



GE Healthcare, Medtronic partnership accelerates global access to personalized care by delivering advanced patient monitoring solutions on the CARESCAPE platform

June 1, 2022

- GE Healthcare, Medtronic receive FDA 510(k) clearance and CE Mark approval on the integration of advanced INVOS™ regional oximetry and Microstream™ capnography technologies on the CARESCAPE precision monitoring platform
- Helping providers improve patient outcomes and safety, Microstream™ capnography (CO2) technology captures evolving respiratory compromise while INVOS™ regional oximetry (rSO2) technology helps clinicians predict and prevent perioperative complications quicker than traditional peripheral measurement [\[i\]](#), [\[ii\]](#)
- Integration allows for continuous monitoring access at the bedside, in transport, and networked to the electronic medical record (EMR), helping providers increase efficiency, enhance patient safety, and improve quality of care

[GE Healthcare's CARESCAPE 3.2](#)
[IMAGE/JPEG - 0.55 MB](#)

Chicago and Dublin – June 1, 2022 – Clinicians now have added ability to personalize care with the integration of two continuous monitoring solutions from [Medtronic](#) plc (NYSE: MDT) – Microstream™ capnography (CO2) and INVOS™ regional oximetry (rSO2) technology for perioperative and ICU care on the [GE Healthcare](#) (NYSE: GE) CARESCAPE precision monitoring platform. FDA clearance and CE Mark approval of the integration of these latest technologies on the CARESCAPE platform completes the full suite of Medtronic patient monitoring technologies available on the system. The combined solution also features GE Healthcare FlexAcuity which gives clinicians around the world the ability to choose care options based on patient acuity needs and assist them in their goal of earlier detection of patient deterioration.

“Our longstanding collaboration with Medtronic allows GE Healthcare to integrate clinically advanced parameters to enable clinicians with precision monitoring for individualized care,” said Neal Sandy, general manager for Monitoring Solutions at GE Healthcare. “We are able to add these capabilities to both new and existing enterprise monitoring systems, ensuring clinicians have access to real-time, reliable patient insights that can play a critical role in care decisions and outcomes.”

Since before the inception of the CARESCAPE platform, Medtronic solutions have been integrated into GE Healthcare technologies for comprehensive patient monitoring. This partnership with Medtronic helps enable GE Healthcare's vision to connect caregivers and their patients within an ecosystem that aims to support patient care, enable better decision making, and drive efficiencies for healthcare systems.

“Personalizing care to each patient is the standard of care. As providers, we prioritize how care is given based on individual patient acuity, so, when we're working with a monitoring platform, it is helpful to be able to choose from different parameters to aid in capturing signs of deterioration as quickly as possible,” said Dr. Eva Masso Lago, MD, PhD, anesthesiologist with Germans Trias I. Pujol Hospital in Barcelona, Spain, who utilizes both CARESCAPE and Medtronic INVOS™ monitors to care for cardiac surgery patients. “Bringing the new INVOS™ technology into the CARESCAPE platform will add ergonomic benefits, enhance ease of use and improve workflow.”

The INVOS™ regional oximetry (rSO2) technology solution monitors for signs of hemodynamic changes and deteriorating patient conditions associated with cerebral desaturation events. When used as an indication of compromised cerebral oxygenation, INVOS technology can help clinicians return the patient's rSO2 to baseline and has been shown to improve postoperative outcomes including hospital length of stay, POD, and MOMM [\[iii\]](#), [\[iv\]](#). Patients undergoing on-pump coronary artery bypass grafting (CABG) spent an average of 14 hours less in the ICU when receiving near-infrared spectroscopy-guided care with INVOS™ rSO2 [\[v\]](#).

The advanced Microstream™ capnography (CO2) technology solution offers clinicians early indication of patient decline [\[vi\]](#) and is validated for neonate to adult patients. It uses a proprietary CO2-specific infrared wavelength that is highly accurate and unaffected by the presence of other gases. The technology also features Smart Capnography™ algorithms engineered to enhance patient safety, improve clinical workflow, and ease alarm fatigue by reducing clinically insignificant nuisance alarms by 53%. This technology potentially cuts down on the high demand placed on providers to respond to non-emergent issues [\[vii\]](#).

“Medtronic and GE Healthcare are both committed to expanding access to patient care around the world,” said Frank Chan, president of the Patient Monitoring business, which is part of the Medical Surgical Portfolio at Medtronic. “This collaboration brings together our combined medical technology leadership to improve workflow, allowing clinicians more time to focus on what matters most – the patient. Together, we are empowering clinicians with actionable insights to personalize care.”

GE Healthcare and Medtronic have received CE (Conformité Européenne) Mark on the technologies included in this advanced system as well as U.S. Food and Drug Administration (FDA) 510(k) clearance for CARESCAPE software v3.2 with Microstream™ and INVOS™.

The Microstream™ capnography and INVOS™ monitoring systems should not be used as the sole basis for diagnosis or therapy and are intended only as adjunct in patient assessment.

###

About GE Healthcare:

GE Healthcare is the \$17.7 billion healthcare business of GE (NYSE: GE). As a leading global medical technology, pharmaceutical diagnostics and

digital solutions innovator, GE Healthcare enables clinicians to make faster, more informed decisions through intelligent devices, data analytics, applications and services, supported by its Edison intelligence platform. With over 100 years of healthcare industry experience and around 48,000 employees globally, the company operates at the center of an ecosystem working toward precision health, digitizing healthcare, helping drive productivity and improve outcomes for patients, providers, health systems and researchers around the world.

Follow us on [Facebook](#), [LinkedIn](#), [Twitter](#), [Instagram](#) and [Insights](#) for the latest news, or visit our website www.gehealthcare.com for more information.

About the Patient Monitoring Operating Unit at Medtronic:

With patient safety at our core, the Patient Monitoring business develops technologies that provide clinicians with actionable insights to personalize care. Our solutions will enable clinicians to predict and prevent complications reducing costs and improving outcomes.

About Medtronic:

Bold thinking. Bolder actions. We are Medtronic. Medtronic plc, headquartered in Dublin, Ireland, is the leading global healthcare technology company that boldly attacks the most challenging health problems facing humanity by searching out and finding solutions. Our Mission — to alleviate pain, restore health, and extend life — unites a global team of 90,000+ passionate people across 150 countries. Our technologies and therapies treat 70 health conditions and include cardiac devices, surgical robotics, insulin pumps, surgical tools, patient monitoring systems, and more. Powered by our diverse knowledge, insatiable curiosity, and desire to help all those who need it, we deliver innovative technologies that transform the lives of two people every second, every hour, every day. Expect more from us as we empower insight-driven care, experiences that put people first, and better outcomes for our world. In everything we do, we are engineering the extraordinary. For more information on Medtronic (NYSE:MDT), visit www.Medtronic.com and follow [@Medtronic](#) on Twitter and [LinkedIn](#).

Any forward-looking statements are subject to risks and uncertainties such as those described in Medtronic's periodic reports on file with the Securities and Exchange Commission. Actual results may differ materially from anticipated results.

[i] Chung F, Wong J, Mestek ML, Niebel KH, Lichtenthal P. Characterization of respiratory compromise and the potential clinical utility of capnography in the post-anesthesia care unit: A blinded observational trial. *J Clin Monit Comput*. June 2019.

[ii] Avery, Edwin G. IV, M.D., C.P.I., Cerebral Oximetry is Frequently a "First Alert" indicator of adverse outcomes, Medtronic white paper, 2016.

[iii] Deschamps A, Hall R, Grocott H, et al. Cerebral Oximetry Monitoring to Maintain Normal Cerebral Oxygen Saturation during High-risk Cardiac Surgery: A Randomized Controlled Feasibility Trial. *Anesthesiology*. 2016;124(4):826-36

[iv] Zorrilla-Vaca A, Healy R, Grant M, et al. Intraoperative cerebral oximetry-based management for optimizing perioperative outcomes: a meta-analysis of randomized controlled trials, *Canadian Journal of Anesthesia*, <https://doi.org/10.1007/s12630-018-1065-7>. Murkin JM, Adams SJ, Novick RJ, et al.

[v] Murkin JM, Adams SJ, Novick RJ, et al. Monitoring brain oxygen saturation during coronary bypass surgery: a randomized, prospective study. *Anesth Analg*. 2007;104(1):51-58.

[vi] Internal test data on file.

For media inquiries, please contact:

Jennifer Purdue
Communications Director
GE Healthcare
+1-267-593-9735
Jennifer.Purdue@ge.com

Tammy Hudson
Public Relations
Medtronic
+1-678-488-5337

Ryan Weispfenning
Investor Relations
Medtronic
+1-763-505-4626