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Medtronic advances data-driven spine solutions with AI-powered patient reported outcomes

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Medtronic, a global leader in medical technology, announced today the launch of the new UNiD™ ePRO service in the United States. This solution will change the way patient outcomes are collected for spine surgeons, reducing the burden on clinic staff and patients. Medtronic has partnered with OBERD, a leading practice intelligence data collection company, to provide spine surgeons with an electronic Patient Reported Outcomes (ePRO) system. The UNiD™ ePRO service integrates with a customer's existing Electronic Medical Record (EMR) system in the hospital and clinic and the UNiD™ ASI platform to provide an unparalleled, seamless experience.

Patient-reported outcomes (PROs) are an increasingly important part of the perioperative process. PROs provide insights from patients about their health, quality of life, or functional statuses associated with the health care or treatment they received. This significant data is retrieved from patients via questionnaires filled out before and after surgery that measure changes or improvements in health.

Historically, PROs are completed manually on paper forms by patients and have low post-operative response rates[1], meaning that surgeons may lack a comprehensive view of the patient's perspective on their overall health, function, and recovery after surgery. The OBERD platform offers improved data collection methods both pre-operatively and post-operatively through integration into the EMR system, increasing patient response rates by 40-60% on average[2]. It can be extremely difficult to achieve top PRO compliance without an automated ePRO service like OBERD.

"Having all of my patient outcome data alongside the radiographic information in the UNiD Hub is extremely valuable for assessing overall health and making clinical decisions. The addition of ePRO to the UNiD™ ASI platform completes the process improvement cycle from plan to clinical outcome. A comprehensive data picture of the patient is invaluable in guiding treatment during all phases of care," said Dr. Christopher Ames, Neurosurgery Director at the University of California San Francisco Spine Center.

The UNiD™ ePRO service provides several unique opportunities that add value to a surgeon's practice, including:

- Saving time and increasing PRO compliance without additional burden on staff.

- Actionable insights to benchmark individual outcomes in comparison to the broader spine surgeon community.
- Enhancing the patient experience by engaging them through various channels (e-mail, text, web portal, app) and delivering patient-specific educational materials and resources throughout their care journey.
- Gaining influence with payers by sharing reports and PRO data on demand.

Enhanced recovery has become the standard of care for patients undergoing major surgery. The majority of patients undergoing spine surgery were not satisfied with in-clinic education alone[3]. Designed to improve the patient experience from intake through recovery, the UNiD™ ePRO service may enable patients to recover more quickly, leaving the hospital sooner by minimizing the effects of stress on the body after surgery. Success is based on empowering patients to be a partner in their own care through shared and informed decision-making. Studies have shown that educating the patient on the keys to enhanced recovery prior to surgery and immediately after surgery can positively impact length of stay, readmissions, and complication rates. In colorectal cancer surgery, for example, complications were shown to decrease by 30–50 percent, and hospital stays were reduced by 3 days[3].

"Our launch of the new UNiD™ ePRO service demonstrates Medtronic's unwavering commitment to improving patient care throughout the perioperative process. Within the AiBLE™ ecosystem, we are bringing smarter connected technologies to help enhance patient care across the care continuum. UNiD™ ePRO is a valuable tool that will centralize the collection of PROs, complement radiographic outcomes on the UNiD™ Hub, enhance clinic workflows, and ultimately allow surgeons and medical staff to maximize their focus on patient care and treatment," said Sean Haag, Vice President, Intelligent Data Solutions (iDS) within the Cranial and Spinal Technologies business, which is part of the Neuroscience Portfolio at Medtronic. "Having surpassed the milestone of 20,000 cases on the UNiD™ ASI platform, the new UNiD™ ePRO solution further solidifies our position as a data-centric spine company dedicated to advancing predictability and patient outcomes."

Furthermore, objective data collected by smartphones and wearables complements subjective patient-reported survey scores[5-7]. Key wearables metrics such as daily step count and heart rate variability have yielded research insight into post-operative recovery trajectory[8-10] and are available today through OBERD.

This new launch demonstrates the commitment of both Medtronic and OBERD to improve spine surgery throughout the perioperative process and continue bringing valuable innovative solutions to our customers.

For more information about UNiD, visit https://www.medtronic.com/us-en/healthcare-professionals/products/spinal-orthopaedic/internal-fixation-systems/unid.html

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 95,000+ passionate people across more than 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 U.S. Securities and Exchange Commission. Actual results may differ materially from anticipated results.

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