

Potential Errors in POCT

- Scope and diversity of testing sites makes the potential for error in POCT high
- Errors in laboratory testing usually classified into the following:
 - Pre-analytic
 - Analytic
 - Post-analytic

Medical/Laboratory Errors

- Attributed to:
 - Pre- Post-analytic errors
 - Action taken by others
 - Poorly designed processes outside of laboratory
 - Misidentification of patients
 - Mistakes in written and oral communication
 - Disjointed policies and procedures
 - Insufficient knowledge of testing process
 - Limited testing oversight
 - Lack of metrics and analysis to identify problems and make improvements

How to Prevent Errors

- Difficult – POCT performed at dozens of sites, hundreds of devices, thousands of operators
- Need to engineer systems that prevent errors and tolerate errors when occur that limit effects
- Manufacturers – Must perform hazard analysis and risk mitigation studies to determine human factors that affect operation

Clinical Practice Guidelines for POCT

- Institute of Medicine (IOM) defines clinical practice guidelines as:

“systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances”