

Susan E. Perkins, MHS, CLS (NCA)
Coordinator, Point-of Care Testing
Baystate Medical Center, Springfield, MA

i-Stat use at Bayswater Medical Center

One of the sessions at Healthcare 2000 in Boxborough, MA on April 27-28 will review the successful use of the I-STAT point-of-care testing system in place at Bayswater Medical Center in Springfield, AM since 1992. 60 units are in use at 12 locations within Bayswater. Blood gas cartridges are the most frequently used test cartridge, but electrolytes, glucose, BUN and iCA are also used. All aspects of the testing are under the oversight of the laboratory. The point of care testing is reviewed daily and each user area supervisor receives a QA compliance report monthly. Cartridge utilization is monitored by the laboratory by overseeing inventory, test reporting and test billing. Proficiency Testing, monthly calibration verification, liquid QC and electronic QC are shared by the laboratory and user areas. All training is provided by laboratorians.

The Intensive Care Unit (ICU) has 24 bedside analyzing modules (BAMs) that are an integral part of the HP bedside monitor. The nurse can perform testing and obtain results and never have to leave the patient's side. Addition handheld units are available to that occasionally two cartridges can be run at the same time.

The Coronary Intensive Care Unit (CICU) has 9 bedside units and is requesting additional units and HP monitor BAMs for next year. The use of i-STAT in the Neonatal Intensive Care Unit and Operating Rooms allowed the laboratory to close a satellite laboratory in each location. The Chestnut Surgical Center, a daystay surgical unit, saves nursing time and can fill OR schedule openings in more timely manner. In two laboratory run labs in off-site clinics the i-STAT has proven to be a more economical choice than a bench top analyzer.

Point-of-care testing has moved the laboratory and the laboratorians out of the laboratory into an interaction with the rest of the institution. In effect, the laboratory has no walls. Instead of seeing point-of-care testing as a loss of testing to the laboratory, it is really an extension of the laboratory. Only the laboratory can provide the expertise and skill to ensure it is done well and meets all regulatory and accrediting agency requirements. It provides a new challenge to the trained laboratorian to be part of the total health care system.