

DM DISEASE MANAGEMENT ADVISOR™

VOLUME 12

NUMBER 4

APRIL 2006

Payers look for programs that can limit complications and costs

Clinical and financial opportunities abound in maternity DM

More than thirty percent of women who become pregnant each year encounter some form of complication that threatens the health of the mother or baby -- and inevitably leads to escalating costs. However, aware that many of these complications are preventable or manageable, employers and payers -- who have long spent a significant portion of their health care dollars on pregnancy-related costs -- are now showing unprecedented interest in maternity management programs.

In response, health plans and DM firms are doubling and redoubling their efforts to get pregnant women into care early; they are re-engineering their risk assessment processes to make the most out of new research; and in many cases non-traditional interventions are being employed to make sure that no opportunities are left untapped to assure a healthy delivery.

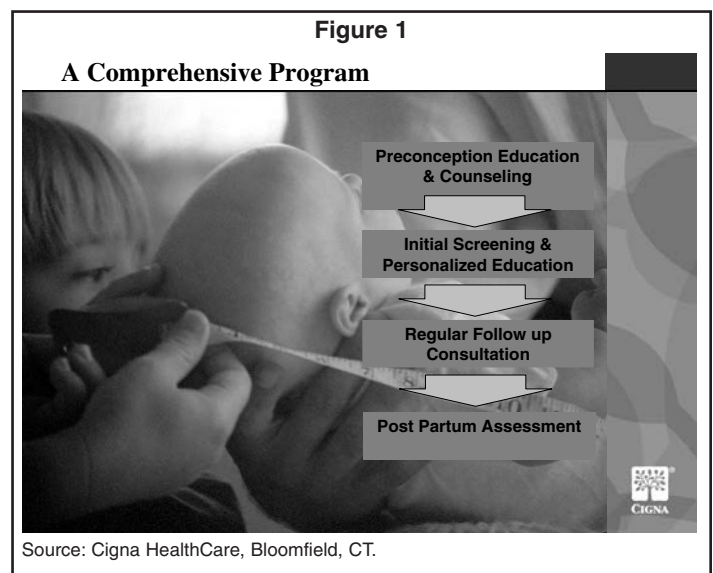
The chief aim of such efforts is to prevent preterm births, which typically lead to a cascade of health care interventions that cost many times the amount of a full-term delivery. In fact, the benefits of avoiding such complications are so valuable that many health care organizations are developing programs aimed at intervening with women even before their babies have been conceived.

New enhancements

In response to this changing market environment, Bloomfield, CT-based CIGNA HealthCare has just announced a major overhaul of its Healthy Pregnancies, Healthy Babies program that includes hefty enhancements to services as well as a more robust approach toward identification and enrollment. "We have a number of large national employers telling us for the last couple of years

that they really want to do more in the area of healthy pregnancies -- more than just the standard healthy baby education programs than we have offered in the past," explains **David Ferriss, MD**, medical director for CIGNA HealthCare. "This program is designed to respond to those customers' needs and desires for a more comprehensive program." (See Figure 1.)

Ferriss stresses that CIGNA is responding to a persistent problem across the country of premature births and low birth-weight babies. "A focus of this program as well is a reaching out to providers to inform them of data that exists supporting the use of 17-hydroxy progesterone caproate or 17-P," a therapy that some studies suggest can be helpful in preventing pre-term delivery when administered to women who are at high risk because they have experienced a previous pre-term delivery. "We are finalizing our communications materials now, but



there will be an outreach to all of our contracted obstetricians across the country regarding this program, and in particular, the evidence supporting the use of 17-P.”

Tiered incentives

To reach pregnant women earlier, CIGNA has expanded its referral sources to include referrals from customer service, the disability area, and dental benefits, when customers have those services in place. Additionally, the organization has developed tiered incentives aimed at engaging women during the first trimester when there is optimal opportunity to impact outcomes, and then keeping them enrolled through delivery. The specific incentives offered are determined with the client organization, but the approach is designed to offer the greatest rewards to women who enroll early in their pregnancies, although participants do not actually receive the incentives until the program has been completed.

Another enhancement involves a new program that delivers targeted communications to women in their childbearing years. “This would include women who are not yet pregnant, and it consists of messaging regarding the importance of health prior to pregnancy,” explains Ferriss. “For example, [the program stresses] the importance of adequate intake of folic acid, not smoking, good nutrition, and exercise.”

Risk assessment

Upon enrollment in the program, women undergo a health risk assessment that stratifies them as low risk, moderate risk, or high risk. In the past CIGNA has routinely given pregnant women at high risk special attention through its specialty case management division, and this will continue. However, the new program offers additional interventions to women categorized as moderate risk or low risk.

Women in the low risk group, for example, receive preventive

education and personal engagement from a nurse specialist upon enrollment, five months into their pregnancy, seven months into their pregnancy, and postpartum. Women at moderate risk receive preventive education plus monthly outreach targeted to their needs.

While the program is currently being piloted by a few large clients, CIGNA plans to make it available nationally on January 1, 2007. By that time the company intends to further streamline the risk assessment process so that members can complete the questionnaire online. Then, based on the responses provided, the system will automatically trigger nurses to contact members by phone for further consultation.

Birth complications: An early warning sign for heart disease?

It is routine practice to closely monitor women who experience pregnancy complications, but such follow-up typically concludes upon delivery. However, a new study suggests that pregnancy-related complications such as preeclampsia, gestational diabetes, and preterm birth are, in fact, an early warning sign of impending heart disease. And both patients and health care organizations stand to gain with prompt action to mitigate risk.

These findings come from investigators at Duke University who analyzed data from the Perinatal Health Services Outcomes Database, which includes all women who gave birth at Duke between 1979 and 2005, and the Duke Information System for Cardiovascular Care, which includes all patients who have received a cardiac catheterization since 1969.

By comparing outcomes from women who appeared in both databases, the researchers found that pregnancy complications added a 1.6-fold risk for the development of cardiovascular disease. Pregnancy complications also increased mortality risk more than two-fold. Additionally, the researchers found that smoking more than doubled the risk of all-cause death, it nearly tripled the risk of cardiac death, and it nearly doubled the risk of developing coronary artery disease.

The findings strongly suggest that providers have an opportunity to short-circuit the course of heart disease in women who experience these birth complications. “What happens is a woman has preeclampsia, gestational diabetes, or a preterm birth, and then goes for an OB/GYN checkup, and everything is fine after delivery,” notes **Mimi Biswas, MD**, the Duke cardiologist who conducted the analyses. “That would be a great time to take the woman aside, and to go through a cardiac risk factor evaluation with her. This could include everything from going through her family history and really checking her BP and cholesterol, to measuring her abdominal girth.”

Biswas emphasizes that providers should then follow the women more closely, even at this early age, and get on top of treating risk factors such as early hypertension, metabolic syndrome, and diabetes. “The women [in the analyses] were very young -- in their twenties -- at delivery, and they were getting MIs and they were dying in their forties,” she says. “Compared to the population as a whole, these women are having heart attacks and dying much younger.”

In light of these findings, Duke is taking steps to implement organizational changes that will trigger appropriate intervention in women who experience these birth complications. “OB/GYNs are really busy doing other things, but [we want to develop] some really easy guidelines for them,” says Biswas. “Everyone has a postpartum follow-up. And if they have any of these red flags, then they should get a quick risk factor evaluation either by the OB/GYN or they should get referred to get one.”

Multiple gestations on the rise

While Richmond, VA-based Health Management Corporation (HMC) has offered maternity management since the early 1980s, administrators there have also seen an up-tick in demand for services in the last two years. "With all the fertility drugs out there, we are seeing a lot more multiple gestations than in the past, and very few triplets get to full term," explains **Donna Snow**, staff VP of Disease Management at HMC. "[Payers] realize that one preterm baby can set them back \$2 million, so while they need to manage chronically ill patients, they also need to manage pregnant moms."

Currently, HMC is actively managing more than 6,000 pregnant women in its Baby Benefits program, which assigns a primary nurse to all women who are identified as having modifiable risk factors. "That nurse is going to stay with the member through the whole pregnancy, and she will contact her daily, weekly, or monthly, depending on risk severity," notes Snow, emphasizing that the nurse's job is to take advantage of any opportunity to insure a full-term pregnancy.

If a woman has been assigned to bed rest, for example, the nurse may need to arrange for child care assistance if there are toddlers in the house. Alternatively, a woman who is experiencing pregnancy-induced hypertension will need to have a BP cuff at home so she can monitor her own BP. "We are truly managing the individual," stresses Snow. "We are educating her about the risk factors, educating her about what we can do and what health benefits she has, and then assisting her in adhering to her physician's plan of care."

Other available interventions include referral to a dietitian for nutritional guidance, or referral to a mental health specialist if there are indications of depression, anxiety, or any other behavioral health issues that could interfere with the pregnancy. A pharmacist may also be called in for consultation if there are issues with adherence or potential adverse drug interactions involved.

Pre-conception intervention

An evaluation conducted in 2003, comparing a group of pregnant women managed in the Baby Benefits program with a matched group receiving usual care, suggests that the approach is cost-effective, delivering a return of \$3.80 for every dollar invested in the program. However, HMC administrators are striving to achieve a greater impact by reaching more eligible women and engaging them earlier in the program. Consequently, the organization plans to aggres-

sively market a pre-conception program targeted at women who are planning future pregnancies.

The promotion for this program seeks to attract inbound calls from women who are thinking about becoming pregnant. "We will go over an assessment with these women that covers their lifestyle choices and what is going on that might impact a pregnancy," explains Snow. Immediately after the assessment, HMC mails educational materials on pregnancy planning to the member. "Then six weeks after we have spoken with the member, we will call her back to see if she is pregnant, and if she is pregnant, we will enroll her in our maternity management program."

Physician incentives

Silver Spring, MD-based APS Healthcare has also established a strong focus on reaching pregnant members while they are still in their first trimester. Program developers do this by working with clients to promote the organization's Healthy Additions program to eligible members, and by establishing incentive programs for participation. Additionally, the organization has had good success nurturing physician referrals into program by implementing provider incentives as well.

"We have a very large customer in Hawaii, and we have had huge success with giving physicians frequent flyer miles for making referrals into the program," explains **Kristin Blasko**, VP of product development at APS Healthcare. "On average, physicians are spending 9 to 11 minutes with any given patient, so they have been very open to having our health coaches out in Hawaii meet with them and explain the program. And they have certainly been enticed by the frequent flyer miles program that we have put in place."

Traditional and non-traditional risk factors

Like the programs offered by CIGNA and HMC, APS's program begins with an outbound phone call and risk assessment questionnaire. During this process, nurses look for the traditional risk factors associated with pregnancy such as high BP and diabetes, but they also look for socioeconomic and psychosocial risk factors, stresses Blasko. "We know that someone who is just trying to get food on the table is not going to be focused on their pregnancy," she says. "And given that we have a lot of experience not only with health, wellness, and DM, but also our core [business] in behavioral health, we really have a lot of experience in looking for and finding people with anxiety issues, or depression, and managing those behavioral co-morbidities so that we

can get our arms around them and have a positive medical outcome.”

Women with risk factors receive ongoing education and support from their health coach and referrals back to their physician as necessary, and every point of contact is documented, adds Blasko. “We reassess the situation, comparing the data that we have collected to the baseline, and we make sure we are following-up with the physician,” she says. “We send out [educational information], and establish plans for emergency situations so that we can really mitigate those risks and get these women to a healthy pregnancy.”

Positive outcomes

Women categorized as low risk typically receive three or four calls over the course of their pregnancy, at which point they are reassessed for any new risk factors or complications. A final call from the health coach is typically initiated 2-4 weeks following delivery. “We assess the mother’s condition, confirm that they have established an appointment for follow-up with their physician and an initial appointment for their baby with a pediatrician, and discuss any issues around breast feeding or healing, if they have had a cesarean delivery,” adds Blasko.

Looking at APS’s entire book of business,

Blasko notes that the program consistently delivers an ROI of \$3 for every \$1 invested, and this is reflected in clinical outcomes as well, with 92.5% of women enrolled in the program delivering full-term versus a national average of 87.9%. Additionally, the cesarean rate is less than half the national average, and surveys suggest that the program satisfaction rate is greater than 95%.

Identify & engage

Going forward, APS has recently developed informatics tools designed to identify any gaps in care through claims analysis, and members are empowered to share that data with their physicians.

All of these enhancements are important, but like Ferris and Snow, Blasko emphasizes that you cannot underestimate the importance of early identification and engagement. “We have continued to evolve our incentive programs to encourage participation because, although we find a fair number of participants through claims, the primary method of identification is through physician and self-referrals.”

Editorial note: More information about the maternity management programs discussed in this article can be accessed through the following Web addresses: www.apshealthcare.com, www.choosehmc.com, and www.cigna.com. ❖