Improved Readmission Rates for Low Birthweight NICU Graduates in Their First Year of Life

United Healthcare Community Plan Pennsylvania and ProgenyHealth

Description

Hospital readmission occurs frequently for infants who are discharged from a neonatal intensive care unit (NICU). NICU nurse case managers engage and educate families of NICU graduates while the infant is in the hospital and educate the families about issues that could lead to a readmission. Case managers apply evidence-based best practices in developing customized care plans, and they plan outreach according to the individual needs of each infant and family.

The managers also collaborate with specialists and social workers to ensure the best outcome for each infant. Ongoing family education, appointment and vaccination reminders, continuous follow-up, and the availability of care management nurses to families by phone 24/7, all work to keep these young Pennsylvania members healthy and out of the hospital.

Priorities

The program described is responsive to the following Medicaid priority areas:

- lmprove access and health outcomes for vulnerable populations.
- Promote patient-centered care through engagement and shared decision-making.
- Control or reduce the per capita cost of care or increase efficiency.

Research

Center for Medicare & Medicaid Services. Readmissions Reduction Program. (2013).

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Patient Protection and Affordable Care Act. 111th Congress of the United States of America at the Second Session. (2010). Washington, DC.

Wade, K. C., Lorch, S. A., Bakewell-Sachs, S., et al. (2008). Pediatric care for preterm infants after NICU discharge: High number of office visits and prescription medications. J Perinatol, 28, 696-701.

Intervention

The health plan conducted a retrospective data analysis from its Baby Trax® database on all NICU patients who were Pennsylvania members that required a readmission in 2013-2014. These readmissions included both medical diagnoses (78.8%) and surgical procedures (21.2%).

The program is designed to provide health care members with enhanced case management support and care coordination by a dedicated nurse case manager after their baby is admitted to the NICU. The family is contacted by a case manager when the infant enters the NICU, and he or she is available to the family 24/7 the first year of life. Case managers assist with discharge planning in conjunction with the hospitals and supervise the transition of care to the home. They are also available 24/7 to ensure families are connected to their providers and receiving necessary health care services after NICU discharge. Case managers work to educate and empower families so they feel comfortable and confident. They provide parents with valuable information about milestones, health, nutritional needs, and developmental goals. In addition, if a mother is interested in breastfeeding support, a lactation consultant is available to her as needed.

Outcomes

Patient outcomes. The outcomes data reviewed from the Baby Trax® database were from the fifth program year covering the 12 months from June 2013 to May 2014. During this time, there were 105 readmissions of NICU graduates in all birthweight categories. For the low birthweight (LBW) infants in this group, those less than 2.5 kilograms, there were 50 readmissions out of 269 LBW infants. The readmission rate of the LBW infant population was 18.6% and compares with the benchmark of 27.4%. The readmission rate for LBW infants managed by the health plan was 32% lower than the benchmark data.

Clinician outcomes. Upon review of those in the case management program, participating families had infants with lower readmission rates than those who did not participate. In the cohort of infants who required readmission, the enrollment rate in case management was only 29%. In contrast, of the population not requiring readmission, 48% of the families were enrolled in case management. From this review, it is clear that enrollment in the case management program reduced the likelihood of a readmission.

Community impact. Families who enroll in the program rate their satisfaction among the highest levels of satisfaction. The plan already carries a satisfaction rate of 88% among all members.

Cost savings. The paid-claims database demonstrates that Medicaid payers in 2014 were paying approximately $25,000 per readmission for NICU graduates. During the period of 2013-2014, the program reduced LBW readmission for NICU graduates by 32% from benchmark data, which are approximately 24 readmissions. Estimated savings for the state is approximately $600,000.

Key Components of Success

The initial challenge faced by case managers is to make certain families understand the value of having a dedicated case manager to support them and then to encourage them to enroll in the program. Motivational coaching of case managers better equipped them to engage parents in a conversation. It is also very important to let families know that the service is provided at no cost to them and is an additional benefit being provided to them by their health plan. Educating and reassuring parents is a key factor.

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