

Four Key Reasons to Use a Handheld Blood Analysis System



Point-of-care testing (POCT) has been possible for over 4 decades.^{1,2} Numerous studies support how a POCT patient-side testing approach can reduce turnaround time and lead to operational efficiencies while maintaining the accuracy and quality of a laboratory-based process.³⁻⁷ These benefits are driving factors for POCT adoption and market growth.

One of the significant advantages of POCT is the ability to conduct blood gas analysis in decentralized settings, close to the patient.⁷

❶ Reduced Turnaround Time³⁻⁷

Availability of handheld, point-of-care blood analysis systems in critical care settings can rapidly inform clinical decisions, enabling expedited intervention and leading to improved patient outcomes. After a few simple steps, a clinician can have clinically actionable test results without leaving the patient's bedside.

❷ Operational Efficiencies³⁻⁷

Handheld blood gas systems provide several operational benefits to the clinical staff, laboratory, and healthcare institutions. POCT involves collecting a specimen and running the test patient-side, eliminating lost time and the extra steps of transporting critical samples to the lab. This process also mitigates time delays that may compromise sample integrity, necessitating sample redraw. Clinical care teams can benefit from the streamlined workflows that mitigate the need to leave the patient care area. This is an added benefit when caring for a patient with an infectious disease, such as COVID-19, where in-room testing limits exposure and negates the need for frequent doffing and donning of PPE.⁶

❸ Accuracy and Quality³⁻⁵

Handheld blood analysis systems, with demonstrated correlation to conventional laboratory analyzers, can provide a broad menu of lab-accurate, critical test results (including blood gas, electrolytes, and metabolites) from a single patient sample at the patient's side.

Additionally, choosing a system with features such as positive patient ID, automated quality assurance, visual prompts, onboard instruction, and color-coded results provides failsafes that support operational and result accuracy.

❹ IT Security⁸

Handheld blood analysis systems can leverage secure, wireless connection to instantly transmit results via data management software (DMS) to your LIS/HIS. A system that offers bidirectional communication with your DMS enables remote, centralized management of devices, operators, inventory, and quality control. This capability supports the proactive and secure management of data system-wide and ensures that real-time, accurate test results are available to the full patient care team.

Conclusion

In today's environment, hospitals and clinicians are challenged to provide high-quality care while addressing staffing challenges and escalating healthcare costs. Handheld POCT systems bring the benefits of convenience, ease of use, and workflow efficiency to the clinical staff, and cost savings for hospital systems, across the continuum of care.⁶ In fact, standardizing use of the same technology across multiple settings can maximize efficiency for the clinician, and therefore may expedite and improve diagnosis and treatment of the patient. With a demonstrated history of clinical, financial, and operational benefit, implementation of quality, point-of-care, handheld blood analysis systems can help meet today's healthcare challenges and improve patient care!³⁻⁷

References:

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Any healthcare practitioner reading this information is reminded that they must use their learning, training, and expertise in dealing with their individual patients.