

# Urine Collection and Transport

## The Problem

The purpose of this process improvement initiative was to address the incorrect method in which urine specimens were collected and transported to the lab for analysis. Before implementation, urine specimens were primarily stored in large specimen jars and transported via a transport services courier. This issue was important because the incorrect collection and transport of urine specimens was out of compliance with existing medical center policy and resulted in slow analyzation time, fluid spillage and specimen contamination.

## Aim/Goal

The goal of this project was to ensure full compliance with Manual of Nursing Practice policy NPM-1000-10 *Urine Collection: Clean Voided Specimen/Vacutainer Urine Collection* as well as of Nursing Practice Policy NPM 300-5 *Pneumatic Tube Systems Operations*. By achieving full compliance with this policy, urine specimens are successfully collected and transported in a stable and efficient manner. Consequently, adherence to this policy has resulted in faster transport and analyzation time while effectively avoiding issues of spillage or contamination.

## The Team

- Davin Janicki – Project Manager, Healthcare Quality Process Improvement
- Kim Sulmonte RN – Quality Improvement Program Director, Nursing
- Jane Foley RN – Director of Operations, Nursing
- Gina McCormack – Technical Director Clinical Lab, Pathology
- Wayne Rhymer – Lab Supervisor, Clinical Lab

## The Interventions

The **Vacutainer Urine collection Kit** is to be solely used. It includes:

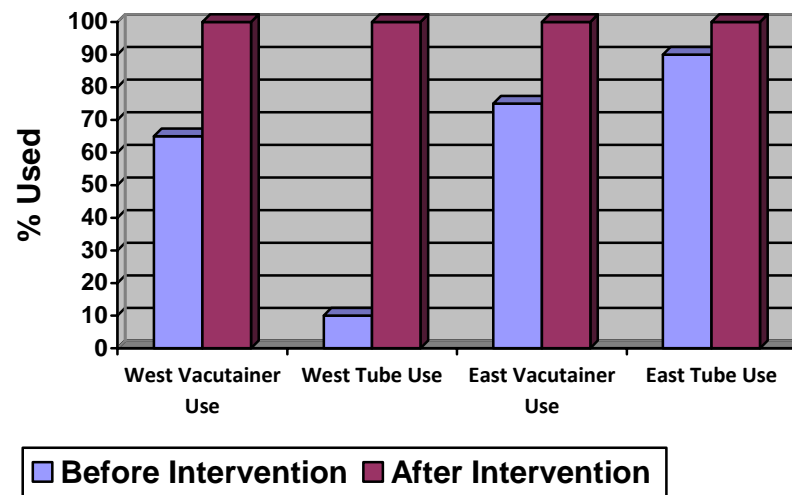
- Specimen cup with integral transfer device
- Grey top specimen tube with preservative for culture
- Red top specimen tube for all other specimens
  - Orange screw top specimen jar should not be used for collecting urine.

All Urine red and grey topped tubes are to be sent via tube system, transport services is not to be used for urine samples. Orange screw top specimen jar is not to be used for tubing urine specimens.

- It is not permissible to tube any “screw top” urine containers because urine Specimen may open up in tube system and cause spillage.

## The Results

Departmental logbooks have confirmed a 99% adherence to new process post implementation. (*West Vacutainer use 65% to 99%, West Tube System use 10% to 99%, East Vacutainer use 75% to 99%, East Tube System use 90% to 99%*)



## Lessons Learned

- Full adherence to existing Medical Center policies: Urine Collection and Tubing.
- Faster transport time because tubing of specimens takes place as opposed to utilizing transport services.
- Faster analyzation time of urine samples because they arrive faster and are in desired collection state.
- Removal of possibility of spillage of urine in tube system.
- Pouring or transfer of urine sample by lab is not necessary because it's in desired state. Thus, there is a reduction in the chance of contamination.

## Next Steps/What Should Happen Next:

Process continually monitored through use of real time problem solving notification to Manager of Clinical Lab Operations for instances of incorrect container or transport use.



Beth Israel Deaconess  
Medical Center



A teaching hospital of  
Harvard Medical School

THE SILVERMAN INSTITUTE  
For Healthcare Quality and Safety

For More Information Contact  
Davin Janicki, QI Project Manager

djanicki@bidmc.harvard.edu