“Our study identified several provider and system barriers to evidence-based transfusion practices including knowledge differences, overly optimistic estimates of current practice, and heterogeneous transfusion practice in each ICU.” Murphy et al.

Reference:


Evidence-based red blood cell transfusion practices in ICU http://ctt.ec/6RxfE+ @ivteam #ivteam

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Abstract:

Background: Despite evidence supporting restrictive red blood cell (RBC) transfusion thresholds and the associated clinical practice guidelines, clinical practice has been slow to change in the intensive care unit (ICU). Our aim was to identify barriers to conservative transfusion practice adherence.

Study Design and Methods: A mixed-methods study involving observation of prescriber (i.e.,
physicians, physician assistants, nurse practitioners) and bedside nurse daily bedside rounds, provider survey, and medical record abstraction was conducted in one cardiac surgical ICU (CSICU) and one surgical ICU (SICU) in an academic hospital in Baltimore, Maryland.

Results: Of 52 patient encounters observed during bedside rounds, 38 (73%) involved patients without evidence of active bleeding or cardiac ischemia. Surveys were completed by 52 (93%) of the 56 providers participating in rounds. Prescribers in the CSICU and SICU (87 and 90%, respectively) indicated the ideal pretransfusion hemoglobin (Hb) to be not more than 7 g/dL in nonbleeding and/or nonischemic patients compared to a minority of nurses (8% \( p = 0.002 \) and 42% \( p = 0.015 \), respectively). Prescribers and nurses in both ICUs overestimated the typical pretransfusion Hb in their units (CSICU, \( p < 0.001 \); SICU, \( p = 0.019 \)). During rounds, providers infrequently explicitly discussed Hb monitoring or transfusion thresholds (33%) despite most (60%) reporting significant variation in transfusion thresholds between individual prescribers.

Conclusions: Our study identified several provider and system barriers to evidence-based transfusion practices including knowledge differences, overly optimistic estimates of current practice, and heterogeneous transfusion practice in each ICU. Further work is necessary to develop targeted interventions to improve evidence-based RBC transfusion practices.

Other intravenous and vascular access resources that may be of interest (External links – IVTEAM has no responsibility for content).