Coordinated Perinatal Care Pays Off for Mother and Child

BY ANTHONY PIVARUNAS, DO

How do we ensure a pregnant patient gets the best possible outcome for herself and the child in the womb? How do we reduce neonatal morbidity and the long-term health effects of prematurity like cerebral palsy, learning disabilities and hearing and vision problems? And, in this age of cost-containment, how do we decrease the number of births at the cusp of viability that have costs well into the hundreds of thousands of dollars? The answer is care coordination.

Fortunately, many pregnancies are low risk and will have a normal outcome with little or no intervention by medical providers. But when we identify a high-risk pregnancy, we must coordinate the whole process of the pregnancy, birth, postpartum and neonatal care.

The National Quality Foundation in 2006 endorsed a definition and framework for measuring care coordination as "a function that helps ensure that the patient's needs and preferences for health services and information sharing across people, functions and sites are met over time." Although the push for care coordination is relatively new, one can argue that this has been the goal of prenatal care from the very beginning. In fact, care coordination is an approach that we have been slowly implementing and refining for over the last 15 years, even though we did not call it by this name.

Sisters of Charity Hospital in Buffalo has been caring for the pregnant women of Western New York for over 160 years. Our hospital is the only one in Western New York with a Level III neonatal intensive care unit and an adult intensive care unit in the same location, a full complement of maternal-fetal medicine physicians, as well as a complete team of adult medical and surgical subspecialists. Sisters of Charity Hospital delivers around 3,000 babies per year, and because a substantial number of these patients are high-risk, given our patient population and referrals from other hospitals, over 20 percent of these neonates end up in our neonatal intensive care unit.

Care coordination has been an important theme for us over the years as we strive to deliver safe, state-of-the-art and compassionate care to our patients. This article will illustrate a few of the strategies that the obstetrics and gynecology department implemented in order to improve health services and information-sharing across people, functions and sites.

THE FAMILY HEALTH CENTER

Though we didn't realize it at the time, we began our push into what's now called care coordination in the mid-

Sisters of Charity Hospital in Buffalo, N.Y. , is a 413-bed community hospital. It is part of the Catholic Health System, a non-profit health care system that provides care to Western New Yorkers across a network of hospitals, primary care centers, imaging centers and several other community ministries.

1990s, in our Family Health Center. The center is a large outpatient clinic located within our hospital and is dedicated to providing obstetrical and gynecologic care to a mostly underserved population.

The Family Health Center is a main site for obstetrics and gynecology resident education and is a very large and busy obstetrical practice, as well. The clinical providers comprise 12 residents, three full-time nurse practitioners and one full-time supervising physician/medical director, as well as a number of support staff.

But the center started out as a small clinic with few patients, and it mostly served a residency training function. Patient volume increased over time, and it became apparent that some patients received fragmented care. The resident physicians saw all the patients and presented the patient details to whichever supervising physician happened to be covering that day. With the constant changes in residents' schedules and supervising physicians, a patient was likely to see multiple caregivers with different management plans during a single pregnancy — and the only information that passed from provider to provider was brief notes in the chart. Many patients began to self-select physicians they trusted, sometimes telling a different attending physician, "I need to check with my doctor" before making a treatment decision.

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Our task was to somehow optimize the care for our increasingly high-risk patients while at the same time continue our teaching mission for the residency program. Looking back, it's clear these simple but effective strategies led us down the path to care coordination.

COMPREHENSIVE INITIAL PRENATAL VISIT

A three- to four-hour comprehensive prenatal visit is the first step in every patient's prenatal care. A social worker, nutritionist, financial counselor, nurse educator and medical provider see all new pregnant patients. Each patient receives a plan of care once this data is compiled, with the coordination of the full-time supervising physician. Low-risk patients are scheduled to be seen by nurse practitioners, while high-risk patients are scheduled for the resident physicians and supervising physician, based on the complexity of the pregnancy and the resident's experience. A general management plan is clearly written in the medical record and modified during the course of the patient's care as needed.

CONTINUITY CLINICS

Each resident physician is scheduled to spend one-half day per week in the Family Health Center and has an individual schedule of patients. We make every effort for patients to be seen by the same resident physician throughout the pregnancy, so that less time is spent reviewing the chart and more time is actually spent caring for the patient. With this change, residents have more involvement with their particular group of patients. Many even want to care for their patients while in labor, even though they may not be on labor and delivery service at that time.

FULL-TIME PHYSICIAN SUPERVISOR

With 15 different medical providers, it would be easy for patients to receive disjointed care; this was especially true when we had different supervising physicians for the residents each day of the week back in the early 1990s. We now have one full-time supervising physician/medical director who is responsible for the Family Health Center. Like conductors in a symphony, the full-time supervising physician along with the charge nurse have been an integral part of our success, acting as the main and consistent coordinators of care for all the patients.

Eliminating day-to-day changes in clinical management helps the entire staff to function more efficiently. We also found having a single physician direct the resident physicians and nurse practitioners made it easier for the Family Health Center to implement evidence-based protocols.

ELECTRONIC HEALTH RECORDS

Electronic health records have been the glue that has helped keep all these efforts together, and the family health center was the first site in our hospital to use them. It has been invaluable for the on-call physicians to have ready access to the patient's history and prenatal course and to be able to make notes in the electronic record about the encounter with the patient.

The electronic record also allowed the Family Health Center's supervising physician/medi-

cal director to more efficiently track and manage the entire population of patients. Plans of care are easily scheduled into each patient's chart, noncompliance is readily identified and the record creates a work list for the nurses to contact the patient.

INPATIENT HIGH-RISK SERVICE

Just as the care in the Family Health Center was fragmented because of multiple different providers with multiple different opinions on how to best manage patients, the same was occurring when high-risk patients were admitted into the hospital. To remedy this, we turned over the management of the high-risk patients to our maternal-fetal medicine physicians, who had seven-day-per-week responsibility for planning and managing our inpatients' care.

Our in-house supervising physicians and our resident physicians would still deliver these patients' babies, but they did so with the coordination of the maternal-fetal medicine specialists. All our high-risk patients admitted for inpatient management have a neonatal consultation and a tour of our neonatal intensive care unit, which helps them to better understand the whole continuum of care.

MULTIDISCIPLINARY CARE CONFERENCES

Keeping a whole team on the same page can sometimes be difficult in a large practice setting. Twice a month, a multidisciplinary care conference is held. Most of the Family Health Center caregivers are present, as well as the maternal-fetal medicine specialists, who run our fetal evaluation unit and provide the high-risk antepartum inpatient management. Others like the neonatologists and the labor and delivery charge nurse are present when a particular need arises.

During the conference, the first objective is to make certain that the patient is getting the most appropriate care in the Family Health Center. The second objective is to coordinate the care continuum between the Family Health Center, the inpatient antepartum unit, labor and delivery and the neonatal intensive care unit. As they review each high-risk patient, everyone with new or important information has a chance to share it with the group. This allows all the physician providers to be aware of each other's patients whom they may encounter while on call.

FUTURE GOALS

Although we have had success in coordinating care, we still have more work to accomplish. Many of the Family Health Center patients receive home care visits both antepartum and postpartum, but there is a lack of real information sharing between the hospital and the nurses doing the actual home visit. We are arranging to have the home care agency send a representative to our multidisciplinary care conferences and help more fully complete the sharing of information. Given that 70 percent of Sisters of Charity Hospital's obstetrical volume is from private physicians, our next goal is to somehow incorporate our private physician's high-risk patients into our multidisciplinary care conference. Although it would be difficult for physicians in private practice to attend the actual meeting in person, we are exploring the idea of having physicians attend via HIPPA-compliant, secure webcast.

CONCLUSION

In the ever-changing arena of health care reform, we have new terminology and concepts (e.g. "care coordination," "care transitions," "patient-centered medical home") to describe the ideal model for patients. But are these things really all that new?

At our institution, we were creating perinatal "care coordination" for many years as we took steps toward our goal of providing the best possible outcome for a pregnant mother and her unborn child. I believe that most of us involved in health care have been trying to create a better model for health care for years. In the end, no matter what we call it, we should never lose sight that the most important concept for patient care is what the renowned physician, researcher and teacher, Francis Peabody, stated in 1925: "The secret of the care of the patient is in caring for the patient."

Like conductors in a symphony, the full-time supervising physician along with the charge nurse have been an integral part of our success, acting as the main and consistent coordinators of care for all the patients.

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