

Case Study

The epoc system at Joseph Brant Hospital







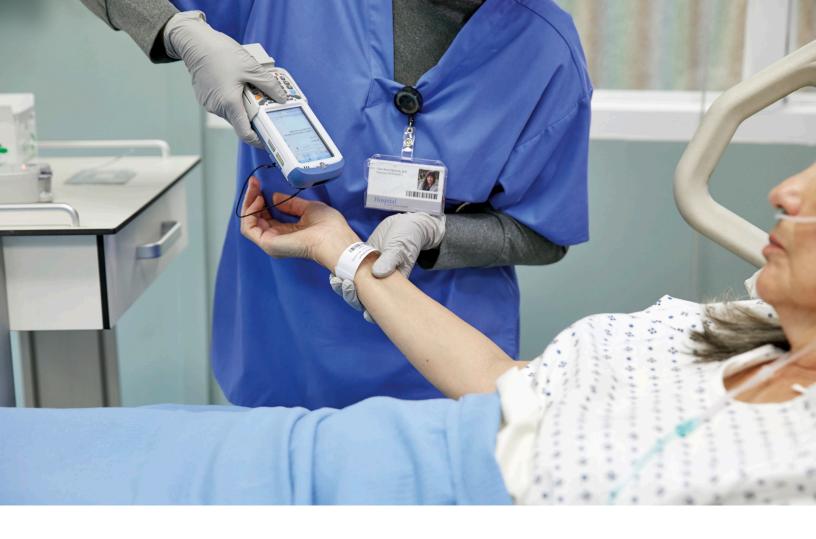
Right Result. Right Here. Right Now.

Every second counts for patients in critical conditions, and technology needs to keep pace and be able to produce rapid results on which medical professionals can act quickly.

In critical situations such as in the emergency room, intensive care unit or operating room, medical professionals need to assess the right treatment quickly using accurate and speedy data. This is true for the team of medical professionals at Joseph Brant Hospital in Burlington, Ontario, Canada. The team, comprised of Respiratory Therapists (RTs), Critical Care Registered Nurses (RNs), Anaesthesia Assistants, and Medical Laboratory Technologists are responsible for providing point of care blood gas testing throughout the institution. RTs and RNs need to evaluate, treat, and maintain cardiopulmonary (heart and liver) function. They have specialized medical expertise and use advanced medical technology to help them, including the epoc® Blood Analysis System from Siemens Healthineers.

The epoc system is a wireless handheld analyzer that enables comprehensive blood analysis testing at the patient's side on a single room-temperature test card, with results in less than one minute.

The system is used for a wide range of tests including blood gas to measure the amount of oxygen and carbon dioxide in the blood. This can indicate the presence of certain medical conditions such as kidney disease, heart failure, diabetes, hemorrhage, chemical poisoning, drug overdose, or stroke, among others. It also tests for electrolytes and metabolite, which indicate kidney health and blood sugar levels. The epoc system also tests for lactate which is used to diagnose sepsis, creatinine that is an indication for kidney function, and blood urea nitrogen that reveals information about how well the kidneys and liver are functioning.



Joseph Brant – committed to exemplary healthcare

Joseph Brant Hospital has been providing the Burlington and local area community with a wide range of health care programs and services since 1961. Serving a population of around 180,000 people, it opened a brandnew tower in August 2017; a major upgrade on its previous building dating back to the 1960s.

The seven-storey state-of-the-art tower features a new emergency department, 172 acute inpatient beds, nine new operating rooms and a new post-anesthetic care unit. It also features an expanded diagnostic imaging department, plus expanded medical, surgical and out-patient services, intensive care unit, and 70 per cent single-patient rooms across the hospital.

"The move to the new facility, which was done in record time, meant that staff had to familiarize themselves quickly with a raft of new equipment, including a lot of new diagnostic equipment," said Melanie McComb, Point of Care Testing Coordinator, Joseph Brant Hospital. "However, staff were delighted with the epoc Blood Analysis System as they found

it easy-to-use and intuitive thanks to its modern, updated, new and fresh feel. In my experience, anyone who is new to handheld blood gas technology loves it instantly."

Joseph Brant Hospital purchased six epoc systems for when the new tower opened. Mostly used by its RT team, the system is used to measure blood gas and to run tests on new born babies at the bedside.

"The portability of the system is what we were looking for," continued Melanie McComb. "The fact the epoc system has room temperature test cards and an expansive test menu made it ideal for our needs — today and in the future. Longer-term, and with the expanded test panel on the BGEM card, we hope to expand the use of the epoc [system] to other clinical situations and settings, putting the epoc [system] in the right place for the right use at the right time."

Melanie McComb, Point of Care Testing Coordinator, Joseph Brant Hospital

Building a lasting partnership

"The Siemens Healthineers team has always been accessible and responsive to any questions we had while we were getting familiar with using the epoc [system]," said Melanie McComb. "We were offered a significant amount of training by Siemens Healthineers, but due to the speed at which we had to move into the new tower and familiarize ourselves with the new technology and systems, we were unable to benefit from a lot of the up-front training offered. It really is testament to the staff in the point-ofcare testing department how quickly they learned the new systems, and the way all disciplines embraced change. Everyone really rose to the challenge and ensured everything kept moving and we delivered the services expected from us. The simplicity and user-friendly features of the epoc [system] really helped, and everyone who used the system for the first time thinks it's reliable and robust."

The epoc system is a made-in-Canada solution. In late 2018, it was announced that the Siemens Healthineers Ottawa, Ontario manufacturing facility that produces the epoc system will be expanding by 5,000 square-feet to support new manufacturing lines to enable growth and support continued development.

"The epoc system is designed to accelerate clinical decision making, streamline patient-testing workflow, simplify inventory management, and deliver real-time results and reporting," said Arin Ellis, POC Business Manager for Siemens Healthineers. "The epoc [system] is an example of how we help to keep patients at the centre of every healthcare system. We want to help healthcare providers to design care that suits individual needs, such as by creating patient-centric products, like the epoc [system], that improve the patient experience."





For more information

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