TRANSFUSION FOR THE TINY: NEONATAL TRANSFUSION – A FOCUS ON PARTNERING WITH PARENTS AND ENSURING EXCELLENCE IN PRACTICE

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INTRODUCTION
Transfusion is frequently required in neonates requiring intensive care management.1 The Neonatal Intensive Care Unit (NICU) at the John Hunter Children’s Hospital (JHCH) is one of the largest in New South Wales, and provides care for the area’s comprehensive specialty care to neonates. With 38 intensive care and 24 special care beds, it cares for more than 1100 newborns annually. More than 150 units of blood and blood products were prescribed to neonatal patients in 2015. In keeping with the release of Patient Blood Management (PBM) Guidelines: Module 6 Neonatal and Paediatrics,2 we aimed to ensure excellence in transfusion practice in the Neonatal Intensive Care Unit (NICU) and to align local policies and practice to provide appropriate use of blood components in this vulnerable population.

METHODS
Clinical Practice Improvement (CPI) methodology was used to determine interventions and key data monitoring. Previous Standard 7 audits were reviewed and a baseline transfusion practice audit was conducted. NICU staff received additional transfusion training and parent handout was also collated. Previous Standard 7 audits were reviewed and a baseline transfusion practice audit was collated. NICU staff received additional transfusion training and parent handout was also collated. Parental feedback, concerns, and feedback regarding transfusion practice was sought at a baseline (survey) and upon project completion (experience tracker). Feedback from the NICU staff (a mix of medical and nursing) regarding the additional transfusion training and parent handout was also collated.

DISCUSSION
Audits have shown that there has been inconsistent consent, monitoring and documentation processes in neonatal transfusions in our institution in the past, and there are many causes contributing to this issue (figure 1).

Figure 1. Inconsistencies in the processes of neonatal transfusion

In consultation with NICU staff (doctors, neonatal nurse practitioners and nurses), a program for additional training in blood transfusion specifically tailored to neonates was developed. The combination of lectures, practical workshops and laboratory education was labelled ‘Blood Month’ and took place in February 2018. Materials included:

• an overview of evidence based transfusion practice in neonates, including working areas of research (including transfusion research currently being undertaken within the JHCH NICU);
• a review of the Standard 7 requirements for the consent, prescription, administration and documentation of blood and blood products (including evidence, interdisciplinary workshops to review the myriad of forms involved in this process), and
• an overview of the laboratory practices involved for blood and blood products with an emphasis on the additional requirements for neonates.

One of the barriers to consent identified by the NICU staff was the lack of neonatal-specific information available to give to parents and families during the consent process. To assist this a specific handout was developed, in collaboration with parents, to provide concise, easy to read and accurate information about blood transfusion. To ensure that the needs of parents were being met, a short survey was offered to parents in the NICU to identify what they perceived to be important for the handout.

Figure 2. Blood Month Poster

RESULTS
Baseline audit showed inconsistent consent, monitoring and documentation processes in neonatal transfusions. Post-blood month audit showed improvement in these parameters.

Figure 6: Staff feedback regarding the education workshops (25 respondents)

CONCLUSION
A combination of staff training and parental CPI tools aligned with PBM Guidelines: Module 6 were well accepted by clinical stakeholders and were associated with practice improvement. This CPI project demonstrated the potential to improve PBM and transfusion practice in this vulnerable population. PBM module-specific consent information, not previously available, by partnering with parents to ensure excellence in transfusion practice. In the process, the strategies and tools developed may translate readily into other NICUs to support best practice.

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REFERENCES