**Background**

Anesthesiology residents, CRNAs, and SRNAs at University Medical Center often draw blood for laboratory studies intraoperatively. Which labs are sent in which tubes is not part of the anesthesia training curriculum. While many of these clinicians are familiar with which tubes the more frequently submitted studies require, less experienced clinicians are unable to identify the correct tube. Furthermore, for less common studies, even the most experienced anesthesia practitioners have difficulty consistently selecting the proper tube for submission. This can be problematic as there are times when labs must be drawn without delay, and calling the laboratory to ask may divert the anesthesia practitioners’ attention away from the patient.

**Aim**

The aim of this project is to enable 100% of residents, CRNAs and SRNAs at University Medical Center to quickly and confidently select the correct tube for laboratory sample submission.

**Measures**

The measure of this project is the percentage of correctly identified sample tubes by anesthesia practitioners. Pre-change and post-change surveys with a random assortment of lab studies serve as a way to assess clinicians’ knowledge, and serve as a surrogate for actual lab sample submissions.

**Methods**

A list of which laboratory studies should be submitted in which tubes was obtained from the University Medical Center laboratory. From this list, an assortment of ten lab studies was selected to create a questionnaire.

In which color tube are the following labs collected?

1. Type and screen
2. CBC
3. Fibrinogen
4. CMP
5. Troponin I
6. TEG Platelet mapping
7. TEG citrated assay
8. CK
9. Lactate
10. PTH

This questionnaire was distributed to anesthesia providers at the UMC operating rooms, and answers were recorded and compiled. A laboratory sample collection guide was created and placed in each operating room. Anesthesia practitioners were given the same questionnaire with the guide as a resource, and answers were again compiled.

**Conclusions**

University Medical Center aims at providing excellent patient care, including vigilance in ensuring patient safety. One area of improvement in patient safety is with the quick and correct collection of laboratory samples intraoperatively by members of the Department of Anesthesiology. Initial education for members of the department as well as a readily available reference guide for laboratory samples can help facilitate safe, but efficient, patient care. A laboratory reference guide has been placed in each operating room at University Medical Center. Discussion with staff and assessment of the frequency of incorrectly submitted samples will give further insight into the utility of the guide.