

ave you ever been short-changed? Maybe you bought something and didn't quite get what you ordered. Or some cashier didn't give you the right amount of cash back. Either way, you probably weren't a happy customer. In the world of healthcare, physicians and their patients are the customers we serve, and when we don't fill tubes correctly, it can short-change both of them in the form of inaccurate test results. When that happens, both get cheated out of the quality they expect and deserve.

Fill 'er Up — To prevent short-changing your patients with underfilled tubes, always follow the tube manufacturer's recommendations. For sodium citrate tubes, anything less than 90% will not render accurate coagulation results and should not be tested. The effect on other additive tubes is well documented, so make it a habit to fill them all to the tube manufacturer's recommendations. Unless you check the fill line on each tube as you remove it from the tube holder, there's no guarantee you're not short-changing all interested parties.

Prime the Line — When drawing with a winged collection set, the vacuum in the tube will be partially exhausted by the air in the tubing. The result: an underfilled tube. If that first tube is a sodium citrate tube, the physician could alter a patient's blood thinner with disastrous consequences. To keep quality in coag collections, prime the line first using a discard tube. The discard tube should be another coagulation tube or a non-additive tube.

Clear the Air — When conditions warrant the use of a needle and syringe, make sure you expel all air from the barrel before use by pushing the plunger fully forward. Should an air bubble be pulled into a tube, the sample will be underfilled to the same degree.

Think Small — When faced with a difficult draw, keeping a variety of smaller size (low-volume) collection tubes on hand can make the difference between one-stick success and a time-consuming recollection that leaves everyone short on patience.

Think Outside of the Antecubital — If test requirements allow for a capillary collection, performing a skin puncture after prewarming the site is a useful alternative when a venipuncture isn't a viable option and only small amounts of blood are required. Just be sure to observe fill requirements for capillary collections, too.

Culture Wars — It's hard for patients to win their war against bacteria in the bloodstream when blood cultures are underfilled. For some infections, only one organism per milliliter of blood is enough to threaten the patient's life. If you put less than 10 mL of blood in a bottle (adult), the lab is not likely to culture the organism quickly-and the physician is not likely to get the patient on the right antibiotic fast enough.

Don't allow the patients you serve and the physicians who care for them to be short-changed by underfilled tubes and the inaccurate results they can produce. Take the time to properly collect and fill each patient's tube of blood as if it were your own. When you do, patients are better managed. That could mean less time in hospital gowns, sleeping in hospital beds, eating hospital food, and away from their daily life and loved ones.