TRANSFORMING HEALTHCARE: MEANINGFUL INNOVATIONS

Medtronic
Further, Together

THE MEDTRONIC STORY
MUCH MORE THAN A GARAGE, A PLACE OF INVENTION

- 800-square-foot garage in Minneapolis where Medtronic was born in 1949
- Primary business – servicing medical equipment
- First year revenue- $8
- Halloween blackout of ‘57 spurs the creation of first portable pacemaker
- Continuous Innovation, Invention & Disruption

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TRANSFORMING HEALTHCARE TO POSITIVELY IMPACT OUTCOMES

IN THE LAST YEAR, MEDTRONIC THERAPIES IMPROVED THE LIVES OF MORE THAN 75 MILLION PEOPLE. **THAT'S TWO PEOPLE EVERY SECOND.**

WHO WE ARE

Omar Ishrak
Chairman and CEO

90,000+ Employees
10,000+ Scientists and Engineers
1,600+ Clinical Professionals

WHERE WE ARE

Operational Headquarters
Minneapolis, Minnesota, USA

Principal Executive Office
Dublin, Ireland

150+ Countries
75 Manufacturing Sites
19 Lab and R&D Sites

BUSINESS STRATEGY

THERAPY INNOVATION
Introducing and delivering meaningful offerings at the therapeutic, procedural, and system level

GLOBALIZATION
Addressing the inequities in healthcare access globally

ECONOMIC VALUE
Helping lead the creation of value-based healthcare solutions

MEDTRONIC CVG CONTINUES TO LEAD IN TECHNOLOGY INNOVATION

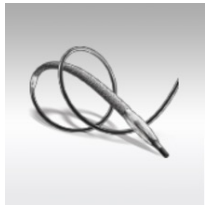
Continuous Innovation
Enhancing the clinical outcomes and economic value of existing products

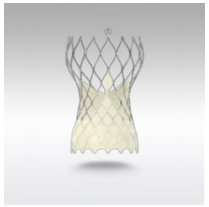
Invention
creating and developing new therapies that result in new markets

Disruption
Disruptive therapies in existing markets

VisiaAF™ ICD

Azure™ Pacing System


Resolute ONYX™ Drug-eluting stent


CoreValve™ TAVR


MVAD™ Left Ventricular Assist*

Reveal LINQ™ ICM

Micra™ Wireless Pacing System


Arctic Front Advance™ Cryoballoon

*Pipeline — Product concept in development

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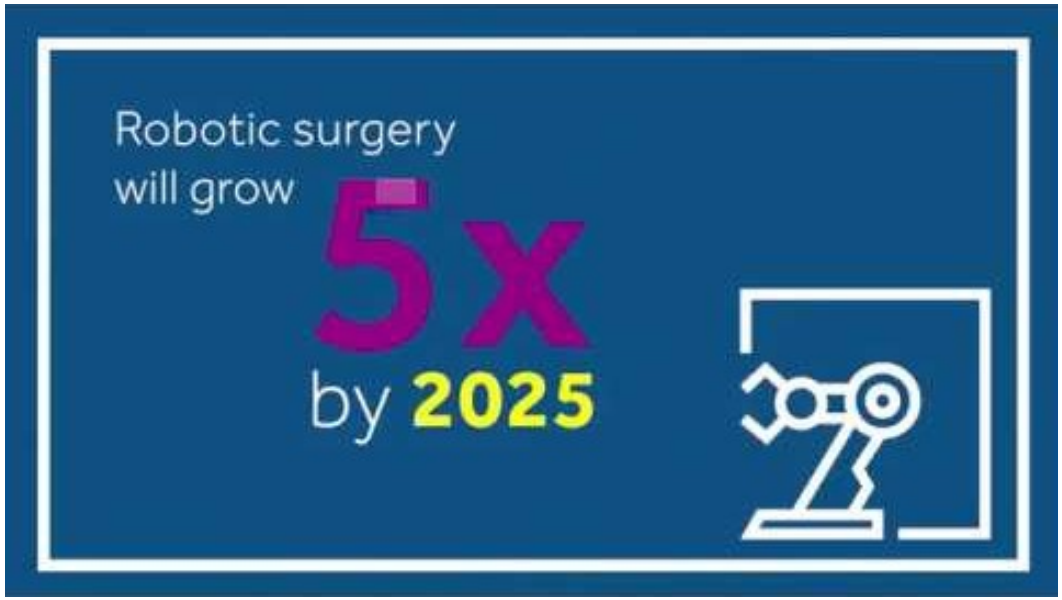
MEANINGFUL INNOVATION
THE SPIRIT THAT DRIVES US

AT MEDTRONIC, WE BELIEVE….
PATIENT-FOCUSED INNOVATION AND STRONG PARTNERSHIPS REMAIN KEY TO AN EVEN BETTER, MORE IMPACTFUL FUTURE.



3 AREAS OF MEDTECH
IMPROVING CHRONIC DISEASE MANAGEMENT

ARTIFICIAL INTELLIGENCE

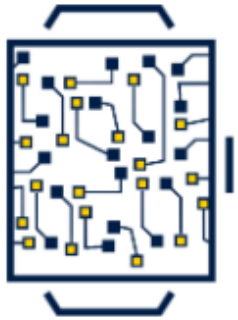
AI and sensor technology used in implantable and wearable devices and managed care solutions help clinicians and patients with chronic disease management.

MACHINE LEARNING

Algorithmic support and insights based on data gathered by sensors and machine learning can give individuals more day-to-day control of their disease.

SENSOR TECHNOLOGY

Through sensor technology and the advanced application of algorithms, our latest technologies help take the guesswork out of daily disease management.



Nothing can replace clinician judgment in patient care, but new data-driven technology in healthcare is helping advance delivery of the right care, to the right patient, at the right time

MINIATURIZING & IMAGING
REVOLUTIONIZING MEDICAL TECHNOLOGIES

Micra™

The world's smallest and first leadless pacemaker

Reveal LINQ™

An insertable, cardiac monitor, approximately one-third the size of a AAA battery

PillCam™ System

A camera inside a device the size of a pill that can be ingested and used to capture photos inside the small bowel and colon

superDimension™

A navigation system using a CT scan combined with fluoroscopic images to build a 3D map for Electromagnetic Navigation Bronchoscopy procedures

TINY DEVICES — FROM PACEMAKERS TO CAMERAS — OFFER HUGE BENEFITS

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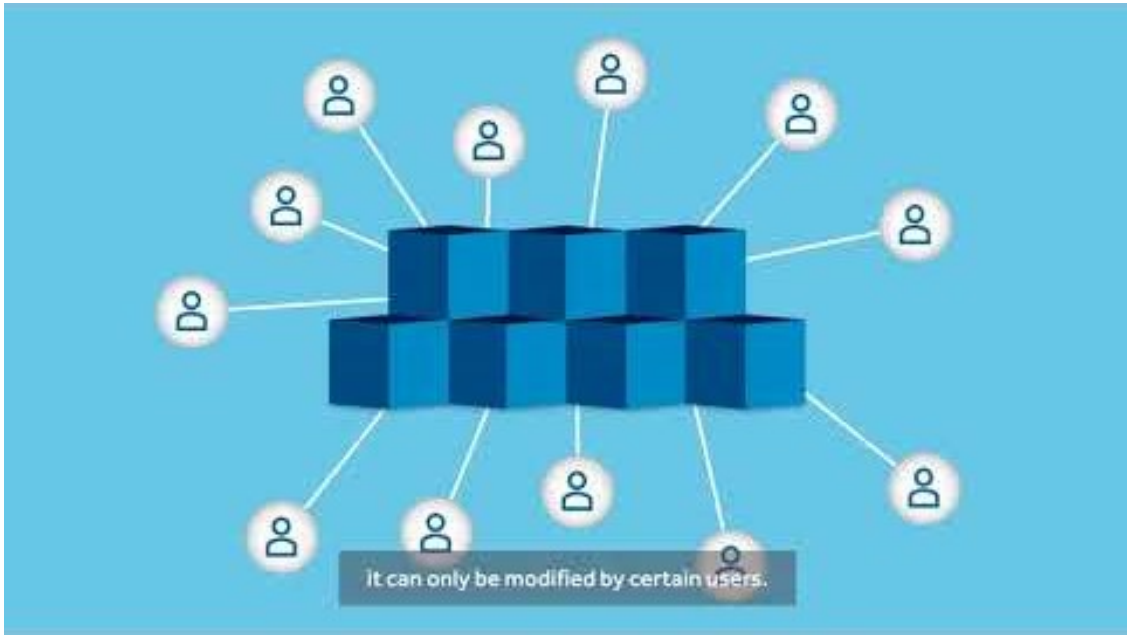
BREAKING DOWN BORDERS
WHAT BLOCKCHAIN CAN DO FOR HEALTHCARE

AT MEDTRONIC…….

WE ARE ENCOURAGED BY THE FEASIBILITY THE TECHNOLOGY HOLDS TO NOT ONLY DELIVER SHORT-TERM BENEFITS TO PATIENTS AND PROVIDERS, BUT ALSO LONG-TERM BENEFITS OF A ROBUST DATA SYSTEM THAT POWERS A GLOBAL HEALTHCARE SYSTEM



BY 2025, 55% OF HEALTHCARE APPLICATIONS WILL HAVE ADOPTED BLOCKCHAIN FOR COMMERCIAL DEPLOYMENT

THE PROMISE OF BIOSENSORS
IMPROVED TRACKING AND OUTCOMES

BIOSENSOR TECHNOLOGY AND ITS ADOPTION BY THE HEALTHCARE INDUSTRY — IS EXPANDING RAPIDLY. WORKING WITH PARTNERS AROUND THE GLOBE, MEDTRONIC IS DEVELOPING SENSOR-BASED SOLUTIONS TO IMPROVE OUTCOMES FOR PATIENTS LIVING WITH DIABETES, HEART DISEASE, HYPERTENSION, AND OTHER CHRONIC CONDITIONS.

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TRAINING HEALTHCARE PROFESSIONALS AROUND THE WORLD
INNOVATIVE PRODUCTS REQUIRE INNOVATIVE TRAINING

$142M
INVESTED IN CAPACITY-BUILDING AND TRAINING REACHED
83K
PEOPLE IN 2019.[6]

3 KEY FOCUS AREAS AT PRL

1. Preclinical testing
2. Biomaterials
3. Training

Physiological Research Laboratories (PRL)

THE MEDTRONIC INNOVATION CENTER JAPAN HAS:

1. The first bone model for spine orthopedic procedures in Japan
2. Training simulators with haptics feedback
3. 3D digital tracking system for surgical instruments

INNOVATING THE MEDTRONIC WAY….
COLLABORATION, PEER ENGAGEMENT, RECOGNITION, AND PROFESSIONAL ADVANCEMENT

- PATIENT-INSPIRED TECHNOLOGY FUELS 21ST CENTURY HEALTHCARE
- REAL WORLD APPLICATION HELPS EXPAND INNOVATION
- DATA AND EXPERTISE UNCOVER POTENTIAL
- INNOVATION HAPPENS BEST WHEN IT HAPPENS FAST
- A PROMISING FUTURE OF BETTER HEALTH

THANKS