and perinatal statistical analyses were presented. Discussion, recommendations and potential solutions were debated and a prioritization process was implemented. Thirty-seven maternity and perinatal experts participated in this process. This report is an attempt to highlight discussions during the meeting on specific topics and to report the prioritization of key findings by participants.

This approach – the development and administration of a Key Informant Survey, a review of supporting research and discussion of possible solutions by experts, and the development of a work plan based on these findings – was utilized in 2006 and 2007 when the West Virginia Perinatal Partnership was first created and began its work. *The Key Informant Survey Report* of 2006, and the subsequent *Blueprint to Improve West Virginia Perinatal Health* and the *Reports on the Blueprint to Improve West Virginia Perinatal Health*, (published in 2006 and 2007 respectively) became the foundation from which the West Virginia Perinatal Partnership developed its work plan. Since that time, the Partnership has initiated quality improvement projects, outreach education, policy changes, and other important strategies to improve birth outcomes in West Virginia. These efforts are documented in the *Accomplishments of the West Virginia Perinatal Partnership* published in 2012. All of these reports, including the report from the 2012-2013 Key Informant Survey can be found at www.wvperinatal.org

The most recent key informant survey identified ten major issues affecting birth outcomes in West Virginia:

1. Perinatal, Pregnancy, and Childbirth Education
2. High Rates of Drug and Alcohol Use
3. Low Rates of Breastfeeding
4. High Teen Pregnancy Rates
5. High Rate of Tobacco Use In Pregnancy
6. Early Induction and Preterm Births
7. High Rate of C-Section Deliveries
8. Maternal and Infant Transport, the One Call System and Being Born at the Right Place
9. Access to Quality Care, including Access to Skilled Professionals
10. Obesity

Survey Findings and Prioritization

1. Prenatal, Pregnancy, and Childbirth Education

The need for expanded prenatal, pregnancy, and childhood education was identified by the Key Informant Survey.

It is clear that maternity and perinatal providers believe that prenatal and childbirth preparation are essential for first time pregnant women and would provide an important avenue for not only reducing unhealthy life style habits, but also for increasing knowledge of healthy habits. During the meeting, participants called upon all healthcare organizations, insurance providers, government and non-government health providers, including physicians, nurses, midwives, childbirth educators, and hospitals to make prenatal and childbirth education a priority. It was also felt that the expense of offering educational programs should be covered in maternity reimbursements; that education should be offered in a time and manner convenient to the pregnant woman and her family; that the education should be made a routine component of prenatal care; and that specific topics should be included in the educational program.

Participants made the following suggestions:

1. Provide prenatal education that emphasizes concerns of drug/alcohol use, method of delivery, benefits of breastfeeding and waiting for labor to begin on its own.
2. Schedule prenatal education as part of prenatal visits.
3. Require all first time pregnant women to take prenatal and childbirth education.

It was noted that a major obstacle in provision of prenatal and childbirth education is that the cost is not generally covered in insurance or health care coverage.

2. High Rates of Drug and Alcohol Use in Pregnancy

A significant portion of those who participated in the Key Informant Survey identified drugs/alcohol use in pregnancy as a major factor contributing to poor birth outcomes in our state. Respondents identified the need for a statewide system to encourage early identification and treatment of drug/alcohol use by pregnant women and to discourage punitive treatment of pregnant women using drugs/alcohol. Maternity providers expressed concern that punitive measures will discourage women from seeking prenatal care.

The primary solutions identified during the Strategic Planning meeting included:

1. Develop and implement a statewide system to encourage early identification and treatment of pregnant women using drugs or alcohol.
2. Increase the number of skilled providers willing to treat pregnant women using drugs/alcohol.
3. Include mandatory drug/alcohol testing as a routine component of prenatal care.

Other suggestions included more patient education on the effects of drug and alcohol use on the growing fetus and increased funding for treatment facilities for pregnant women.

3. Low Rates of Breastfeeding

There are many benefits to breastfeeding, including strengthened mother-baby attachment, improved health of the child, and lower health care costs. Yet, despite these benefits, West Virginia has low rates of breastfeeding. Participants of the Key informant Survey and Central Advisory Council and Strategic Planning Meeting identified the following solutions to encourage breastfeeding among West Virginia women:

1. Provide more education to hospital maternity nurses so that they can develop the skills needed to deliver effective care in helping new mothers with breastfeeding.
2. Educate and hire more qualified lactation consultants to assist new mothers in the hospital and after discharge.
3. Promote policies that improve conditions for breastfeeding working moms.

Teaching school children the importance of breastfeeding, promoting policies that allow women to breastfeed in public, and advocating for longer paid maternity leave were other suggestions that key informants made on the survey and during the meeting.

4. High Teen Pregnancy Rates

As noted in a recent report, "women under the age of 20 in West Virginia have higher rates of premature births, low birth rates, and infant mortality than older women. Even more troubling is the fact that the teen pregnancy rate in West Virginia has been increasing higher than that of the national average. Additionally, the majority of poor birth outcomes in women under 20 years of age are directly related to a lack of knowledge and misinformation about how to have a healthy pregnancy and a healthy baby." (*A Study on Health Education and Teen Perinatal Outcomes*, Edvantia, 2009.)

Given this, it is not surprising that respondents to the Key Informant Survey and participants in the Central Advisory Council and Strategic Planning Meeting identified teen pregnancy as one of the major challenges facing our state and impacting birth outcomes. The potential solutions identified by participants focused heavily on reproductive health education within the school

system. It was noted during the meeting that not all schools are equal in terms of the reproductive health education in the curriculum. A study commissioned by the West Virginia Perinatal Partnership and conducted by Edvantia, an educational research group, found that fewer teen pregnancies and less babies born at low birth weight are reported in counties where health educators are experienced and certified, and where school based health clinics exist.

The following suggestions for reducing teen pregnancy were identified by the Survey respondents and meeting participants:

1. Support the state Family Planning Program and other programs that increase access to education and services.
2. Require all middle and high school students to have comprehensive health/sex education.
3. Increase the number of school-based health services.

Promoting the use of long acting, reversible contraception for teens was also identified by many who participated in the survey and in the meeting.

5. High Rate of Tobacco Use In Pregnancy

Smoking and other uses of tobacco in pregnancy is one of the most challenging problems facing maternity health care providers and policymakers in our state. Despite the well-documented adverse effects of tobacco use on birth outcomes, which include preterm birth and low birth weight, West Virginia has the highest rate of tobacco use in pregnancy with nearly 30% of all pregnant women in the state smoking. To address this critical problem, survey respondents and meeting participants made the following suggestions:

1. Encourage health care providers to counsel women on cessation through one on one conversations.
2. Study other states that have achieved dramatic decreases and replicate successful programs.
3. Increase the number of health care providers trained to deliver effective cessation counseling.

Other suggestions to lower the use of tobacco during pregnancy included increasing public awareness campaigns on the effects of smoking during pregnancy and working to increase taxes on tobacco products.

6. Early Induction and Preterm Births

Although incidences of non-medically indicated early induction of labor have decreased in the last few years, too many infants in West Virginia are born too early. Premature births result in

low birth weight, leading to a multitude of health problems and high healthcare costs. Survey respondents and meeting participants focused on two key strategies.

1. The public, and specifically pregnant women, need open and honest education on the risks of inducing labor and the associated costs both in dollars and health outcomes.
2. The possibility of restricting reimbursement for inducing labor to only those that are medically necessary should be explored.

7. High Rate of C-Section Deliveries

West Virginia has one of the highest Cesarean section rates in the country. The West Virginia Perinatal Partnership's ***First Baby Initiative*** aimed to reduce c-sections and to increase vaginal births after cesarean (VBAC). In many participating community hospitals, c-sections rates decreased as a result of this quality initiative. However, the same results were not realized by larger hospitals. Several theories why the initiative was more successful in smaller hospitals have emerged. One possibility is that larger hospitals have more staff to influence. As a result, changing processes and practice patterns takes longer and requires a sustained effort. Moreover, hospitals that treat high-risk maternity patients will likely have a higher c-section rate compared to hospitals that do not.

Another theory as to why the state hasn't been more successful in lowering c-section rates has to do with when women in labor are admitted to the hospital. It is recommended that women not be admitted until they are at least 4 centimeters dilated; this is an indication of active labor. (New guidelines jointly released in February 2014 by the American College of Obstetricians and Gynecologists and the Society for Maternal Fetal Medicine recommend longer laboring times and the consideration of 6 centimeters dilation as the sign of active labor.) It is unclear whether waiting until active labor to admit women is widely practiced.

Key informant survey respondents and meeting participants indicated the following as potential solutions to lower C-Section rates:

1. Continue to bring together hospitals and physicians, such as was done as part of the First Baby Initiative, to work on sustained education and changes in practice patterns.
2. Explore changes in payment schedule to incentivize VBAC and normal deliveries.

8. Access to Quality Care, including Access to Skilled Professionals

Although the receipt of early and regular prenatal care, including support services, is important to assuring healthy perinatal outcomes, many women in West Virginia do not have access to such care. The lack of providers in remote and rural parts of West Virginia is a major obstacle. Survey respondents and meeting participants recommended these key strategies.

1. Expand the Connect to Care project to all rural areas by providing telecommunications equipment and dedicated personnel to the project.
2. Establish collaborative practices utilizing physicians and advanced practice nurses to provide obstetrical care in under-served areas.
3. Explore policy changes that will allow for the adequate reimbursement of ancillary services such as lactation consultation and home visitation.

Another strategy recommended by many participants addresses the financial barriers women may face that affects their ability to receive early prenatal care. The Office of Maternal, Child and Family Health offers funding for women to receive medical care and can bridge the time before they receive Medicaid coverage. Respondents felt that this funding source should be promoted so that more are aware that it is available.

9. Maternal and Infant Transport, the One Call System and Being Born at the Right Place

Early recognition and transfer of high-risk pregnant women and sick newborns to facilities with adequate diagnosis and treatment expertise are essential to reducing neonatal mortality rates.

During 2011-12 the Partnership studied where very low birth weight babies are born. The Centers for Disease Control and Prevention urged States to closely monitor this information and to aim for a goal that 90% of all very low birth weight babies be born in a tertiary care center. This issue is of great concern because infants of less than 1500 grams of weight do much better if they are born in a high risk center rather than being transported after birth. There is some research that indicates that the act of transporting very low birth weight (VLBW) infants may cause or increase the chances of brain hemorrhage. In West Virginia, 84% of VLBW babies are born in the "right place."

Several issues related to this problem were discussed during the meeting. Foremost, the lack of a statewide transport system for pregnant high risk women entering labor poses serious barriers for hospitals and doctors attempting to treat them. The establishment of such a transport system is supported by the majority of participants. It was recommended that a report be developed that discusses the cost for such a system and how it might function. The key informants feel that a request should be made to the legislature and state policy makers to fund this transport system.

Survey respondents and meeting participants recommend the following solutions for addressing transport and communication problems:

1. Establish a statewide maternal transport system.
2. Formalize referral processes by establishing transfer agreements with tertiary care centers in order to ensure a multidisciplinary and integrated approach to comprehensive care.

10. Obesity

The Key Informant Survey responders and the meeting participants both focused on early prenatal education as a key solution to addressing the risk factors associated with obesity among pregnant woman. Early prenatal education can promote good nutritional habits. In addition, respondents suggested correlating the rising incidence of diabetes with obesity, thereby linking reductions in obesity to a life span improvement.

Conclusion

The West Virginia Perinatal Partnership will design a five year work plan to address many of the problems and solutions offered through the findings of the Key Informant Survey and the 2013 Central Advisory Council and Strategic Planning Meeting.

It is evident that education, both for pregnant women and for perinatal providers, is essential if we are to improve birth outcomes in West Virginia. Only through the collaboration of many organizations, agencies, and individuals working in partnership can we address the many issues identified by those working with pregnant women and their newborns. The West Virginia Perinatal Partnership will continue to develop new strategies, seek to change existing programs and policies, and put mechanisms in place to address the health care needs of these critical populations.