PPP’S & MEDTRONIC

- BACKGROUND, STRATEGY, MARKET ASSESSMENT AND EXECUTION

TREVOR GUNN
VP, International Relations
Chair, Medtronic PPP Council
Today, Medtronic is the world’s largest manufacturer of medical technology. We are structured into four “super regions” - Americas, Europe, Middle East, & Africa, Asia Pacific, and Greater China. Medtronic operates in 160+ countries, employs 85,000+ employees, has 90 manufacturing facilities, and 56 research centers.
<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
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<tbody>
<tr>
<td>Number of employees:</td>
<td>85,000</td>
</tr>
<tr>
<td>Medical devices now being produced</td>
<td>131,000</td>
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<tr>
<td>Number of patents:</td>
<td>53,000+</td>
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<tr>
<td>Research and development spend</td>
<td>$2B</td>
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<tr>
<td>Suppliers</td>
<td>120,000</td>
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Information reflects Medtronic fiscal year 2014 data and Covidien fiscal year 2014 data.
Connecting What We Do with Major Untreated Diseases

**CARDIAC RHYTHM**
- Atrial fibrillation
- Slow heart rates (bradycardia)
- Fast heart rates (tachycardia)
- Heart failure
- Asymptomatic heart rates

**DIAGNOSTICS AND SOLUTIONS**
- + CO₂
- + Consciousness
- + Pulse oximetry
- + Skin integrity
- + Patient & caregiver safety

**NEUROLOGICAL**
- Severe spasticity
- Parkinson’s disease
- Essential tremor
- Epilepsy
- Dystonia*
- Hydrocephalus
- Obsessive-compulsive disorder*
- Brain tumors and lesions
- Chronic pain
- Subdural hematomas
- Cranial trauma
- Acute ischemic stroke
- Brain aneurysm
- Vascular embolization

**STRUCTURAL HEART**
- Heart valve disease
- Congenital heart disease

**UROLOGICAL, UROGYNECOLOGICAL, AND GASTROENTEROLOGICAL**
- Overactive bladder and urinary retention
- Nausea and vomiting associated with gastroparesis*
- Fecal incontinence
- Intervventional GI
- Cholecystectomy
- Appendectomy
- Barrett’s esophagus
- Capsule endoscopy
- Hernia repair
- Bariatric bypass and sleeves
- Colon resection
- Hemorrhoidectomy
- Nutrition delivery
- Hysterectomy, fibroids, and sterilization
- Salpingo-oophorectomy

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*Humanitarian device in the United States—the effectiveness for this use has not been demonstrated
BREADTH OF MEDTRONIC-VIRTUALLY EVERY DISEASE STATE

CARDIAC AND VASCULAR GROUP
- Aortic and Peripheral Vascular
- Cardiac Rhythm and Heart Failure
- Coronary and Structural Heart

DIABETES GROUP
- Intensive Insulin Management
- Non-Intensive Diabetes Therapies
- Diabetes Services and Solutions

MINIMALLY INVASIVE THERAPIES GROUP
- Early Technologies
- Patient Monitoring and Recovery
- Surgical Innovations
- Renal Care

RESTORATIVE THERAPIES GROUP
- Brain Therapies
- Pain Therapies
- Specialty Therapies
TODAY’S MEDICAL TECHNOLOGY LANDSCAPE – IMPORTANT FOR PPP’S
PLAYERS ARE STRUCTURED ALONG FOUR DIMENSIONS
WHY PPP’S
WHY DO PPP’S? MACRO PERSPECTIVE
PPP’S AS A GROWTH AND MISSION OPPORTUNITY

Align with our Mission: increase Patient Access
• Increasing patient access in multiple communities aligns with the core of our mission, drives our globalization strategy and actively contributes to the global push for universal health coverage with outcome oriented business models.

Access Public Markets
• Public markets present opportunities to access predominantly publicly-driven healthcare systems, close to decision makers, with often high degrees of scalability.

Diversify and Increase Revenue
• PPP’s are generally longer term contracts that allow us to diversify from our predominantly short-term business and create sustainable revenue over longer periods of time.
FOR MEDTECH: WHY PPP’S IN LMIC’S

- Procedural Delays
- Regulation
- Infrastructure
- Physician Education
- Reimbursement
- Awareness
- Tariffs

Increased Patient Access to Medical Devices
PPP STRATEGY
AND
PPP ENVIRONMENT & INTERNAL READINESS ASSESSMENT
MEDTRONIC PPP SOLUTIONS - ‘FOUR LANES’

**Types of Projects**
- Facilities/projects in collaboration with government entity
- Open manufacturing facilities as a means to improve/secure market access with governments.
- Training programs in collaboration with government entity
- Develop wide-ranging programs that train government health system workers on Medtronic therapies.

**PURPOSE**
- Utilize government subsidies and other programs to support development of R&D projects.
- Production
- Distribution
- Call Centers
- Hub and Spoke
- VBHC
- “Public Sector” IHS
- Take advantage of government scale to reach more patients and improve delivery and quality of care.
HEALTH SYSTEM STRENGTHENING PPP’S
IHS: DIABETER/IMPERIAL HOSPITAL/MAASTRICHT/GABAGADA(NIGERIA)
IHS: BROAD GEOGRAPHIC FOOTPRINT
EXPERIENCE IN 20+ MARKETS

150+ PARTNERSHIPS GLOBALLY

5 AGREEMENTS IN AUSTRALIA

200+ CATH LABS

100+ OPERATING ROOMS

220+ EXPERTS
- ARCHITECTS
- BIOMEDICAL ENGINEERS
- CONSULTANTS
- CATHLAB MANAGERS
- PROCUREMENT LEADERS
- HEALTHCARE SUPPLY CHAIN EXPERTS OR MANAGERS
- DIGITAL HEALTH EXPERTS
THE CASE OF KENYA
ANGELICA MEDICAL-MEDTRONIC PARTNERSHIP - RENAL DIALYSIS IN KENYA

MARY W. MATU AND THE BELLCO(MEDTRONIC) TEAM, ITALY, IN JULY 2018
PROJECT STATUS

To date:
- 50 hospitals fully installed
- 43 hospitals are dialyzing
- Installation is ongoing in 4 hospitals
- 428 Nurses trained
- 60 biomedical technicians trained
ANGELICA MEDICAL SUPPLIES AND MEDTRONIC, SIGNING A PARTNERSHIP AGREEMENT IN THE PRESENCE OF PRESIDENT KENYATTA, AT THE UNITED NATIONS, NAIROBI – JUNE 2018