Title:
CAMP: Care for Addicted Mothers Program

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Abstract Summary:
The current opioid crisis is affecting not only pregnant patients, but also their newborn infants. This project involved implementing a prenatal screening tool for early identification of maternal drug use, conducting a needs assessment of clinical staff and developing standardized education for staff providing care to mothers and babies.

**Learning Activity:**

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**Abstract Text:**

Introduction/Background:

The opioid crisis in the United States is well documented with alarming statistics and outcomes throughout the news media. One component of this crisis, drug dependent pregnant mothers and their newborns, has greatly impacted our nation’s hospital systems. Over a two-year period (2014-2016), a 42% increase in newborns born with Neonatal Abstinence Syndrome (NAS) was experienced at Lehigh Valley Health Network (LVHN), which is a large Magnet designated health care system in the northeastern area of US. The increase in this NICU population has escalated challenging interactions between parents and NICU clinical staff as expectations for intensive neonatal care were not understood or anticipated by parents. Challenges were recognized by multiple stakeholders in the system and a need to improve the care continuum for mothers and babies as well as education for clinical staff was identified.

Aim/Goal/Purpose Sentence:

The goal of this quality improvement project was to improve the care continuum for pregnant women and newborns exposed to opioids at LVHN by conducting a needs assessment of clinical staff and developing standardized education and resources for staff providing care to mothers and babies.

Methods:

Through the Maternal-Child Health Nurse Leadership Academy (MCH) sponsored by Sigma Theta Tau International (STTI) and Johnson & Johnson®, the project leadership team of Warren Furry (Fellow), Mary Bianchi (Leadership Mentor) and Carol Klingbeil (Faculty Advisor) devised a project plan. Individual interviews were conducted with key stakeholders including LVHN Women’s and Children’s Service Line leadership, the Chairs of the Departments of OB/GYN and Pediatrics and pertinent clinical committees to gauge interest and support.

A LVNH project team representing diverse interdisciplinary backgrounds was formed to study current LVHN clinical protocols and to examine the current state of the care continuum. The team reviewed knowledge of the current opioid crisis, planned to assess the knowledge gap of the staff and determined the ideal method to conduct education in the organization. The current approach for screening patients for substance use was reviewed and determined that improvements were needed as the tool did not adequately explore drug use. The evidence based 4P’s Plus® screening tool was identified as a comprehensive tool to be implemented and used for the first prenatal visit for all new LVHN patients. This tool includes questions about patient’s parents, partners, and
personal past and present use of alcohol and drugs. A new LVHN maternity care pathway was in the process of development and the 4P’s Plus© screening tool was added to the pathway and integrated into the EPIC electronic medical record during project implementation.

The project team explored the current education available to the outpatient clinical teams addressing clinical content such as maternal drug use, maternal drug screening, maternal addiction medication choices and care of and identification of the baby with NAS. An initial educational session was held with LVHN outpatient office nursing staff to provide a forum for baseline education and to identify a follow-up survey that would be launched to gather additional post-education information. Baseline education included content about the improved screening tool, interpreting answers to the new screening tool, maternal drug use information, communication styles used in discussing the screening tool results, NAS and how NAS is treated in the inpatient NICU at LVHN. A 10-question survey was designed by the project team and delivered via Survey Monkey® to assess staff knowledge after the baseline education and to identify further education needs to plan for a subsequent education session to be held three months after the baseline education during the LVHN OB/GYN Department Grand Rounds. Content covered during the second education session included a review of the staff/patient communication challenges, survey findings and community services available in Lehigh County, Pennsylvania. The interdisciplinary project team continues to meet to discuss the project status and next steps as the compelling issue that prompted this project has not diminished in the community or the country.

Results:

NAS admissions to the LVHN NICU have declined in 2017 thus far to 50% of 2016 admission numbers. Improved screening during prenatal care has been implemented in the organization as a result of the project. Initial education to approximately 130 LVHN outpatient OB/GYN office staff was provided during two separate sessions. Staff demonstrated knowledge was attained after the initial education sessions and provided valuable feedback about the need for more information to refer mothers for more help with their opioid dependence/addiction and to discuss the potential neonatal care for infants in the NICU. After the initial education staff also voiced an increased understanding of how it might feel to take care of NAS patients and what the challenges for the parents might be as well. The result of improving the work life experiences of the staff has provided an opportunity to promote more empathetic patient care. An unanticipated positive outcome has been the building of relationships between inpatient and outpatient LVHN clinical staff and the breaking down of communication silos during the education sessions.

Conclusions:

Using the MCH Academy to implement a quality improvement project using evidence-based practice to increase knowledge, improve the care of mothers and babies with opioid addiction and provide resources for staff and families, has demonstrated improved staff knowledge and satisfaction in caring for this population. Several new opportunities to expand the project have been identified. The 4P's Plus© screening tool is now being considered for use at the time of all inpatient admissions. Transitioning the tool for use in this environment will require additional training and education. Refining communication in the outpatient office through the use of scripting for office staff has been requested and will require further development. Another unanticipated outcome of this project has been the creation of a NAS pathway for the inpatient treatment of the newborn. As this pathway is being developed, it is now recognized that outpatient office staff will require further education and training as they will be continuing to refine newborn treatment information delivered to parents in the prenatal environment.