

## APPLYING AUTOMATION TO TUBE CAPPING AND SPECIMEN MANAGEMENT

**Problem:** In the April issue of *Lab Manager*, Tiffany Roberts, in conversation with Rachel Muenz, mentions automation of repetitive tasks as a potential solution to the current shortage of clinical lab technicians. (“Lab or Life?” pg. 31).

At Lab Improvements, we couldn’t agree more.

Highly trained lab professionals are wasting countless hours manually capping specimen tubes and managing refrigerated inventory. While traditional large-scale automation systems can be used to recap and archive high volumes of specimen tubes, they are not practical for smaller laboratories, such as those found in hospitals, clinics, and research facilities. Every minute a lab worker spends processing samples is a minute where they are unable to focus on the higher yield activities they were trained for. This reduces efficiency while also significantly increasing the risk of sample contamination, repetitive strain injury, and could potentially expose staff to bloodborne pathogens.

**Solution:** Lab Improvements has developed the CapTrack, a benchtop device that offers labs an affordable way to automate the recapping of 13mm specimen tubes and manage refrigerated inventory.

After analysis has been completed, specimen tubes are loaded into the CapTrack. The tubes are then robotically recapped if necessary and archived into a management database. Samples exit the CapTrack illuminated in colored light to easily indicate their status or destination. Green light indicates that the tube is capped and has been assigned to an RFID-enabled rack that can be placed into cold storage, while a sample requiring attention is quickly identified by the red light surrounding it.

If a sample needs to be retrieved, key information such as the rack number, date, and a photo of the cap are found in the CapTrack database, allowing staff to retrieve the sample in less than a minute. Traditional storage methods are time consuming, prone to user error, and can easily end up with delays in sample retrieval. The device also allows for the optimization of refrigerated storage with its cleanout feature, which will notify staff of racks that contain samples older than a specified number of hours or days. This ensures that samples are not disposed of prematurely or kept too long.

A system like the CapTrack allow labs to automate high risk, repetitive chores without the complexity and cost of a traditional large-scale automation system, allowing staff to concentrate on the core tasks that require their expertise.

*For more information on the CapTrack, please visit [www.labimprovements.com](http://www.labimprovements.com)*



▲ *Lab Improvements’ CapTrack is a benchtop device that offers labs an affordable way to automate the recapping of 13mm specimen tubes and manage refrigerated inventory.*