ACM

Acute Care & Monitoring

Empowering patient safety. Anytime, anywhere.

Discover how ▶

Medtronic

Acute Care & Monitoring Vision

We **empower healthcare professionals** with world-class technology to **personalize patient care**, anytime, anywhere.

Through **connected solutions seamlessly integrated** into clinical practice, we help **predict** and **prevent** dangerous and costly **complications**, from hospital to home.

We are the leader in the **equitable delivery of care**, committed to reducing disparities in outcomes, expanding access, and helping to **protect more patients** in more places.

Medtronic

Committed to patient safety

We believe **healthcare should be equitable.** By providing the right healthcare technology, building lasting partnerships, and learning from the data, we can help **expand healthcare access for everyone, everywhere.**

Healthy lives also depend on a healthy planet. We are dedicated to conserving resources, producing less waste, and eliminating our carbon footprint across our global operations.

We will make a lasting impact by helping ensure **good health no matter who or where patients are** and by developing **innovation that sustains our planet.**

Empowering patient safety. Anytime, anywhere.

Medtronic Acute Care & Monitoring helps more than 115 million patients annually.[1]

Positively impacting patients every minute

From the **hospital to home**, millions of patients are touched by the Acute Care & Monitoring portfolio.

Helping to prevent dangerous and costly complications

Blood Oxygenation Management

Track moment-to-moment oxygen status to drive critical decisions

Respiratory Management

Provide airway management and reduce drug-induced respiratory compromise[2]

Perioperative Care

Preserve vital organ health during surgery

Connected Care

Connect what matters – data, patients, and providers

References

Medtronic

Expanding access to innovations

We lead the market through a series of innovations

1972 **Shiley™** PVC continuous curve tracheostomy tube

1984 **Nellcor™** pulse oximetry monitoring

1987 **Hi-Lo** endotracheal tube

1988 **OxiNet™** remote monitoring system

1996 **Shiley™** pediatric tracheostomy products

1998 **DAR™** mechanical filter

2002 **Nellcor™** forehead SpO_2 sensor (MaxFast)

Nellcor™ OxiMax™ technology

2004 **Nellcor™** sensor remanufacturing program

2008 **Shiley™** XLT tracheostomy tubes

2009 **BIS™** brain monitoring system

SatSeconds™ alarm management for pulse oximetry

2010 **CommanderFLEX® CD310** hub device

INVOS™ regional oximetry monitoring

Omnivisor Pro® clinical software

TeleResponse® IVR platform

2011 **McGRATH™ MAC** video laryngoscope

2012 **Microstream™** capnography monitoring

Nellcor™ respiration rate finger sensor

2013 **Vital Sync™** remote patient monitoring

2014 **Zephyr™** performance systems

2015 **Shiley™** flexible tracheostomy platform

2016 **Capnostream™** 35 portable respiratory monitor

Nellcor™ flexible SpO_2

Vital Sync™ monitoring and clinical decision support solution

2017 **CommanderFLEX® CD320** hub device

Nellcor™ low power pulse oximetry PCBA

NetResponse® web platform

Shiley™ flexible pediatric tracheostomy tubes

Zephyr™ cloud based software 2.0

2018 **LinkVIEW®** video hub device

2019 **INVOS™** 7100 platform

Shiley™ flexible evac tracheostomy tube

2020 **BIS™** 3.50 software upgrade

Microstream™ advance filter line

NanoMediCO$_2$™ capnography module with **Microstream™** technology

2022 **BioButton®*** multi-parameter wearable

Calima™* connective forced air warming system

GE CARESCAPE®* OEM integrated parameters

HealthCast™ portfolio

INVOS™ neonatal & pediatric rSO_2 sensor

Nellcor™ OxySoft™ SpO_2 sensor

RespArray™ patient monitor

2023 **BIS™ Advance** monitor

CommanderFLEX® CD390 hub device

Puritan Bennett™ cuff pressure manager

2024 **Oxy$_2$Mask ™*** $EtCO_2$ with **Microstream ™** connector

Oxy$_2$Pro™ * with **Microstream ™** connector

1970 – 1999 | 2000 – 2009 | 2010 – 2019 | 2020 – today

* Third party brands are trademarks of their respective owners.

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Addressing clinical and economic challenges with our technologies

Intubation complications

Incidence
Difficult intubations (DI) occur in 6% of all cases[3]

Cost
$14K (2018 USD) increased in-patient cost per difficult intubation[4]

McGRATH™ MAC video laryngoscope

Impact
94% first-pass success rate with McGRATH™ MAC compared to 71.6%–82% with DL[5,6]

Healthcare benefit
VL is associated with reduced hospital cost, shorter LOS, lower ICU admission rates, and fewer complications compared with DL[3]

Airway complications – ventilator-associated pneumonia (VAP)

Incidence
15.6% globally for VAP[7]

Cost
$40K (2012 USD) for ventilator-associated pneumonia[8]

Shiley™ evac endotracheal tube with TaperGuard™ cuff

Impact
Use of ETTs with SSD significantly reduced the risk of VAP[9]

Healthcare benefit
SSD can reduce ICU LOS among patients with mechanical ventilation[10]

Incidence
23% drop in cuff pressure when using a handheld manometer[11]

Puritan Bennett™ cuff pressure manager

Impact
Use of continuous cuff pressure monitoring is associated with a significantly lower incidence of VAP[12]

Healthcare benefit
Continuous cuff pressure monitoring and SSD reduce VAP and the duration of mechanical ventilation[12]

Incidence
Open tracheal suction systems result in a 57% increase in VAP[13]

DAR™ filters and filter HMEs
DAR™ closed suction

Impact
Closed suction systems can significantly decrease VAP compared to open suction systems[13]

Healthcare benefit
Closed suction systems are known to reduce the amount of nursing time by 40%[14]

References

Medtronic

Addressing clinical and economic challenges with our technologies

Respiratory compromise in general care floor

Incidence
Ward: 46% of patients receiving opioids[2]

Cost
$6,648 incremental in high-risk patients[15]

Healthcare impact
1.4 days LOS increase for patients experiencing >1 respiratory depression episode[15]

RespArray™ patient monitor & Vital Sync™ remote monitoring system

Impact
97% of respiratory adverse events on the general care floor are preventable with better monitoring and response[16]

Savings
$535,531 annual hospital cost reduction and 103 cumulative LOS days[17] per median-sized hospital (annual floor volume of 2,447 patients†)

Respiratory compromise in procedural sedation

Incidence
~1/3 of NORA closed claims deemed to be preventable with better monitoring, with inadequate oxygenation/ventilation being the single most common event[18]

Cost
$6,904 (2015 USD) higher in IR procedures where patient had an RC event, compared to IR procedures without an RC event[19]

Healthcare impact
1.1 days LOS longer in hospital in IR procedures when patient had an RC event[19]

Microstream™ capnography monitoring system

Savings
$85 and $35 (2014 USD) reduction in cost/procedure for deep and moderate sedation cases respectively, when capnography was utilized[20]

Blood oxygen management

Incidence
100M patients require continuous oxygen monitoring:
- ~1% are the smallest, most vulnerable NICU patients, with respiratory issues being the #1 reason they are admitted[21]
- ~15% of the world's population have darker skin tones and are at risk of oxygen overestimation[22,23]

Healthcare impact
- Neonatal resuscitation delays of a few minutes, 50% increase in death, and 20% increase in brain bleeds that can lead to life-long disability[24]
- Overestimation of oxygen leads to a 10% reduction in therapy delivery and higher readmission rates related to COVID-19[25]

Nellcor™ portable SpO_2 patient monitoring system
Nellcor™ SpO_2 sensor with OxiMax™ technology

Impact
- Post 40% faster and 0% false bradycardia (vs. 35% with Masimo Signal Extraction Technology®)[26]
- Reduce missed hypoxemic events by 74% during the most challenging situations of low perfusion and dark skin pigmentation[27]

†Based on data from 2018

References

Medtronic

Addressing clinical and economic challenges with our technologies

Post-operative delirium (POD)

Incidence
- 13–26% in patients ≥65 years old[28]
- Cardiac and abdominal surgeries associated with a higher risk of POD[28]

Cost
U.S. $806 – U.S. $24,509 in 2019[29]

Healthcare impact
Increased length of stay (LOS), post-operative complications, and hospital costs[30]

BIS™ brain monitoring system

Impact
29% POD decrease[31]

Healthcare benefit
- Reduced mortality[30]
- ~2-day reduction in LOS[30,32]

Cerebral desaturation

Incidence
26–74% in cardiac surgery with cardiopulmonary bypass[33]

Healthcare impact
3x greater risk for prolonged LOS[34]

INVOS™ 7100 regional oximetry system

Impact
78% decrease in the intraoperative cerebral desaturation load[35]

Healthcare benefit
46% reduction in the rate of post-operative cognitive dysfunction at seven days after surgery[36]

References

Medtronic

Addressing clinical and economic challenges with our technologies†

Avoidable ICU readmissions & rapid response team activation

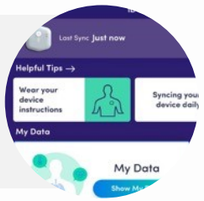
Incidence
Ward: 6.3% of patients are readmitted to ICU[37]

Cost
- Medical ward: $13,424, 2021 USD, increment cost per readmission[38*]
- Surgical ward: $21,448, 2021 USD, incremental cost per readmission[38*]

Healthcare impact
- High mortality[38,39]
- Rapid response team (RRT) activation[40,41]
- 35% of medical-surgical nurse's shift is taken up by clinical documentation[42]
- 16% of an ICU nurse's shift time is spent silencing alarms[43]

BioButton®* multi-parameter wearable

BioDashboard™* clinical intelligence system



Impact
Ward: Reduced risk of mortality, ICU transfers, and RRT activation[38-41]

Savings
Ward: ~14% reduction in annual cost for an average-sized hospital[44]

Prolonged length of stay & reduced 30-day readmission

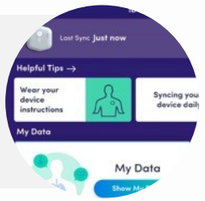
Incidence
- Medical & surgical ward: prolonged length of stay (LOS) of 4.1 days for unplanned ICU readmission[38]
- ICU: prolonged LOS of 6.4 days[38]

Cost
- Hospital: $1,772, 2020 USD, per day[45]
- ICU: $2,902, 2020 USD, per day[45]

Healthcare impact
- Sepsis[46]
- Increased risk for pressure ulcers[47]

BioButton®* multi-parameter wearable

BioDashboard™* clinical intelligence system



Impact
- Hospital: Reduced length of stay[48]
- Home: Reduced risk of 30-day readmission following hospital discharge[49,50]
- Automated alerting system beneficial in the management of sepsis[46]

Savings
Potential saving of $710, 2011 USD per patient†,[47]

†Based on studies done on devices using same or some of the same monitoring parameters as the BioButton®* multi-parameter wearable.

References

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World-class technology with more than 235 years of exceptional clinical performance.

BIS™
Brain monitoring system
#1 global share
3,000 clinical references

Calima™* & WarmTouch™
Warming system and blankets

DAR™
Breathing systems

HealthCast™
Intelligent patient manager

INVOS™
Regional oximetry system
#1 global share
800 clinical references

McGRATH™ MAC
Video laryngoscope and disposable blade
#1 global share for routine use
~75 clinical references

Microstream™
Capnography monitoring system
#1 global share
250+ clinical references

Mon-a-therm™
Temperature management system

Nellcor™
Pulse oximetry monitoring system
#2 global share
325+ clinical references

Puritan Bennett™
Cuff pressure manager

Shiley™
Endotracheal and tracheostomy tubes
#1 global share
~80 clinical references

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ER & EMS

DAR™ filters and filters HMEs

McGRATH™ MAC video laryngoscope and disposable blade

Microstream™ capnography monitoring system

Mon-a-therm™ temperature management system

Nellcor™ pulse oximetry system

Shiley™ endotracheal tubes with preloaded stylet

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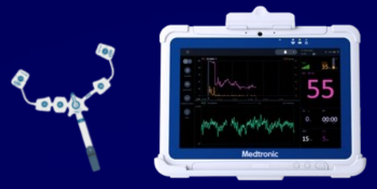
ICU



BIS™ brain monitoring system

Calima™* & WarmTouch™ warming system and blankets

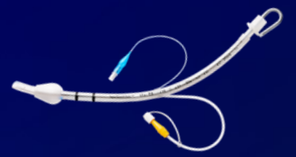
DAR™ breathing system

Microstream™ capnography monitoring system

Mon-a-therm™ temperature management system

Nellcor™ pulse oximetry system

Puritan Bennett™ cuff pressure manager



Shiley™ evac endotracheal tube with TaperGuard™ cuff

Shiley™ flexible evac tracheostomy tube

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OR & ASC

BIS™ brain monitoring system

Calima™* & WarmTouch™ warming system and blankets

DAR™ breathing system

INVOS™ regional oximetry system

McGRATH™ MAC video laryngoscope and disposable blade

Microstream™ capnography monitoring system

Mon-a-therm™ temperature management system

Nellcor™ pulse oximetry system

Puritan Bennett™ cuff pressure manager

Shiley™ endotracheal and tracheostomy tubes

Medtronic

GCF

BioButton®* multi-parameter wearable

DAR™ tracheostomy HME

Microstream™ capnography monitoring system

Mon-a-therm™ temperature management system

Nellcor™ pulse oximetry system

Shiley™ speaking valves

Shiley™ tracheostomy tubes

Vital Sync™ remote patient monitoring

Medtronic

Home

BioButton®* multi-parameter wearable

Commander FLEX® hub device

DAR™ tracheostomy HME

Shiley™ speaking valves

Shiley™ tracheostomy tubes

TeleResponse® interactive voice display

Medtronic

Collaborative care

Our industry partnerships help empower clinicians with vital patient monitoring technology

Strategic partnerships

Bring marketing-leading technology to more than 70 OEM partners, giving clinicians the ability to choose their preferred respiratory function and advanced parameter monitoring technology

Flexible OEM solutions

Integrate into a broad range of multi-parameter monitoring and medical device host systems from a single source

Plug-and-play devices

Without requiring hardware or software updates

Seamless integration

With dedicated OEM monitoring support team

Baxter
BD
Dräger
Fukuda
GE HealthCare
Mindray
Nihon Kohden
Philips
Stryker
ZOLL

Medtronic

Proud to be your partner in patient safety

235+
Years of clinical performance

4.5K+
Clinical references

14+
Years of clinical experience

60+
Physicians & nurses on staff

Medtronic

Support that surrounds you from initial consideration, to implementation, and beyond

	Considering a product	**Purchasing** a product	**Implementing** a product	**Owning** a product	**Advocating** for a product
Clinical specialists	✓	✓	✓	✓	✓
Conferences	✓				✓
Contracting resources		✓			
Customer service		✓	✓	✓	
Delivery assist			✓		
Distributor partners				✓	
Field sales representative	✓	✓	✓	✓	✓
Marketing product experts	✓	✓		✓	✓
Medical education	✓	✓	✓	✓	✓
OEM partners				✓	
Online ordering				✓	
Remote sales representative	✓	✓		✓	
Service & repair			✓	✓	
Society engagements	✓				✓
Websites	✓		✓	✓	
YouTube videos	✓		✓	✓	

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Education and training opportunities to refine skills and expand perspectives

Face-to-face education

- Ambassador events
- Campus experience events
- Centers of Excellence
- In-hospital in-service training
- In-hospital product training
- International expert forums
- Peer-to-peer events
- Society-led trainings
- Symposia

On-demand learning

- Applications
- Continuing education unit (CEU) courses
- MedEd Bytes microlearning videos
- Podcasts
- Simulations
- Virtual reality experiences
- Webinars

500+
accredited and nonaccredited courses[51]

4K
Clinicians participate in webinars annually[52]

47%
Increase in technical confidence after webinar attendance[52]

Medtronic

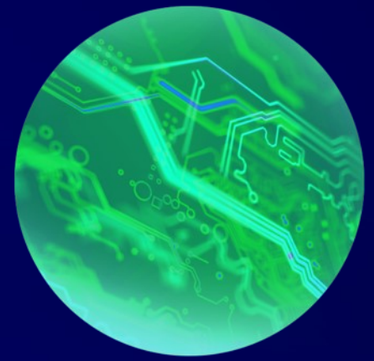
Investing in solutions to help solve your biggest healthcare challenges so you can focus on patient care

Health equity

Ensuring equitable care by reducing disparities in outcomes and expanding access to care

Sustainability

Protecting our planet by minimizing our environmental footprint, reducing our operational carbon footprint, cutting waste and water usage, and building sustainability into our products



Connectivity

Engineering capital-lite technologies to connect stranded devices and integrate with your EMR so you get more value from your current devices

Data intelligence

Providing real-time data so clinicians can act sooner while harnessing AI to turn data into actionable information to improve workflow efficiency and improve patient outcomes

These technologies are not yet cleared or marketed.

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For trained personnel only. For specific indications and instructions for use, please refer to the product manual.

Monitoring products should not be used as the sole basis for diagnosis or therapy and are intended only as an adjunct in patient assessment.

Medtronic Care Management Services are not intended as a substitution for, or alternative to, the medical care provided by a physician. Medical guidance and treatment decisions should always be determined by treating physicians or other properly licensed health care professionals. Service availability and performance may be impacted by patient user error and connectivity, access, and service hour limitations.

BioButton® multi-parameter wearable is manufactured by BioIntellisense. Calima™ warming system is manufactured by Celsius Medical. The PMD-200™ monitor is manufactured by MedaSense. VACUSILL® suction regulator is manufactured by Hersill.

05/2024 – US-PM-2400324

Medtronic

Perfecting your art. Advancing patient care.

BIS™ brain monitoring system provides direct measurement of the anesthetic effect on each patient's brain.

Among other benefits, BIS™ technology:

- Helps the clinician personalize anesthetic dosing to individual patient physiologies
- Indicates hypnotic effect through the easy-to-read BIS™ index
- Can help reduce usage of inhalational anesthetic agents, which are a major contributor to the carbon footprint of surgery, by 7.9% to 13.8%[53,54]

BIS™ Advance monitor

BIS™ extended sensor

BIS™ pediatric sensor

BIS™ quatro 4-electrode sensor

Medtronic

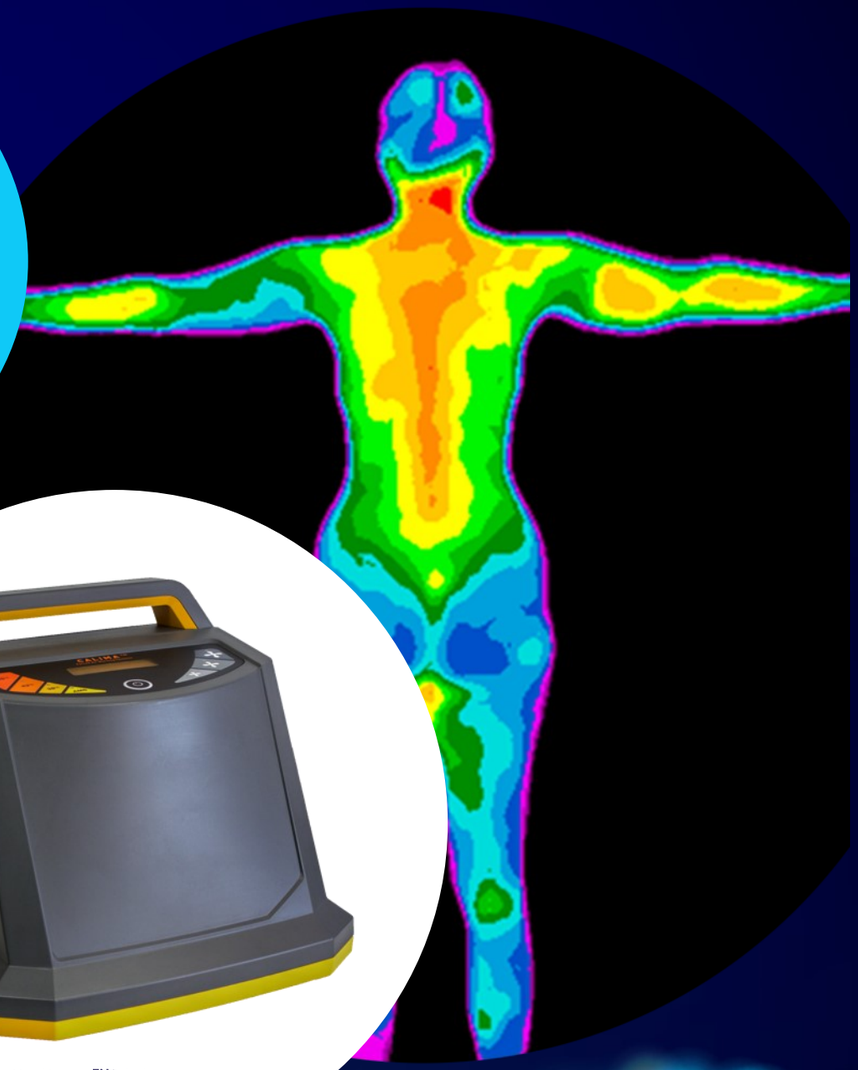
Take comfort knowing you are covered

Calima™* convective forced air warming system has reinforced and resealable hose entrance ports to provide secure fixation.

Calima™* warming blankets portfolio contains 26 types of overbody and underbody blankets (sterile/non sterile) for adult, pediatric, and neonatal patients. The blanks are designed to stay with the patient from the operating room through their recovery.

WarmTouch™ warming blankets portfolio contains 8 types of overbody blanks for adult and pediatric patients specifically designed to withstand the demands of the operating theatre environment.

WarmTouch™ lower body blanket



Calima™* blower

Medtronic

A simple solution for complex Veteran patients

Commander FLEX® hub device

Offers Veteran patients more options to better meet their monitoring needs. Featuring a brightly lit LCD display and textured buttons, it offers voice and visual prompts to engage patients and promote interaction.

Omnivisor® Pro clinical dashboard

Commander FLEX® hub device

Integrated with the Omnivisor® Pro clinical platform and available in English and Spanish, key features include:

- Routine health checks with vital sign capture, patient education, and disease management protocols (DMPs)
- Ability to manually enter multiple vital signs with date and time stamp for accuracy
- Unique patient messages
- Voice and screen prompts with large textured keypad
- Integration with the Veteran Health Administration and Medtronic DMPs

Quality solutions fitted to your needs.

DAR™ breathing systems

DAR™ breathing circuits and breathing accessories

In the OR, recovery rooms, intensive care units, and home care environments, these products can be used with Shiley™ endotracheal tubes, Shiley™ tracheostomy tubes, and inhalation therapy products for a complete solution to your respiratory care requirements.

DAR™ closed suction system

Designed with patient comfort, clinician safety, and efficient workflow in mind, closed suctioning offers many potential benefits compared to open suctioning, including continued delivery of oxygen and positive pressure, decreased nosocomial infection, and reduced staff exposure.[55]

DAR™ mechanical and electrostatic filters and filter HMEs

This technology provides effective protection and optimal humidification by capturing heat and water vapor from patient's exhaled air and adding heat and moisture to the patient's inspired air.

DAR™ catheter mount

DAR™ extendible extension tube

DAR™ tracheostomy HME

DAR™ electrostatic filter

DAR™ mechanical filter

DAR™ closed suction

Medtronic

The next evolution in patient monitoring

HealthCast™ intelligent patient manager is a portfolio of remote monitoring, connectivity, and interoperable solutions to help optimize workflow efficiencies, simplify patient management,[56,57] and empower clinicians to prioritize care with actionable insights.

HealthCast™ wearables

BioButton®* multi-parameter wearable

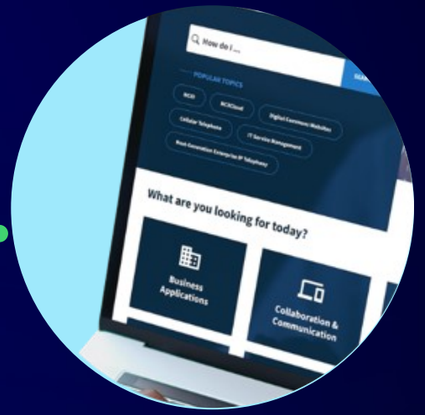
HealthCast™ remote monitoring

HealthCast™ Vital Sync™ remote patient monitoring

Commander FLEX® hub device

Omnivisor® Pro clinical monitoring software

TeleResponse® interactive voice response platform



HealthCast™ services

EMR Connect
Delivery assist
Technical health check
Technical training
Connection service plan

Technology that helps you prioritize care.

BioButton®* multi-parameter wearable part of the HealthCast™ portfolio, is a medical-grade wearable device designed for continuous monitoring of patients in-hospital and hospital-to-home

BioButton®* wearable device technology:

- Monitors up to 1,440 vital signs per day, including respiratory rate at rest, skin temperature, and heart rate at rest – plus a broad range of other biometrics
- Integrates with your existing EMR system
- Up to 16-day continuous battery life
- Unique data analysis and a patented intuitive display via BioDashboard™* clinical intelligence solution

Medtronic

Integrate simply. Connect seamlessly. Support continuously.

HealthCast™ services individualized, easy-to-implement service plan options that help you optimize patient safety[39,58,59] and provide quality care.

Capital-lite connectivity solutions

Ongoing **tailored support** and **technical training help**

Individualized, easy-to-implement service plans

Customized system that **integrates** effortlessly with hospital's existing interfaces and workflow

Stop being overburdened by manual charting

We connect stranded devices to your EMR.

Medtronic

Know who needs you. Right now.

HealthCast™ Vital Sync™ remote patient monitoring
Provides critical alerts and actionable insights on web-enabled devices, helping you stay connected to your patients from anywhere.

Get timely, meaningful data receive near real-time trend and alert data on any web-enabled device or via the HealthCast™ Vital Sync™ system mobile app

Recognize and act on patient deterioration earlier with real-time alarms

Eliminate time-consuming manual charting with EMR connectivity

Vital Sync™ patient monitoring on mobile device

Medtronic

Because seconds matter

INVOS™ regional oximetry system can help you decide if intervention is necessary when timing is critical.

The INVOS™ system provides continuous measurement of cerebral oxygen saturation and indicates changes in cerebral perfusion.[60]

- Unique clinical algorithm can alert you to potential hemodynamic changes before other vital sign monitors even react[34-36,61-64]
- The INVOS™ system reached 80-percent[65] baseline threshold faster than other monitors†
- More peer-reviewed clinical research than any other product available that consistently demonstrates ability to intervene sooner[34-36,61-64]

INVOS™ 7100 monitor on stand

INVOS™ adult, pediatric, and infant sensors

†Compares the INVOS™ technology to Nonin EQUANOX™*, CASMED FORE-SITE ELITE™*, and Masimo Root™* O3 NIRS monitors during an induced hypoxic state in an animal model.[65]

Medtronic

Always within reach: an intubation routine for anywhere

McGRATH™ MAC video laryngoscope

Performance

Make this your default technique so that your first intubation attempt is your best.[5]

Minimalist material use

McGRATH™ MAC disposable blades are made with less than 16g of transparent medical-grade polymer.

Affordability

Associated with improved patient outcomes compared to direct laryngoscopy[6,66] and offers significant direct cost savings compared to other VLs.[67]

Ergonomics

A familiar, balanced design for intuitive ease of use may support a more ergonomic, upright, and relaxed intubation.[68]

Clinician Safety

Video laryngoscopes support clinicians remaining in an upright position, which creates a distance between the clinician and the patient and may reduce clinician exposure to droplet-borne pathogens.[69,70]

Portability

Handheld, cable-free, and durable with a reliable, simple power source for every intubation – regardless of location.

Help prevent the preventable

Microstream™ capnography monitoring provides an early warning of respiratory compromise,[71] offering clinicians the opportunity to provide care sooner and quickly determine how to intervene, reducing risks and saving time, money, and lives.[20,72,73,92]

Microstream™ enabled technology includes:

Smart Capnography™ integrated algorithms proven to reduce alarms and simplify the use of patient monitoring to enhance patient safety and improve clinical efficiency[74,75]

- Available for long-term and short-term use and with or without oxygen delivery
- Sized to accommodate neonate to adult patients

RespArray™ patient monitor

Designed for procedural sedation and medical surgical suites, experience world-class Nellcor™ pulse oximetry and Microstream™ capnography in our continuous multi-parameter vital signs monitor.

- SpO_2, $etCO_2$, noninvasive blood pressure, ECG (3/5 lead), temperature monitoring, clinical decision support including Early Warning Score (EWS) & CCHD workflow app (IEC version only)
- Integration with Vital Sync™ for remote patient monitoring, analytics and reporting. HL7 direct to EMR, 5Ghz WIFI, barcode scanner inputs

Medtronic

Accurate and reliable monitoring. For the ways you deliver care.

Mon-a-therm™ temperature probes and sensors meet a range of patient needs from intensive care and post-anesthesia care units to the emergency room and general care floor.

Mon-a-therm™ temperature products:

- Quickly and accurately reflect changes in core body temperature[76,77]
- Are single-patient use for convenience and infection control
- Are compatible with multi-function patient monitors
- Can be used in nasopharyngeal, esophageal, rectal, and axillary placement sites

Accessory for Mon-a-therm™ temperature monitoring – esophageal stethoscope

Medtronic

Never miss a beat

Nellcor™ pulse oximetry sensors with OxiMax™ technology

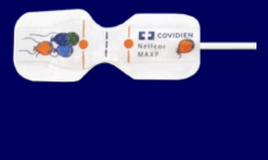
From neonate to the elderly, and virtually every patient in between, count on Nellcor™ pulse oximetry to provide quick and reliable information.[26,78] We look at every heartbeat to ensure that readings are sensitive and timely, even in the most challenging conditions.†[,26,79]

- Nellcor™ pulse oximetry has consistently delivered respiratory monitoring solutions that clinicians can count on.
- We continually build upon our technology with meaningful innovations that make a difference in accuracy,[78] clinician workflow,[80,81] and ability to assess the next steps in patient care.

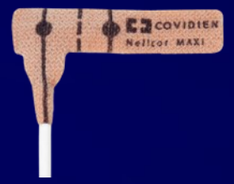
Nellcor™ OxySoft™

Forehead SpO_2 sensor

Non-adhesive SpO_2 sensor



Adhesive SpO_2 sensor



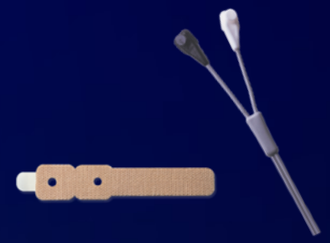
Adhesive SpO_2 sensor

Adhesive SpO_2 sensor

Adhesive SpO_2 sensor

Reusable SpO_2 sensor

Reusable SpO_2 sensor



Two-piece reusable SpO_2 sensor cable with adhesive wraps

†Oxygen saturation accuracy can be affected by certain environmental, equipment, and patient physiologic conditions (as discussed in the operator's manual for the monitor) that influence readings of SpO_2. Please consult the IFU and manual for full safety information.

Prioritize and develop interventions — remotely.

Omnivisor® Pro clinical monitoring software

Assembles and presents Veteran data for efficient clinical review and early-risk evaluation. The routine collection of this actionable data allows for seamless coordination between the Veteran and Care Coordinator.

Integrated with the Commander FLEX® hub and TeleResponse® interactive voice response platform, the Omnivisor® Pro clinical monitoring software supports:

- Use of Veteran Health Administration and Medtronic disease management protocols
- Customized two-way messaging
- Cross-panel coverage
- Easy transfer of vital sign data and question responses into the Computerized Patient Record System

Medtronic

Cuff pressure management made simple.

Puritan Bennett™ cuff pressure manager

Real-time pressure feedback and management

Help protect your patients against common and costly tracheal injuries and VAP caused by cuff overinflation and underinflation with the Puritan Bennett™ cuff pressure manager.[82]

Simplified workflow

- Reduces manual work of measuring and adjusting cuff pressure with a manometer and syringe[82-84]
- Provides uninterrupted cuff monitoring and management
- Compact and portable, allowing the user to inflate and deflate the cuff quickly

Built-in safety

- Cuff leakage detection and a filtered extension tube also safeguard your ventilated patients from complications[85,86]

Puritan Bennett™ cuff pressure manager

Medtronic

A state-of-the-art portfolio to help you and your patients breathe easier

Shiley™ airway management products

Shiley™ flexible tracheostomy tubes and Shiley™ endotracheal tubes with TaperGuard™ cuff

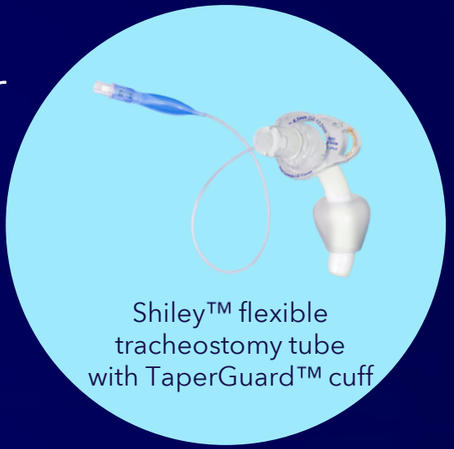
Optimizing airway management for patients calls for the right tools. Our patented TaperGuard™ cuff for Shiley™ endotracheal and tracheostomy tubes features a unique tapered shape, uses less material,[87] and improves seal performance.[88]

Designed to maximize comfort and safety for patients, our enhanced cuff technology helps reduce tracheal contact pressure,[89] microaspiration,[90] and fluid leakage into the lungs.[88,91]

Whether for short-term or long-term use, Shiley™ products with TaperGuard™ cuff provide the same quality and reliability you've come to count on from the Shiley™ brand.

Shiley™ speaking valve

Designed to be used in conjunction with Shiley™ flexible tracheostomy tubes, our Shiley™ speaking valve enables phonation by redirecting airflow through the vocal cords, nose, and mouth.



Shiley™ flexible tracheostomy tube with TaperGuard™ cuff

Shiley™ evac endotracheal tube with TaperGuard™ cuff

Shiley™ pediatric endotracheal tube with TaperGuard™ cuff

Shiley™ speaking valves

Products are non-DEHP and are not made with natural rubber latex.

Medtronic

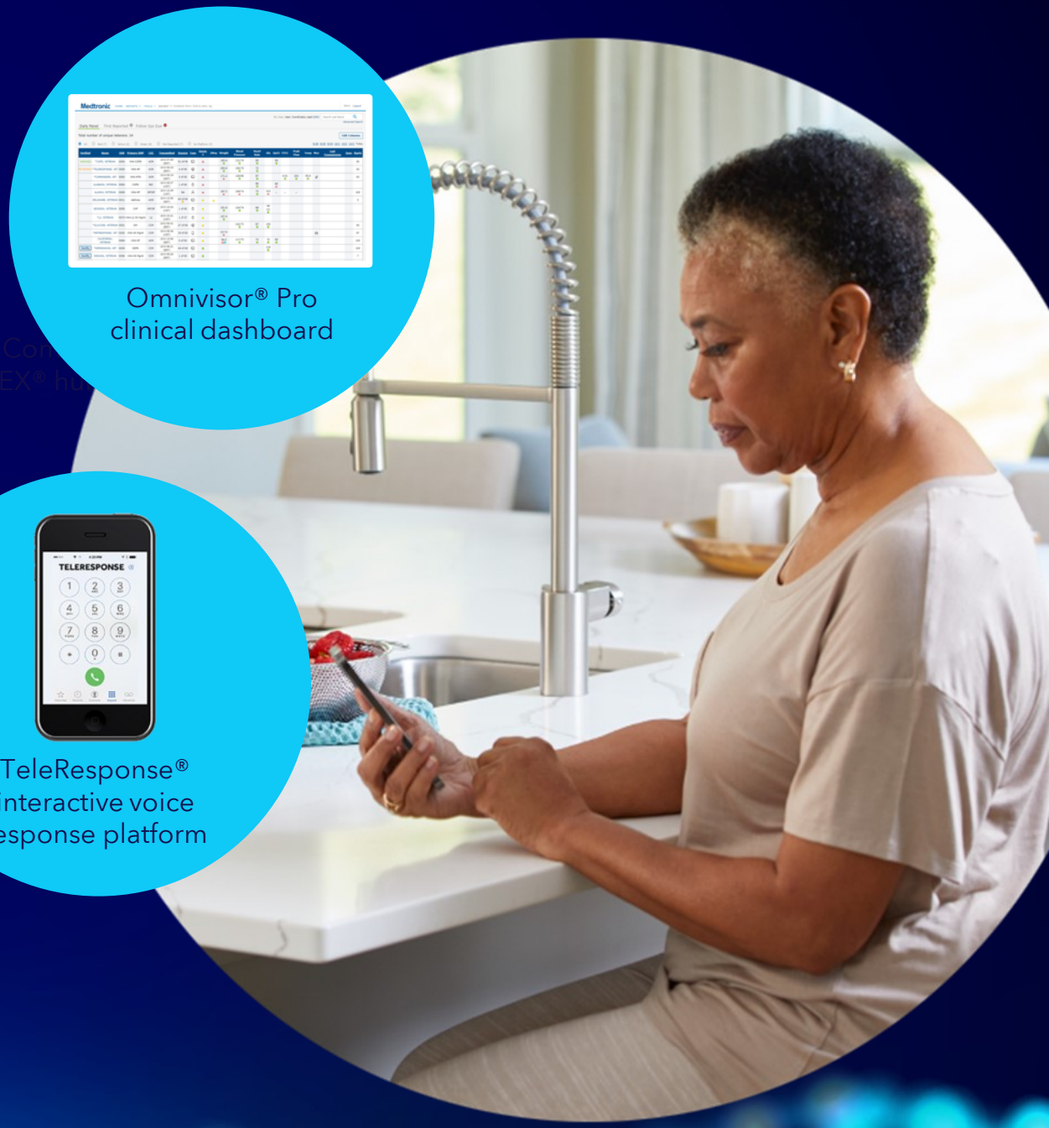
Daily health checks when it is most convenient

TeleResponse® interactive voice response platform

Provides access to daily health checks through an interactive, telephonic system available day or night. Flexible response options allow for manual entry or verbal responses for vital sign results, question responses, and system navigation.

Integrated with the Omnivisor® Pro clinical monitoring software, Care Coordinators can send unique patient messages – in English or Spanish – to encourage adherence to the patient's care plan.

- Routine health checks with education, patient education, disease management protocols (DMPs), and manual input of vital signs
- Secure pass-code entry using telephone keypad
- Entry of multiple vital sign readings with a date/time stamp for accuracy
- Integration with the Veteran Health Administration and Medtronic DMPs



Medtronic