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Title of Abstract:

A Qualitative Analysis of Challenges and Successes in Retinopathy of Prematurity Screening

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Abstract Description:

Background: Retinopathy of Prematurity (ROP) is the second most common cause of childhood blindness in the United States. A recent study demonstrated that the median rate of missed ROP screens for eligible infants in California was 13%, with some hospitals missing up to 73% of infants who qualified.

Objective: We sought to understand what barriers exist to identifying and screening neonates for ROP and what systems help overcome these barriers.

Design/Methods: We interviewed NICU staff at 6 hospitals in California between December 2012 and November 2015. We spoke to NICU staff members including neonatologists, bedside nurses, discharge coordinators, and ophthalmologists. Sites were identified based on their ROP screening rates as reported to the California Perinatal Quality Care Collaborative (CPQCC). Three hospitals were identified as high performing, two were improved from (2010-11) to (2012-13) and one was low performing. Sites visited represented variety in location, volume, and CCS level. Interviews were recorded and transcribed, and then coded by 2 independent researchers. Codes were then synthesized into major themes. Saturation was reached when no new themes emerged.

Results: Themes common to top performing hospitals include an overall commitment to quality improvement and participation in QI projects, a committed ophthalmologist, and a system with double checks and reminders. However, the committed ophthalmologists all identified fear, discomfort, liability and poor reimbursement as barriers for most ophthalmologists to screen for ROP. Those that do screen feel a moral obligation, a calling, and feel rewarded by their impact on a baby's quality of life. Themes common to improved hospitals include identification of eligible neonates on admission, the use of Retcam and education throughout the unit. Themes

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found in the low performing hospital include difficulty identifying eligible neonates due to lack of education, older babies more commonly missed, and difficulty getting ophthalmology to come to the unit.

Conclusion(s): This study highlights differences in NICUs that consistently screen all eligible neonates for ROP and those that have lower screening rates. It also shows that infants born at older gestational ages but at lower birth weights are more likely to be missed. Success in ROP screening is multifactorial and requires successful systems with double checks and reminders as well as a multidisciplinary team with overlap of accountability in order to ensure successful screening for ROP.

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