This issue’s focus:

**PRE-ANALYTIC VARIABLES**

**Welcome to UK Hospital’s Phlebotomy Newsletter**

Through this communication we’d like to share information to standardize specimen collection practices, and reduce pre-analytic variables at UK Hospital.

**What is a pre-analytic variable?**

Pre-analytic variables are deviations from accepted practices that occur prior to sample analysis and impact or alter patient results. Often we can control these variables by changing how we do things.

Some examples might be:
- Tourniquet placement
- Sample mislabeling
- Vacutainer underfilling
- Improper specimen type
- Timing of collection
- Specimen contamination

**Tourniquet Placement**

One of the simplest things we can control is tourniquet time.

Tourniquets should never be in place for more than 1 minute.

Extended venous compression results in:
- Hemolysis due to the leaking of interstitial fluid into the tissue.
- Decreased coagulation studies caused by early coagulation activation as of low molecular weight molecules migrate from the venous space to the interstitial space.
- Elevated potassium results due to hemoconcentration.

Latex tourniquets are no longer allowable due to the prevalence of latex allergy.

If a blood pressure cuff is used, inflate to 40mm Hg.

Blood contaminated tourniquets should always be discarded.