Anemia in Hospitalized Patients Webinar Q&A

Developed to support implementation of *Small-volume blood collection tubes to reduce transfusions in intensive care: The STRATUS randomized clinical trial*

Implementation Process and Logistics

Q: Can you explain the implementation process for this initiative? Which stakeholders were involved, and what were the logistics involved in switching the tubes? Are there potential issues with old tubes still being used?

> A: Most of the implantation was working with internal stakeholders at the ICU, and then doing brief education sessions and providing educational resources. The logistics are perceived to be difficult, but working with the stakeholders allows you to figure out the best way to implement the change. You can also engage the vendor for more educational or logistical support. Validation protocols are available in the BiB resources.

Q: Do nurses fill tubes in the same way, and if not, would this affect the implementation of small volume tubes across different hospitals?

> A: Although this was not standardized in the STRATUS study, we encouraged nurses to fill the tubes to manufacturers recommendations. Encouraging those who will be using the tubes to follow standard operating procedures (and providing necessary support and education) helps to ensure concentrations of any tube additives are appropriate and the tests are valid.

Q: Was there a cost difference between the different tubes? Are they manufactured by the same company and available from the same suppliers?

> A: The tubes cost the same, and there is no additional cost to labs in in going to a lower volume test in our experience.

Operational Challenges and Considerations

Q: Were there any issues with insufficient volume for tests requiring larger volumes? Did reduced specimen volumes lead to increased manual handling in the lab, especially in automated testing lines?

> A: So far there have been no additional insufficient volume tests due to the switch over to low volume tubes. In terms of automation, the smaller volume tubes are the same dimension as the larger volume tubes, so it does not affect automation at all.

Q: Were there specific measures taken in the blood bank to ensure enough blood for crossmatching, especially for patients with antibodies?

> A: So far, small volume tubes have been successfully implemented and used by blood banks. 98% of our patients are electronic cross matched. There are a couple of special scenarios where you may have to go back and draw more blood from patients to do the testing that's required for antibodies, but this is the exception.

Scalability and Adaptability

Q: Can this initiative be applied hospital-wide or is it more suitable for specific units, like ICUs?

> A: This can definitely be applied hospital wide. There is no reason, if it worked for ICU patients, it would not work for patients outside the ICU as the logistics are very similar.

Q: Are there plans to explore the impact of low volume blood tubes on patients in medical/surgical wards, particularly regarding hemoglobin levels at discharge?

> A: Anemia at discharge is important for patient recovery. Although we didn't look at this, it's important to note that drawing additional blood from people that is not required does not add value to care. Patients are often surprised with the amount of blood drawn, and if we can prevent the need for RBC transfusions, we are reducing potential harm to the patients.