The University of Maryland Medical Center

Safe Sleep Initiative: Using Patient Education and SmarTigr to Help Improve Safe Sleep Practice and Reduce Infant Mortality

The Challenge

Despite being the wealthiest country in the world, the United States has a higher infant mortality rate than 25 other developed countries, according to a new report from the Centers for Disease Control. Sadly, the US ranks only 56th in low infant mortality out of 224 countries. Although healthcare spending levels are significantly higher than any other country in the world, a baby born in the US is less likely to see his/her first birthday than one born in Serbia, Canada, Cuba, or anywhere in the European Union.

Contributing factors include congenital defect, premature delivery (<37 weeks), low birth weight, Sudden Infant Death (SIDS), pregnancy complications, and preventable injuries such as suffocation. However, new research suggests that the high US infant mortality rates are almost entirely due to socio-economic factors such as low income and low literacy.

In light of this, states across the US are undertaking initiatives to actively reduce their infant mortality rates. In 2009 Maryland’s infant mortality rates were 7.2% within the state and up to 13.5% within the city of Baltimore. Baltimore City’s “Sleep Safe” campaign through “B’more for Healthy Babies” is part of the health department’s strategy to improve birth outcomes. In 2009, they developed the Sleep Safe video and in 2010, the mayor issued a proclamation to have hospitals show the video, provide education, and have mothers sign a safe sleep commitment. In 2012, the State of Maryland’s Administration set a new goal to reduce infant mortality by an additional 10% by 2017 and undertook programs to engage hospitals to proactively participate in the effort.

The Solution

The University of Maryland Medical Center (UMMC) partnered with the Maryland Department of Health and Mental Hygiene (DHMH), the Baltimore City Health Department, and TeleHealth Services to meet the unique challenges of their inner city hospital and its patient population. Working closely with unit staff and leadership, the team developed an initial strategy to offer standardized video education and messaging in the hopes of achieving a behavioral change, which in turn would help to reduce the infant mortality rates.

The Sleep Safe program is a multi-faceted program consisting of a “Mother Baby-New Moms” curricula, which includes:

- The “Sleep Safe” video
- A post-education comprehension assessment
- A safe sleep commitment process to focus on and encourage behavioral change
- Clinical emphasis and follow up with additional education for parents who cannot recall the best practice recommendations
- Tracking the number of UMMC patients who received prenatal safe sleep education
UMMC needed a solution that was readily available, reliable, and easy to use by patients and staff to consistently deliver the program to patients and family. Understanding the validity and impact that video education can have on patient outcomes and satisfaction⁵, UMMC turned to their SmarTigr solution to deliver their New Mom/Sleep Safe program via SmarTigr’s patient-specific My To-Do List for all new parents in the Mother/Baby unit. SmarTigr delivers the required curriculum in both English and Spanish, and is available on-demand and at the optimal teachable moment.

The post-education assessment also includes a commitment process designed to focus on and highlight the importance of safe sleep practices and spark behavioral change. Result notifications of assessments completed with incorrect answers are automatically generated and sent via email to the initiative manager and charge nurses. In addition, a complete record of survey results are retained for evaluation against outcomes data.

The Results

The SmarTigr system is an essential part of the patient education strategy and philosophy at UMMC, with utilization steadily increasing each year. UMMC’s SmarTigr system was identified as a technology partner to deploy their safe sleep initiative with the staff recognition and acceptability to deliver education and information as well as the flexibility to expand their program into its next phase. Each day the clinical staff at UMMC is driving education plan adherence to ensure that this important education and information is reaching their patient population to positively affect patient outcomes.

In order to meet the specific needs of their inner city patient population, UMMC understood they had to develop and deliver a simple and effective strategy for providing infant safe sleep education. By utilizing on-demand video education through their interactive patient education solution, they can effectively engage and educate new parents and family. During their post-discharge home visit, 93% of the UMMC moms reported viewing the “Sleep Safe” video. In the first three months after implementation, 94-100% of patients correctly answered the post-education assessment questions and 94% committed to safe sleep practice. Most importantly, thanks to city-wide efforts, total sleep-related infant deaths attributed to the sleep environment are trending down from 27 deaths in 2009 to 13 in 2014.

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References: