MEDTRONIC INC
Form 10-K
June 24, 2008

Table of Contents

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

x Annual report pursuant to section 13 or 15(d) of the Securities Exchange Act of 1934.
For the fiscal year ended April 25, 2008.

o Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.
For the transition period from __________ to __________

Commission File No. 1-7707

Medtronic, Inc.

(Exact name of registrant as specified in charter)

Minnesota 41-0793183
(State of incorporation) (I.R.S. Employer Identification No.)

710 Medtronic Parkway
Minneapolis, Minnesota 55432
(Address of principal executive offices) (Zip Code)

Telephone Number, including area code: (763) 514-4000

Securities registered pursuant to section 12(b) of the Act:

<table>
<thead>
<tr>
<th>Title of each class</th>
<th>Name of each exchange on which registered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common stock, par value $0.10 per share</td>
<td>New York Stock Exchange, Inc.</td>
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<tr>
<td>Preferred stock purchase rights</td>
<td>New York Stock Exchange, Inc.</td>
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Securities registered pursuant to section 12(g) of the Act:
None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes x No o
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Exchange Act. Yes o No x

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes x No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant’s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definition of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act.
Large accelerated filer x Accelerated filer o Non-accelerated filer o Smaller reporting company o

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).
Yes o No x

Aggregate market value of voting stock of Medtronic, Inc. held by nonaffiliates of the registrant as of October 26, 2007, based on the closing price of $47.82, as reported on the New York Stock Exchange: approximately $54.2 billion. Shares of Common Stock outstanding on June 19, 2008: 1,125,244,102

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant’s 2008 Annual Report filed as Exhibit 13 hereto are incorporated by reference into Parts I and II hereto and portions of Registrant’s Proxy Statement for its 2008 Annual Meeting are incorporated by reference into Part III hereto.

TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Business</td>
<td>1</td>
</tr>
<tr>
<td>1A.</td>
<td>Risk Factors</td>
<td>31</td>
</tr>
</tbody>
</table>

PART I
### Table of Contents

**Annual Meeting and Record Dates**

Medtronic, Inc. (Medtronic or the Company) Annual Meeting of Shareholders will be held on Thursday, August 21, 2008 at 10:30 a.m., Central Daylight Time at the Company’s World Headquarters, 710 Medtronic Parkway, Minneapolis (Fridley), Minnesota. The record date for the Annual Meeting is June 23, 2008 and all shareholders of record at the close of business on that day will be entitled to vote at the Annual Meeting.

**Medtronic Website**

Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 are available through our website (www.medtronic.com under the Investor Relations caption) free of charge as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission (SEC).

Information relating to corporate governance at Medtronic, including our Principles of Corporate Governance, Code of Conduct (including our Code of Ethics for Senior Financial Officers), Code of Business Conduct and Ethics for Board Members and information concerning our executive officers, directors and Board committees (including
committee charters), and transactions in Medtronic securities by directors and officers, is available on or through our website at www.medtronic.com under the Corporate Governance and Investor Relations captions.

We are not including the information on our website as a part of, or incorporating it by reference into, our Form 10-K.

Available Information

The SEC maintains a website that contains reports, proxy and information statements, and other information regarding issuers, including the Company, that file electronically with the SEC. The public can obtain any documents that the Company files with the SEC at http://www.sec.gov. The Company files annual reports, quarterly reports, proxy statements and other documents with SEC under the Securities Exchange Act of 1934 (Exchange Act). The public may read and copy any materials that the Company files with the SEC at the SEC’s Public Reference Room at 100 F Street, N.E., Room 1580 Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330.

Table of Contents

PART I

Item 1. Business

Overview

Medtronic is the global leader in medical technology alleviating pain, restoring health, and extending life for millions of people around the world. We are committed to offering market-leading therapies to restore patients to fuller, healthier lives. With beginnings in the treatment of heart disease, we have expanded well beyond our historical core business and today provide a wide range of products and therapies that help solve many challenging, life-limiting medical conditions. We hold market-leading positions in almost all of the major markets in which we operate.

Medtronic was founded in 1949, incorporated as a Minnesota corporation in 1957, and today serves physicians, clinicians and patients in more than 120 countries worldwide. Beginning with the development of the heart pacemaker in the 1950s, we have assembled a broad and diverse portfolio of progressive technology expertise both through internal development of core technologies as well as acquisitions. We remain committed to a mission written by our founder more than 40 years ago that directs us to contribute to human welfare by application of biomedical engineering in the research, design, manufacture and sale of products that alleviate pain, restore health and extend life.

With approximately 40,000 dedicated employees worldwide personally invested in supporting our mission, our success in leading global advances in medical technology is the result of several key strengths:

Broad and deep technological knowledge of microelectronics, implantable devices and techniques, power sources, coatings, materials, programmable devices and related areas, as well as a tradition of
technological pioneering and breakthrough products that not only yield better medical outcomes, but more cost-effective therapies.

Strong intellectual property portfolio that underlies our key products.

High product quality standards, backed with stringent systems to help ensure consistent performance that meet or surpass customers’ expectations.

Strong professional collaboration with customers, extensive medical educational programs, and thorough clinical research.

Full commitment to superior patient and customer service.

Extensive experience with the regulatory process and sound working relationships with regulators and reimbursement agencies, including leadership roles in helping shape regulatory policy in the major markets in which we operate.

A proven financial record of sustained revenue and earnings growth and continual introduction of new products.

Table of Contents

We currently function in seven operating segments that manufacture and sell device-based medical therapies. During the first quarter of fiscal year 2008, we revised our operating segment reporting to combine our former Vascular and Cardiac Surgery businesses into the new CardioVascular operating segment. Additionally, the Navigation business was separated from Spinal for most of fiscal year 2008 and was reported as part of a stand alone segment named Corporate Technologies and New Ventures. In the fourth quarter of fiscal year 2008, the decision was made to include the Navigation business as a component of the Ear, Nose and Throat segment, which was renamed Surgical Technologies to reflect the expanding scope and focus of this business. Our operating segments are:

Cardiac Rhythm Disease Management
Spinal
CardioVascular
Neuromodulation
Diabetes
Surgical Technologies
Physio-Control

The chart above shows the net sales and percentage of total net sales contributed by each of our operating segments for the fiscal year ended April 25, 2008 (fiscal year 2008).

With innovation and market leadership, we have pioneered advances in medical technology in all of our businesses and enjoyed steady growth. Over the last five years, our net sales on a compound annual growth basis have increased more than 12 percent, from $7.665 billion in fiscal year 2003 to $13.515 billion in fiscal year 2008. We attribute this
growth to our commitment to develop or acquire new products to treat an expanding array of medical conditions. In the coming decade, we anticipate that technology advancements, the Internet, and increasing patient participation in treatment decisions will transform the nature of healthcare services. Medtronic is positioned to deliver on this promise of integration across device technology, biotechnology, and information technology by building on trusted partnerships with caregivers; leveraging our scale, scope, and expertise; and benefiting patients worldwide.

We will accomplish this goal by operating as ONE Medtronic, reaching within and across our operating segments to make the whole of Medtronic greater than the sum of its parts. The main tenets of this approach are:

- Driving sustainable long-term growth through innovation
- Strong focus on improving operating margins
- Delivering EPS growth and disciplined capital allocation
- Aligning the organization for relentless and consistent execution

Our primary customers include hospitals, clinics, third party healthcare providers, distributors, and other institutions, including governmental healthcare programs and group purchasing organizations.

Cardiac Rhythm Disease Management (CRDM)

CRDM is the world’s leading supplier of medical devices for cardiac rhythm disease management. We pioneered the modern medical device industry by developing the first wearable external cardiac pacemaker in 1957, and manufactured the first reliable long-term implantable pacing system in 1960. Since then, we have been the world’s leading producer of cardiac rhythm technology, and from these beginnings, a $10 billion industry has emerged. Today, our products and technologies treat and monitor a wide variety of heart rhythm diseases and conditions.

Table of Contents

**Conditions Treated**

Natural electrical impulses stimulate the atria and ventricles, the heart’s chambers, to rhythmically contract and relax with each heartbeat. Irregularities in the heart’s normal electrical signals can result in debilitating and life-threatening conditions, including sudden cardiac arrest, one of the leading causes of death. Physicians rely on our CRDM products to monitor and correct these irregularities and restore the heart to its normal rhythm. Our CRDM products are designed to treat and monitor a broad range of heart conditions, including those described below.

- **Bradycardia**  abnormally slow or unsteady heart rhythms, usually less than 60 beats per minute, or unsteady heart rhythms that cause symptoms such as dizziness, fainting, fatigue, and shortness of breath.
- **Tachyarrhythmia**  heart rates that are dangerously fast or irregular. In the lower chambers of the heart, called ventricles, this is called ventricular tachycardia or fibrillation and can lead to sudden cardiac arrest. In the upper chambers, called the atria, this is called atrial arrhythmia which can affect blood flow to the body and increase the risk of stroke.
Heart Failure - impaired heart function resulting in the inability to pump enough blood to meet the body's needs, characterized by difficulty breathing, chronic fatigue and fluid retention.

Sudden Cardiac Arrest - condition when the heart's ventricles suddenly develop a rapid, irregular rhythm (ventricular fibrillation) and the quivering ventricles cannot pump blood to the body, which, without immediate treatment, will almost always lead to death.

Syncope - a sudden loss of consciousness, which occurs when the blood pressure drops and not enough oxygen reaches the brain. Causes vary and include heart-related conditions, exhaustion, stress, overheating, illness and certain medications.

Atrial Fibrillation - condition when the atria quiver instead of pumping blood effectively. Blood in the atria may pool and clot. If a clot breaks loose and advances to the brain, a stroke can result.

The charts below set forth net sales of our CRDM products as a percentage of our total net sales for each of the last three fiscal years:

We offer the broadest array of products in the industry for the diagnosis and treatment of heart rhythm disorders and heart failure. Because many patients exhibit multiple heart rhythm problems, we have developed implantable devices that specifically address complex combinations of arrhythmias. In addition to implantable devices, we also provide leads, ablation products, electrophysiology catheters, and information systems for the management of patients with our devices. Our CRDM devices are currently implanted in more than 3 million patients worldwide.

Implantable Cardiac Pacemakers. Bradycardia is a common condition, with hundreds of thousands of patients diagnosed each year, and millions of people worldwide suffering from its effects. The only known treatment for this condition is a cardiac pacemaker, a battery-powered device implanted in the chest that delivers electrical impulses to stimulate the heart to beat at an appropriate rate.
been shown to reduce the amount of right ventricular pacing to less than 5 percent, compared to 50 percent or more from devices with typical dual-chamber pacing. The Adapta family leads our portfolio of pacemakers, which also includes the EnRhythm and EnPulse families.

Following the launch of our international trial in February 2007 of 350 patients, in January 2008 we announced the start of a United States (U.S.) clinical trial of 470 patients to confirm the safety and efficacy of the Medtronic EnRhythm MRI SureScan pacing system, the first-ever pacemaker system to be developed and tested specifically for safe use in Magnetic Resonance Imaging (MRI) machines under specified scanning conditions. The EnRhythm MRI SureScan pacing system consists of the dual-chamber EnRhythm MRI SureScan pacemaker and CapSureFix MRI SureScan pacing leads. Currently, individuals with implanted cardiac devices such as pacemakers, implantable cardioverter-defibrillators (ICDs) and cardiac resynchronization therapy (CRT) devices are prohibited from receiving MRI scans, since MRI machines may interact with traditional systems, potentially compromising therapy and patient safety. While improvements to pacing technology have continued since its development nearly 50 years ago, this advance marks a concerted effort to pursue compatibility with MRI scans, an important healthcare diagnostic procedure.

**Implantable Cardioverter-Defibrillators.** Approximately 7 million people worldwide have tachyarrhythmia. Tachyarrhythmia is a potentially fatal condition that can lead to sudden cardiac arrest, the sudden and complete cessation of heart activity. Sudden cardiac arrest is one of the leading causes of death in the U.S. responsible for more than 310,000 deaths annually, with most due to ventricular fibrillation. ICDs are stopwatch-sized devices that continually monitor the heart and deliver appropriate therapy when an abnormal heart rhythm is detected. Several large clinical trials have shown implantable defibrillators significantly improve survival as compared to commonly prescribed antiarrhythmic drugs. In 2005, the results of Sudden Cardiac Death in Heart Failure Trial (SCD-HeFT), sponsored by the National Institutes of Health, with funding provided by Medtronic, were published in the *New England Journal of Medicine*. This 2,521 patient trial, the largest ICD trial ever conducted, showed ICDs reduced death by 23 percent in people with moderate heart failure compared to those who did not receive ICDs. Also in 2005, the Centers for Medicare and Medicaid Services expanded coverage of ICDs for Medicare beneficiaries who meet SCD-HeFT indications. Despite the mounting evidence demonstrated in clinical trials such as SCD-HeFT, only about 35 percent of all patients in the U.S., and significantly less outside the U.S., who are indicated for an ICD actually receive one, leaving hundreds of thousands of people at an increased risk for sudden cardiac death. Our Virtuoso family of dual and single chamber ICDs offer unique features including Anti-tachyarrhythmia Pacing (ATP) During Charging, OptiVol Fluid Status Monitoring, our pacing mode MVP, and Conexus Wireless Telemetry with SmartRadio. ATP During Charging is a feature that automatically uses pacing pulses to stop fast, dangerous heartbeats, while concurrently preparing to deliver a shock, if needed, with no delay. OptiVol automatically monitors fluid status in the thoracic cavity, the chest area encompassing the lungs and heart. The accumulation of thoracic fluid is a primary indicator of worsening heart failure and will often result in patient hospitalization. The OptiVol Fluid Status Monitoring diagnostic feature allows physicians earlier access to warning signs of deteriorating heart failure, which can then be used for early treatment of the patient's heart failure. In July 2007, we announced the launch of the Virtuoso family of ICDs in Japan, following launches in the U.S. and Europe in May and June 2006, respectively.
**Implantable Cardiac Resynchronization Therapy.** Heart failure is a large and growing health problem. It is typically a late manifestation of one or more other cardiovascular diseases, including coronary artery disease, hypertension, cardiomyopathy, and valvular disease. Chronic heart failure occurs when the heart is unable to pump enough blood to sustain adequate circulation in the body's tissues. Approximately 22 million patients suffer from heart failure globally and an estimated $80 billion is spent each year to manage heart failure patients. Approximately 5.2 million Americans suffer from heart failure and more than 550,000 new cases are estimated to develop each year. Heart failure is the most costly cardiovascular disease in the U.S., with an estimated $40 billion spent on managing heart failure patients each year. Further, there are more than one million hospitalizations in the U.S. annually with a primary diagnosis of heart failure.

Since 1997, Medtronic has supported more than 20 randomized, controlled clinical studies evaluating device therapy in more than 8,000 heart failure and post-myocardial infarction patients. This research has resulted in several medical firsts, among them the first U.S. Food and Drug Administration (FDA) approved resynchronization device for the treatment of heart failure, which was based on results from the groundbreaking MIRACLE trial; the first study of the risk of sudden cardiac death in a heart failure patient population with SCD-HeFT; and the landmark CARE-HF trial, which demonstrated that patients with moderate and severe heart failure who received a Medtronic CRT device experienced a significant reduction in risk in mortality and morbidity, and that long-term treatment with a CRT-pacing (CRT-P) device or CRT-defibrillator (CRT-D) device is a cost-effective way to improve survival in patients with heart failure. In the fall of 2007, data from IMPROVE HF was presented at the scientific sessions of the Heart Failure Society of America Annual Scientific Meeting and the American Heart Association. This is the largest study of U.S.-based heart failure patients in the outpatient setting and is being sponsored by Medtronic. Data demonstrated significant underutilization of many guideline-indicated life-saving medical and device therapies provided to heart failure patients, particularly for women and the elderly. Based on current medical guidelines, only 39 percent of eligible patients received CRT or CRT-D therapy, and only 51 percent of eligible patients received ICD therapy. This data underscores the challenge and opportunity of the ICD market.

Medtronic continues to offer the industry's broadest selection of devices and features for the growing number of patients with heart failure who are also considered at high risk of sudden cardiac arrest. The Concerto CRT-D, together with the Virtuoso ICD, are Medtronic's first cardiac rhythm disease management devices to utilize our proprietary Conexus wireless telemetry, enabling communication remotely between the implanted device and programmers at the time of implant, during follow-up in a clinician's office, or remotely using a patient home monitor. The Concerto CRT-D/Virtuoso ICD family represents our next step in the delivery of premium implantable devices, which, in addition to MVP and ATP During Charging, include OptiVol Fluid Status Monitoring. Concerto CRT-D also offers Left Ventricular Capture Management (LVCM). LVCM is intended to automatically sense and adjust impulses for stimulation of the heart's left ventricle. Concerto, along with previously released CRT-D devices (InSync Maximo and InSync Sentry), offer sequential biventricular pacing or V-to-V (ventricle to ventricle) timing, a feature that allows physicians to separately adjust the timing of electrical therapy delivered to the heart failure patient's two ventricles, which can optimize the beating of the heart and enhance the flow of blood throughout the body. These CRT-D devices represent important clinical advances since sudden cardiac arrest occurs in heart failure patients at six to nine times the rate observed in the general population. In July 2007, we announced the commercial launch of the Concerto CRT-D in Japan, following launches in the U.S. and Europe in May and June 2006, respectively.

**Diagnostics and Monitoring** Approximately 1.5 million people worldwide suffer from unexplained syncope. In almost 10 percent of patients, syncope has a cardiac cause; in 50 percent of patients, a non-cardiac cause; and in 40 percent of patients the cause of syncope is unknown. It is a leading cause of emergency room visits. Syncope is difficult to diagnose as syncopal episodes are often too infrequent and unpredictable for detection with conventional monitoring techniques. Our Reveal DX, which launched in Europe in July 2007 and the U.S. in December 2007, is a device that is placed under the skin and continuously monitors the heart's electrical activity before, during, and after a syncopal event. With
Atrial Fibrillation (AF) is the most common cardiac arrhythmia, experienced by approximately 4 to 5 million people worldwide. Treatment of AF can be difficult as episodes may show no symptoms and therefore go unnoticed by patients. AF can lead to a two to seven times higher risk of stroke and an increased risk of heart failure with its attendant risk of sudden cardiac arrest. Our Reveal XT Insertable Cardiac Monitor, launched in Europe in July 2007, monitors AF patients 24 hours a day, every day for up to three years. There are a variety of ways to treat AF, but prior to the launch of Reveal XT physicians had no means of gathering detailed data over an extended period on the progression of AF and the effect of treatment. Reveal XT gives new insight into patients’ heart rhythms, which may help physicians to evaluate stroke risk and determine appropriate treatment options for their patients.

Patient Management Tools. We have three different patient management tools, CareLink, Paceart, and CardioSight Service. The Medtronic CareLink Network, monitor, and software help physicians and patients better manage chronic cardiovascular disease treated by implantable device therapy. CareLink enables patients to transmit data from their pacemaker, ICD, or CRT-D using a portable monitor that is connected to a standard telephone line. Within minutes, the patient’s physician and nurses can view the data on a secure Internet website. The information, which is comparable to that provided during an in-clinic device follow-up visit, provides the physician with a view of how the device and patient’s heart are operating. The system provides an efficient, safe and convenient way for specialty physicians to remotely monitor the condition of their patients and, if needed, make adjustments to medication or prescribe additional therapy. It also saves patients time by potentially eliminating some in-office visits. For patients implanted with devices featuring Conexus Wireless Telemetry, clinicians can schedule routine follow-ups to occur automatically while the patient sleeps, alleviating compliance issues, and program the device to send a CareAlert notification to physicians wirelessly and automatically, providing the potential for treatment decisions before the condition worsens. The information in the Medtronic CareLink Network, which can be forwarded automatically to Paceart, provides access to detailed patient and device data for clinicians from a myriad of sources including in-clinic device interrogations, for inclusion in the patient’s Paceart record; from Paceart, via HL7 industry standard protocols, the data can move seamlessly to the hospital or clinic’s electronic health record system. Today, the Medtronic CareLink Network is being utilized in more than 2,400 clinics and hospitals, and more than 250,000 patients are being monitored. In June 2007, CareLink was launched in Europe, and is now currently available in the U.S., Canada, and Western Europe, and is being piloted in other parts of the world including Japan and Australia.

For more than 20 years, the Paceart System has led in the development of information solutions for device clinic management, including activities such as automating patient scheduling, correspondence and reporting. Paceart supports a common workflow by organizing and archiving data for cardiac devices from all major device manufacturers, serving as the central hub for patients’ device data. In addition to automatically downloading data from the Medtronic CareLink Network, Paceart can automatically receive data from the Medtronic 2090 Programmer, using SessionSync technology. Paceart acts as the gateway for managing clinics’ device data, receiving registration and scheduling data from, and sending patient and device data to more than 15 of the leading electronic health record and practice management systems. Paceart can interface with any HL7-compatible system and is actively sharing data with such industry leaders as athenahealth, EPIC, GEMMS, and NextGen Healthcare, among others. Today, more
than 1,100 clinics are using the Paceart System to streamline clinicians’ daily activities and better serve 1.5 million patients.

The third patient management tool we offer is called CardioSight Service, which is an in-clinic data access tool available to physicians treating heart failure patients who have one of several Medtronic CRT-D or ICD devices. CardioSight provides clinically valuable, device-derived information to help specialty physicians discern the status of the heart failure patient’s symptoms. The CardioSight Reader gives insight into a patient’s condition without using a device programmer. Within minutes of downloading device information using the reader, a Heart Failure Management Report or Cardiac Compass Trends Report is available to the clinic and can be added to the patient chart before the physician consults with the patient.

Table of Contents

Customers and Competitors

The primary medical specialists who use our implanted cardiac rhythm devices include electrophysiologists, implanting cardiologists, heart failure specialists, and cardiovascular surgeons. We hold the leading market position among implantable cardiac rhythm device manufacturers. Our primary competitors in the CRDM business are Boston Scientific Corporation and St. Jude Medical, Inc.

Spinal

Our Spinal business is a leading supplier for innovative medical devices and implants used in the treatment of the spine. Today we offer a wide range of products and therapies to treat a variety of conditions of the spine.

Conditions Treated

Our Spinal business offers products for treatment and diagnosis of many spinal conditions, including those listed below.

Herniated Disc A disc herniation occurs when the inner core of the intervertebral disc bulges out through the outer layer of ligaments that surround the disc. This tear in the outer layer of ligaments causes pain in the back at the point of herniation. If the protruding disc presses on a spinal nerve, the pain may spread to the area of the body that is served by that nerve. The terms ruptured, slipped, and bulging are also commonly used to describe this condition.

Degenerative Disc Disease As part of the natural aging process, intervertebral discs lose their flexibility and shock absorbing characteristics. The ligaments that surround the discs become brittle and easier to tear. At the same time, the inner core of the disc starts to dry out and shrink. Over time, these changes can cause the discs to lose their normal structure and/or function.

Spinal Deformity When viewed from behind, the human spine appears straight and symmetrical. When viewed from the side, however, the spine is curved. Some curvature in the neck, upper trunk, and lower
trunk is normal. These curves help the upper body maintain proper balance and alignment over the pelvis. The term deformity is used to describe any variation in this natural shape. One form of spinal deformity, scoliosis, involves a lateral, or side-to-side, curvature of the spine. The vertebrae rotate along with the spine as a consequence of a scoliotic curve. Depending on the severity of the curve, a scoliotic spine may create asymmetries in the shoulders, thoracic spine, and pelvis, leading to an imbalance of the trunk and significant disfigurement.

Spinal Tumors Tumors or cancers of the spine and spinal cord are relatively rare. Three types of tumors affect the spine and spinal cord: primary benign tumors, primary malignant tumors, and metastatic tumors. The term primary is used to designate a tumor originating from actual spine cells. Secondary spinal tumors, or cancers, which are more commonly called metastases, spread from other organs in the body.

Trauma/Fracture Trauma to the spine refers to injury that has occurred to bony elements, soft tissues, and/or neurological structures. Stability to the spinal column can be compromised when bony elements are injured or there is disruption to soft tissues such as ligaments. Instability causes the back to become unable to successfully carry normal loads, which can lead to permanent deformity, severe pain, and, in some cases, catastrophic neurological injuries. Most often the instability comes from a fracture in one of the bony parts of the vertebra. Osteoporosis, a condition characterized by loss of bone mass and structural deterioration of bone tissue, can lead to bone fragility and an increased susceptibility to fracture.

Stenosis A condition caused by a gradual narrowing of the spinal canal, stenosis results from degeneration of both the facet joints and the intervertebral discs. Bone spurs, called osteophytes, which develop because of the excessive load on the intervertebral disc, grow into the spinal canal. The facet joints also enlarge as they become arthritic, which contributes to a decrease in the space available for the nerve roots.

Table of Contents

The charts below set forth net sales of our Spinal products as a percentage of our total net sales for each of the last three fiscal years:

Our Spinal products, include thoracolumbar, cervical and interbody devices that are employed utilizing the most modern surgical techniques, including the latest Minimal Access Spinal Technologies (MAST) along with bone growth substitutes, and devices for vertebral compression fractures and spinal stenosis.

**Spinal Instrumentation.** Each year approximately 25 million Americans experience back pain that is severe enough to visit a healthcare professional. Of the approximately 25 million Americans, 13 million endure a significant impairment of activity. We are committed to providing spinal surgeons with the most advanced options for treating low back pain and other spinal conditions.

Today we offer one of the industry’s broadest lines of devices, including a wide range of sophisticated internal spinal stabilization devices, instruments, and biomaterials used in the treatment of spinal conditions. Spinal fusions, which are currently one of the most common types of spine surgery, join two or more vertebrae to eliminate pain caused by movement of the unstable vertebrae. Our Spinal products are used in spinal fusion of both the thoracolumbar region,
referring to the mid to lower vertebrae, as well as of the cervical region, or upper spine and neck vertebrae. Products used to treat spinal conditions include rods, pedicle screws, hooks, plates, and interbody devices, such as cages, as well as biologic products, which include bone growth substitutes, dowels and wedges.

In October 2007, we launched the CD HORIZON LEGACY Anterior Spinal System. The newest member of the CD HORIZON family offers an anterior (frontal) fixation solution for complex spinal surgery. The fixation system is designed to assist with stability of the thoracic and lumbar spine when performing modern spinal fusion surgery and may also help patients suffering from degenerative disc disease, trauma, tumors, severe curvatures and other degenerative diseases of the spine. The system features titanium construction, low profile screw design, top loading, top tightening screws, and color coding to make the procedure easier.

**Dynamic Stabilization.** In July 2007, we launched the PRESTIGE Cervical Disc, the first artificial disc commercially available in the U.S. for use in the neck. The PRESTIGE Cervical Disc gives some patients who are suffering from degenerative disc disease that can cause intolerable neck and/or arm pain the potential for motion at the treated level of the spine as well as another option for pain relief and restored function. With its patented ball-and-trough design, the PRESTIGE Cervical Disc is designed to maintain motion and flexibility while replacing a diseased disc that is removed during surgery. In July 2007, the Company also announced that the BRYAN Cervical Disc received a recommendation for approval from the U.S. FDA’s Orthopedic and Rehabilitation Devices advisory panel. The BRYAN Cervical Disc, composed of a polyurethane nucleus surrounded by titanium endplates, is designed to replicate normal, physiologic motion of the cervical spine.

In addition to the PRESTIGE and BRYAN Cervical Discs we have two additional disc replacement programs currently under investigation in the U.S.: the MAVERICK Artificial Disc for the lumbar spine; and the PRESTIGE LP, our next generation lower profile cervical disc, made of unique ceramic titanium composite.

**Minimal Access Spinal Technologies.** We have developed a series of MAST that facilitate safe, reproducible access to the spine with minimal disruption of vital muscles and complementary structures. These techniques involve the use of advanced navigation and instrumentation to allow surgeons to operate with smaller incisions and less tissue damage than traditional surgeries, thus reducing pain and blood loss and improving recovery periods.

Our expanding portfolio of minimally invasive spinal technologies includes the CD HORIZON SEXTANT II System, a next-generation METRx System, to treat herniated discs and allow minimally invasive access for fusion and the MAST QUADRANT Retractor System a retractor that allows access to complex degenerative pathology.

**Biologics.** Our INFUSE Bone Graft, used in spinal fusion, contains a recombinant human bone morphogenetic protein, or rhBMP-2, that induces the body to grow its own bone, eliminating the need for a painful second surgery to harvest bone from elsewhere in the body. In Europe, INFUSE Bone Graft is marketed as InductOs Bone Graft for spinal fusion. We also offer INFUSE Bone Graft for the treatment of certain types of acute, open fractures of the tibial shaft, a long bone in the lower leg, as well as certain oral maxillofacial indications.
In September 2006, we co-launched the MASTERGRAFT MATRIX and MASTERGRAFT PUTTY synthetic bone graft products, which were developed to provide surgeons with a comprehensive solution. Embedded with MASTERGRAFT GRANULES, both grafts are osteoconductive, malleable, and designed to fill gaps in the skeletal system. These new grafts give surgeons more handling options, while providing an osteoconductive implant that localizes biologic components. These grafts are designed to aid cellular proliferation and osteointegration during the bone healing process. MASTERGRAFT MATRIX is a compressive-resistant collagen scaffold block that is designed to facilitate uninterrupted bone growth. MASTERGRAFT PUTTY is a malleable collagen scaffold that may be used with bone marrow aspirate or sterile water. When the hydrated graft is combined with local bone, it may provide more suitable handling characteristics for the surgical procedure. In May 2007, we announced the immediate, nationwide availability of PROGENIX DBM, a bone graft substitute and bone void filler used in voids or gaps of the pelvis, ilium, and extremities.

Late in April 2007, we began to market INFUSE Bone Graft for certain oral maxillofacial and dental regenerative bone grafting procedures. It is estimated that more than 350,000 bone grafting procedures of this type are performed in the U.S. each year. Medtronic has also submitted a pre-market approval (PMA) with the FDA for a posterolateral spinal indication for INFUSE Bone Graft.

**Kyphon.** During the third quarter of fiscal year 2008, we consummated the acquisition of Kyphon Inc. (Kyphon), a public company, and it became our wholly owned subsidiary. Kyphon develops and markets medical devices designed to restore and preserve spinal function using minimally invasive technology. Kyphon's primary products are used in balloon kyphoplasty for the treatment of spinal compression fractures caused by osteoporosis, trauma or cancer, and in the interspinous process decompression (IPD) procedure for treating the symptoms of lumbar spinal stenosis (LSS). In the U.S., Kyphon's X-STOP IPD Device provides us with the first FDA-approved minimally invasive device for the treatment of mild to moderate LSS patients. In Europe, both the X-STOP and the next generation Aperius PercLID device are available for the treatment of LSS.

It is expected that the acquisition of Kyphon will add to the growth of our existing Spinal business by extending its product offerings into some of the fastest growing product segments of the spine market, enabling us to provide physicians with a broader range of therapies for use at all stages of the care continuum.

**Customers and Competitors**

The primary medical specialists who use our Spinal products are spinal surgeons, orthopedic surgeons, neurosurgeons, and interventional radiologists. Our competitors in the Spinal business include Zimmer, Inc., Johnson & Johnson, Stryker Corporation, Synthes-Stratec, Inc., and over 200 small physician owned companies.

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**Table of Contents**

CardioVascular

Our CardioVascular business offers a full line of minimally invasive products and therapies to treat coronary artery disease, abdominal and thoracic aortic aneurysms, peripheral vascular disease, and heart valve disorders.
Conditions Treated

Our CardioVascular business offers minimally invasive products for the treatment of the following conditions.

- **Coronary artery disease**: deposits of cholesterol and other fatty materials (plaque) on the walls of the heart's arteries, causing narrowing or blockage of the vessel and reducing the blood supply to the heart. Blockage in a coronary artery can prevent the heart from receiving sufficient oxygen, which can impair heart function, potentially resulting in a heart attack.

- **Peripheral vascular disease**: narrowing or blockage of arteries outside the heart, impeding blood supply to the brain, legs, and other vital organs.

- **Abdominal and Thoracic aortic aneurysm (AAA/TAA)**: an aneurysm is a dangerous bulge or weakening of the body's main artery that can rupture with fatal consequences if left untreated.

- **Heart valve disorders**: diseased or damaged heart valves can restrict blood flow or leak, which limits the heart's ability to pump blood, causing the heart to work harder to meet the needs of the circulatory system.

The charts below set forth net sales of our CardioVascular business as a percentage of our total net sales for each of the last three fiscal years:

Our CardioVascular products include coronary and peripheral stents and related delivery systems, endovascular stent graft systems, distal embolic protection systems, perfusion systems which oxygenate and circulate a patient's blood during arrested heart revascularization surgery, positioning and stabilization systems for beating heart revascularization surgery, products for the repair and replacement of heart valves, surgical ablation products, and a broad line of balloon angioplasty catheters, guide catheters, guidewires, diagnostic catheters and accessories.

Coronary and Peripheral Stents. If a blockage in a coronary artery prevents the heart from receiving sufficient oxygen, the heart cannot function properly and a heart attack may result. Coronary artery disease is commonly treated with balloon angioplasty, a procedure in which a special balloon is threaded through the coronary artery system to the site of the arterial blockage, where it is inflated, pressing the obstructive plaque against the wall of the vessel to improve blood flow.

Following balloon angioplasty, physicians often place coronary stents at the blockage site to prop open diseased arteries to maintain blood flow to the heart. Stents are cylindrical, wire-mesh devices small enough to insert into coronary arteries. Our leading Driver bare metal stent system is composed of an advanced cobalt-based alloy, which surpasses the limitations of stainless steel by creating very strong, ultra-thin struts that offer excellent flexibility and vessel support. The Driver stent is available in all major markets worldwide. The Micro-Driver coronary stent system, approved in the U.S. and Japan in 2006, is now also available in all major markets. The Micro-Driver is a bare metal stent system designed specifically to
perform in small vessels and tortuous anatomies. This cobalt-alloy stent is the first bare metal stent for small vessels with an indication for new or untreated vessels (a de novo indication), addressing an important need in the treatment of coronary artery disease.

**Drug-Eluting Stents.** Drug-eluting stents (DES) are designed to inhibit the re-narrowing or re-clogging of arteries, known as restenosis, that can occur after percutaneous coronary intervention (PCI). Our Endeavor DES (Endeavor) drug-eluting coronary stent combines an innovative delivery system leveraging our discrete technology, our advanced Driver cobalt alloy stent, Zotarolimus (a sirolimus analogue), and a biomimetic polymer coating that controls the release of the drug into the vessel wall. In May 2002, we entered into a ten-year agreement with Abbott Laboratories (Abbott) granting us co-exclusive use of Abbott’s proprietary immunosuppressant drug Zotarolimus, as well as the phosphorylcholine coating Abbott has licensed from Biocompatibles International PLC for use in conjunction with Zotarolimus. Clinical and preclinical studies have shown that this proprietary biocompatible polymer, which mimics the outer membrane of a red blood cell, is safe and thrombo-resistant.

Worldwide, Medtronic has approximately 16,000 Endeavor patients enrolled in its multiple clinical trials, and the growing volume of positive data and number of patients with long-term follow-up continues to reinforce the stent’s favorable safety and efficacy profile. Ultimately, the ENDEAVOR clinical program will enroll more than 22,500 patients followed to five years; approximately 16,630 of these patients will receive an Endeavor stent.

Our Endeavor program achieved a number of significant regulatory and clinical milestones during fiscal year 2008. In July 2007 we announced that the ENDEAVOR IV clinical trial had met its primary, non-inferiority endpoint of Target Vessel Failure at nine months compared to the TAXUS Paclitaxel-Eluting Coronary Stent System from Boston Scientific Corporation. These results were included in the Endeavor Pre-Market Approval application for FDA approval.

In October 2007 we announced the CE Mark approval and the international launch of Endeavor Resolute DES (Endeavor Resolute). Endeavor Resolute is a next-generation DES with Biolinx, a proprietary biocompatible polymer that is designed to address the special needs of patients who have complex medical conditions, and is engineered to match the duration of drug delivery with the longer healing duration often required by these patients. Since approval, Endeavor Resolute has been launched in more than 100 countries in Europe, Asia, the Middle East and Africa making Medtronic the first company to offer two internally developed DES options for the treatment of coronary artery disease.

In November 2007 we received CE Mark approval for the Sprinter Legend Semicompliant Rapid Exchange Balloon Dilatation Catheter for use in coronary angioplasty procedures. The Sprinter Legend provides the latest innovations in balloon technology, including the unique 1.25 mm Zerofold balloon, and is designed to address the most technically difficult lesions in coronary angioplasty procedures.

On February 1, 2008 we announced FDA approval and the initiation of the U.S. launch of the Endeavor. Based on the most comprehensive body of scientific evidence submitted to the FDA for a DES, the approval gives U.S. cardiologists access to a new medical device for safely and effectively treating patients with narrowed coronary arteries. Endeavor is the first new DES approved by the FDA since 2004. As a condition of FDA approval, we agreed to continue our extensive post-market clinical program, and we will now add sites in the U.S. to ensure that at least 5,000 patients are followed to a minimum of five years. With the U.S. launch, Endeavor is now available in all major global markets except for Japan.

Also in February 2008, we announced the first human use of our investigational bifurcation stent. The new stent employs an innovative Y-shaped design to match the anatomy of lesions that form at the junctions of coronary arteries. The implant marked the first patient enrollment in the BRANCH study, a trial designed to assess the safety and deliverability of the Medtronic bifurcation stent, which differs from other approaches by providing scaffolding to both branches of the bifurcation simultaneously without overlapping stents. The prospective, single-arm trial will
enroll up to 60 patients at five sites in Australia and New Zealand. Of the approximately two million percutaneous coronary interventions performed each year worldwide, an estimated 450,000 involve patients with bifurcation lesions, which are consistently recognized as one of the most difficult lesion types to treat and are associated with higher adverse event rates.

In March 2008 at the American College of Cardiology annual meeting, we presented a pooled analysis of safety data from the ENDEAVOR clinical program that affirmed the superior long-term safety of the Endeavor drug-eluting coronary stent compared to the Driver bare metal stent. The analysis illustrated that Endeavor, when compared to Driver, was associated with low rates of all evaluated safety metrics.

**Endovascular Stent Grafts.** Our CardioVascular product line also includes a range of endovascular stent grafts including the market-leading AneuRx and Talent Stent Grafts for minimally invasive AAA repair and the Talent Thoracic and Valiant Thoracic Stent Grafts for TAA repair. Present in an estimated 1.2 million people and responsible for approximately 15,000 annual deaths in the U.S., an AAA is a dangerous bulge or weakening of the body’s main artery that can rupture with fatal consequences if left untreated. This is compared to over 60,000 people in the U.S. with a thoracic aortic aneurysm. Medtronic now has more than 10 years of clinical experience with its endograft implants, by far the most clinical experience in the endovascular industry. More than 130,000 patients have been treated worldwide with Medtronic stent grafts for AAA or TAA aneurysms.

**Abdominal Aortic Aneurysm (AAA) Repair**

Our AneuRx AAAdvantage Stent Graft System is available in the U.S. and the Talent Abdominal Stent Graft System is now approved worldwide with the exception of Japan. In March 2006, we announced FDA approval of our AneuRx AAAdvantage stent graft with the Xcelerant delivery system. Enhancements to the AAAdvantage Stent Graft System include contoured stents, broader proximal and distal sealing, and improved radiopaque markers. In January 2008, we announced the U.S. market launch of the AneuRx AAAdvantage Stent Graft on the Xcelerant Hydro Delivery System, which features a hydrophilic coating designed to aid navigation of the device through tight and tortuous arteries by reducing friction with the artery wall. In March 2008, we announced the European market launch of the Talent Abdominal Stent Graft on this same Xcelerant Hydro Delivery System. In addition, we anticipate continued sales growth outside the U.S. with future acceptance of our next generation Endurant AAA Stent Graft. We anticipate completion of our first-in-human trial and CE mark approval for the Endurant AAA Stent Graft in Western Europe in the second half of calendar year 2008. The Endurant AAA Stent Graft System’s precise deployment, flexibility, and low delivery profile are designed for patients with challenging aneurysm anatomies.

The Talent Abdominal Stent Graft with the CoilTrac Delivery System PMA was approved by the FDA in April 2008 and the U.S. launch occurred in June 2008. The Talent Abdominal Stent Graft System is specifically indicated for endovascular repair (EVAR) of abdominal aortic and aorto-iliac aneurysms. It expands the indication for EVAR with a proximal aortic neck length requirement of 10 mm or greater and a proximal aortic neck angulation of 60 degrees or less. The stent graft is available in diameters of up to 36 mm, as well as flared and tapered iliac limbs of 8 mm to 24 mm. This indication enables physicians to treat a broader range of patients than with other abdominal stent grafts.
systems available in the U.S. The U.S. PMA clinical data is consistent with Talent Abdominal's international experience, where it is a leading stent graft with more than 45,000 implants to date.

**Thoracic Aortic Aneurysm (TAA) Repair**

In July 2005, we announced the international commercial release of the Valiant Thoracic Stent Graft with the Xcelerant Delivery System, a next-generation stent graft. The Xcelerant Delivery System is designed to provide physicians with a smooth, controlled and more trackable delivery platform.

The Talent Thoracic Stent Graft with the CoilTrac Delivery System PMA was filed with the FDA in July 2007 and we received FDA approval of our Talent Thoracic device in June 2008. We anticipate the launch of the Talent Thoracic Stent Graft in the second half of calendar year 2008. The Talent Thoracic Stent Graft System may expand the indication for thoracic stent grafting by as much as 25% due to the introduction of smaller and larger diameter stent grafts. The Talent Thoracic Stent Graft System is available in Europe and the rest of the world, excluding Japan.

**Table of Contents**

In addition, we anticipate launching the next generation Valiant Thoracic Stent Graft System with Xcelerant Hydro Delivery System and incorporated tip capture in Europe at the end of calendar year 2008. This delivery system combines the reduced friction of the hydrophilic coating with a tip capture mechanism designed for precise and controlled deployment of the stent graft.

**Coronary Artery Bypass Surgery.** When physicians determine that they cannot effectively treat a blockage in a coronary artery using balloon angioplasty or a stent, they typically turn to cardiac surgery to address the problem. The most common surgical procedure used to treat blockage in a coronary artery is a Coronary Artery Bypass Graft (CABG). In a CABG procedure, surgeons re-route the blood flow around the blockage by attaching a graft, usually from an artery or vein from another part of the patient's body, as an alternative pathway to the heart. There are two primary techniques, arrested heart surgery and beating heart surgery.

**Arrested Heart Surgery.** In a conventional coronary artery bypass procedure (as well as heart valve surgery), the patient's heart is temporarily stopped, or arrested. The patient is placed on a circulatory support system that temporarily replaces the patient's heart and lungs and provides blood flow to the body. We offer a complete line of blood-handling products that form this circulatory support system and maintain and monitor blood circulation and coagulation status, oxygen supply, and body temperature during arrested heart surgery.

**Beating Heart Surgery.** As an alternative to conventional arrested heart bypass surgery, physicians are performing coronary artery bypass surgery on the beating heart to avoid the complexity and potential risks of arresting the heart. To assist physicians performing beating heart surgery, we offer positioning and stabilization technologies. These technologies include our Starfish 2 and Urchin heart positioners, which use suction technology to gently lift and position the beating heart to expose arteries on any of its surfaces. These heart positioners are designed to work in concert with our Octopus tissue stabilizer, which holds a small area of the cardiac surface tissue nearly stationary while the surgeon is suturing the bypass grafts to the arteries. In June 2006, we introduced the Octopus Evolution tissue stabilizer, the latest in a 10-year series of innovative cardiac surgery instruments. It is currently estimated that
beating heart surgeries make up approximately 20 percent of the estimated 270,000 coronary artery bypass surgeries that are performed in the U.S. each year.

**Surgical Ablation.** Our Cardioblate surgical ablation systems (CSAS), which includes the Cardioblate LP Surgical Ablation System and Cardioblate Navigator Tissue Dissector, allow cardiac surgeons to create ablation lines during cardiac surgery. In November 2006, we announced FDA approval to initiate the Feasibility of the Lone Atrial Fibrillation Clinical Trial, (FACT), to evaluate the use of the CSAS thorascopically in paroxysmal AF patients. In March 2007, we announced initiation of the Concomitant Utilization of RadioFrequency Energy for Atrial Fibrillation (CURE-AF) study, a U.S. pivotal trial to evaluate the CSAS to treat permanent AF. The purpose of CURE-AF is to evaluate the safety and effectiveness of our CSAS at reestablishing the normal heart rhythm in patients with permanent AF requiring concomitant open heart surgery utilizing the modified Cox Maze III procedure. This prospective, non-randomized, clinical trial will enroll 75 patients at 10 U.S. medical centers. The primary endpoints of the trial are to evaluate the freedom from permanent AF in patients off antiarrhythmic drugs at six months and the composite major adverse event rate at one month. The results of the trial will be submitted to the FDA to support an indication for the Medtronic CSAS in the treatment of permanent AF in patients requiring concomitant open heart surgery.

**Heart Valves.** We offer a complete line of surgical valve replacement and repair products for damaged or diseased heart valves. Our replacement products include both tissue and mechanical valves. The valve market continues to shift from mechanical to tissue valves, which is beneficial to us due to our broad selection of tissue valve products. Our Mosaic bioprosthetic heart valve is a reduced-profile valve engineered from porcine tissue incorporating a proven flexible stent. The low profile and flexibility of the stent offer benefits to the surgeon when implanting the valve. Other tissue product offerings include the Freestyle stentless and Hancock II stented valves. Our mechanical heart valve offerings include the Medtronic Hall, the ADVANTAGE and the ADVANTAGE Supra bileaflet valves. Currently, the standard ADVANTAGE aortic bileaflet valve is under evaluation by the FDA in the U.S. Our valve repair products include the Duran Flexible and CG Future Band and CG Composite Annuloplasty.

Table of Contents

Systems. In January 2008 we announced the formation of an exclusive global licensing agreement with Arbor Surgical Technologies, Inc. under which Medtronic will manufacture, market and distribute Arbor’s bovine pericardial tissue heart valve technologies. In addition, we acquired a minority interest in Arbor. The technology will complement our Structural Heart Disease therapy objectives, which are focused on developing effective options for valve disease, septal defects and atrial fibrillation.

In October 2006, Medtronic’s Melody Transcatheter Pulmonary Valve and Ensemble Transcatheter Delivery System received European CE Mark making it the first transcatheter valve in the world to receive such an approval. The system is the first of its kind to treat patients with congenital structural heart disease requiring pulmonary heart valve replacement. According to the American Heart Association, congenital heart defects are the No. 1 birth defect worldwide. In the U.S. alone, more than 25,000 babies are born each year with a congenital heart defect. Approximately 22 percent of these babies have defects disrupting the blood flow from the right ventricle to the pulmonary artery. A feasibility study to evaluate the use of the Medtronic Melody Transcatheter Pulmonary Valve and Ensemble Transcatheter Delivery System in the U.S. was initiated in February 2007, and enrollment was completed in
September 2007.

Transcatheter valve technology represents a less invasive means to treat heart valve disease and is designed to allow physicians to deliver replacement valves via a catheter through the body’s cardiovascular system, thus eliminating the need to open the chest. Traditionally, open heart surgery has been required to correct the problem and it is not unusual for a patient to undergo multiple, open-heart surgeries during their lifetime. The Melody Valve and Ensemble System provide a non-surgical means to restore effective pulmonary valve function and prolong the functional life of prosthetic conduits, thereby reducing the number of open heart surgeries for these patients throughout their lifetime.

**Customers and Competitors**

The primary medical specialists who use our catheter-based products for treating coronary artery disease are interventional cardiologists, while products treating peripheral vascular disease and aortic aneurysms may be used by interventional radiologists, vascular surgeons, cardiac surgeons and interventional cardiologists. Our primary competitors in the coronary and peripheral vascular business are Boston Scientific Corporation, Johnson & Johnson, and Abbott Laboratories, Inc. Our primary competitors in the endovascular business are Cook, Inc. and W. L. Gore & Associates, Inc. The principal medical specialists who use our cardiac surgery products are cardiac surgeons. Our primary competitors in the structural heart disease business are Edwards LifeSciences Corporation, Boston Scientific Corporation, Johnson & Johnson, St. Jude Medical, Inc., Terumo Medical Corporation, and Sorin S.p.A.

**Neuromodulation**

Our Neuromodulation business develops, manufactures, and markets devices for the treatment of neurological, urological, and gastroenterological disorders. We are the pioneer in the field of restorative neuroscience, using site-specific neurostimulation and targeted drug delivery to modulate and restore nervous system function. Through collaborative efforts with our customers we have developed a unique portfolio of therapeutic technologies for the treatment of debilitating chronic diseases that represent large, unmet medical needs.

**Conditions Treated**

Our Neuromodulation business offers products for the treatment or diagnosis of the conditions described below.

- **Pain Management** including neurostimulation and implantable drug delivery systems for chronic pain.
- **Movement Disorders** including deep brain stimulation for Parkinson’s disease, essential tremor, dystonia, and intrathecal baclofen (ITB) therapy for spasticity.
- **Urological and gastroenterological disorders** including neurostimulation for overactive bladder and urinary incontinence, radio frequency ablation for benign prostatic hyperplasia (BPH or enlarged prostate), neurostimulation for gastroparesis, and a pH monitoring system used to diagnose gastroesophageal reflux disease (GERD).

**Table of Contents**

- [Pain Management](#)
- [Movement Disorders](#)
- [Urological and gastroenterological disorders](#)
- [Conditions Treated](#)
- [Neuromodulation](#)
The charts below set forth net sales of our Neuromodulation products as a percentage of our total net sales for each of the last three fiscal years:

Neuromodulation products consist of therapeutic and diagnostic devices, including implantable spinal cord stimulation systems and implantable drug delivery devices, used to treat intractable chronic pain; deep brain stimulation systems and implantable drug administration devices to treat movement disorders like Parkinson’s disease and implantable intrathecal drug delivery for intractable spasticity; and sacral nerve stimulation systems to treat overactive bladder and urinary incontinence. Our product portfolio also includes products for the treatment of BPH, or enlarged prostate and gastroparesis and a pH monitoring system for diagnosing GERD. Many of these are large, underpenetrated markets. Chronic pain affects an estimated 75 million people in the U.S. alone. Overactive bladder affects 33 million people in the U.S. alone.

**Pain Management  Implantable Neurostimulation Systems.** We offer the largest portfolio of neurostimulation systems, including rechargeable and non-rechargeable devices, along with the largest selection of leads. In February 2008, we announced the worldwide launch of RestoreULTRA neurostimulation systems for the treatment of chronic pain. This rechargeable neurostimulator, the most advanced device in our market-leading family of RESTORE devices, is the smallest and thinnest 16-electrode rechargeable neurostimulator available. Furthermore, for the first time with any neurostimulator, the patient programmer includes an innovative new feature called TARGETmyStim. This feature allows patients to make appropriate and immediate adjustments in their stimulation in order to best address normal fluctuations in pain, including changing pain patterns. By using the remote control programmer, patients can fine-tune their stimulation to specific sites up and down the spinal cord and increase/decrease the intensity of the electrical impulses. These adjustments allow the patient to customize their pain therapy in a way that was previously only possible with a physician programmer during an office visit. The RestoreULTRA neurostimulator allows patients who use medium stimulation settings to go at least two weeks before needing to recharge.

Our portfolio of neurostimulators also includes RestoreADVANCED (rechargeable) and PrimeADVANCED (non-rechargeable) neurostimulation systems. All of the neurostimulation systems are implanted under the skin and have up to two leads with eight electrodes each that deliver electrical pulses to the spinal cord. Based on individual patient need, the positioning of the electrodes can be customized to deliver stimulation directly to the target area on the spinal cord, and in doing so, block pain signals from reaching the brain.

In June 2007, we launched worldwide, the Specify 5-6-5 surgical lead for neurostimulation therapy, designed to improve its effect on low back pain. The Specify 5-6-5 surgical lead features 16 electrodes arrayed in three columns on a durable, flexible, curved paddle that conforms to the anatomy of the epidural space. The electrodes are arranged in a diamond pattern that is intended to maximize therapeutic effectiveness while minimizing energy consumption. Each electrode can be activated and programmed independently, which enables customization and adjustment of neurostimulation therapy based on individual patient needs. This lead is the first of its class to use a tripolar design.
A continuing major initiative in fiscal year 2008 was the establishment of higher levels of evidence for our therapies' efficacy and cost-effectiveness. In September 2007, the international medical journal *PAIN* published results from a study known as PROCESS showing that Medtronic neurostimulation therapy plus conventional medical management provided patients with significantly greater pain relief, quality of life, functional capacity and treatment satisfaction than conventional medical management alone after six months. Forty-eight percent of the patients assigned to receive neurostimulation plus conventional treatments experienced a 50 percent or greater improvement in leg pain compared to 9 percent of patients assigned to receive only conventional treatments (p<0.001). PROCESS is the largest multi-center randomized controlled trial of neurostimulation therapy ever conducted. The study design randomly assigned 100 patients from 12 academic medical centers in Australia, Belgium, Canada, Israel, Italy, Spain, Switzerland, and the United Kingdom to receive conventional medical management or Medtronic neurostimulation therapy for a period of six months and includes long-term follow-up to 24 months.

**Pain Management  Implantable Drug Delivery Systems.** Our portfolio of intrathecal drug delivery systems consist of the only programmable, implantable drug pump and catheter that deliver small quantities of drug directly into the intrathecal space in the spine. These devices are used to treat chronic, intractable pain.

**Movement Disorders  Deep Brain Stimulation (DBS).** For patients suffering from movement disorders like Parkinson’s disease, essential tremor, or dystonia, our line of Activa DBS Therapy systems offer a solution. DBS therapy uses an implantable medical device akin to a cardiac pacemaker to deliver carefully controlled electrical pulses to precisely targeted areas of the brain involved in motor control. Continuous stimulation of these areas blocks the signals that cause the disabling motor symptoms of the disease.

The establishment of higher levels of evidence for our DBS therapies’ efficacy and cost-effectiveness is a major step in their continued adoption. In August 2006, the *New England Journal of Medicine* published results from a major randomized controlled multi-center study showing that Activa DBS Therapy combined with medication is significantly more effective than medication alone in treating motor symptoms of advanced Parkinson’s disease. Conducted at 10 academic medical centers in Germany and Austria, the study included 156 patients with severe motor symptoms of Parkinson’s disease. Compared to medication alone, DBS of the subthalamic nucleus, a brain structure involved in regulating movement, caused significantly greater improvements in motor function after six months of treatment. On average, patients who received DBS plus medication showed a 41 percent improvement in motor function. In November 2006, research published in the *New England Journal of Medicine* showed DBS can provide significant and sustainable benefits to people with disabling forms of dystonia, a neurological movement disorder that forces parts of the body into abnormal, sometimes painful, movements or postures. Three months after randomization, patients in the neurostimulation group experienced a 39 percent improvement in the movement score of the Burke-Fahn-Marsden Dystonia Rating Scale, compared to a 5 percent improvement in the control group. Similarly, neurostimulation patients recorded a 38 percent reduction in disability scores, compared to an 8 percent reduction in the control group.

During fiscal year 2008, we also continued to make progress in clinical trials designed to explore new applications of our deep brain stimulation technologies in the treatment of other neurological disorders that affect hundreds of thousands of patients. In the first quarter of fiscal year 2008, we completed the implants for the SANTE pivotal trial, a study of our deep brain stimulation therapy for the treatment of medically refractory epilepsy, a form of the neurological condition that does not respond to antiepileptic drugs. Epilepsy is a condition that affects more than three million Americans of all ages; about one-third of these people do not respond to current treatment options and continue to experience seizures. The data on the SANTE trial will be available in calendar year 2008.

Additionally, we continue to explore innovative new ways to use DBS therapy for severe and intractable psychiatric disorders such as obsessive-compulsive disorder (OCD) and treatment-resistant depression. As previously announced, we are pursuing a Humanitarian Device Exemption (HDE) for OCD and intend to pursue additional clinical evaluation of the Company’s DBS therapy in the treatment of severe and treatment-resistant depression, a disabling form of the psychiatric disorder affecting millions of people worldwide.
**Table of Contents**

**Movement Disorders  Implantable Drug Delivery Systems.**  Our portfolio of intrathecal drug delivery systems consists of the only programmable, implantable drug pump and catheter that deliver small quantities of drug directly into the intrathecal space in the spine. In addition to use in the treatment of intractable pain, these devices are used for the management of severe spasticity of cerebral or spinal origin.

Medtronic ITB (Intrathecal Baclofen) Therapy is indicated for the management of severe spasticity of cerebral and spinal origin, including stroke, cerebral palsy, brain injury, spinal cord injury, and multiple sclerosis. It uses our SynchroMed II Implantable Infusion System, which consists of a programmable drug pump connected to a thin tube, or catheter, to deliver precise amounts of a muscle relaxant manufactured by Novartis Corporation under the trade name Lioresal® Intrathecal (baclofen injection) directly to the intrathecal space—the fluid-filled area surrounding the spinal cord, the drug’s site of action. By targeting the spinal cord, ITB Therapy reduces spasticity with smaller amounts of medication than would be required orally. Intrathecal infusion, which bypasses the body’s blood-brain barrier, also minimizes systemic side-effects. By reducing spasticity, ITB Therapy may also improve function, quality of life, and ease of care. To date, the ITB therapy is relatively under penetrated.

In late April 2007, we announced a new study published in an issue of the Journal of Child Neurology indicating that Medtronic ITB therapy for spasticity in children with cerebral palsy improves their quality of life and is cost-effective compared to other established cost-effective treatments. The findings of this Medtronic-sponsored study were aimed to increase access to the treatment.

**Urology and Gastroenterology Devices.**  Our therapeutic and diagnostic products for urology and gastroenterology include the InterStim Therapy for the treatment of overactive bladder and urinary incontinence; Prostiva RF Therapy, which uses low-level radio frequency energy to treat BPH, or enlarged prostate; Enterra Therapy for the treatment of gastroparesis; and the Bravo pH Monitoring System for the evaluation of GERD.

In November 2007, we announced the initiation of the InSite Trial, a post-market study of InterStim Therapy. This study aims to enroll more than 450 patients; those who qualify will be randomized to receive either InterStim Therapy or standard medical treatment, including oral medications as determined by their physician. Patients implanted with InterStim Therapy will be followed out to five years. The results of this trial are expected to provide further clinical evidence of InterStim Therapy’s efficacy in treating patients suffering from overactive bladder versus standard medical therapy.

**Customers and Competitors**

The primary medical specialists who use our Pain Management and Movement Disorders products are neurosurgeons, neurologists, pain management specialists, physiatrists, and orthopedic spine surgeons. The primary medical specialists who use our urology and gastroenterology products are urologists, urogynecologists, and gastroenterologists. Our primary competitors for pain management and movement disorders are Boston Scientific Corporation and St. Jude Medical, Inc. Our primary competitors for urology and gastroenterology products are Boston Scientific Corporation, Urologix, Inc., and American Medical Systems, Inc.
Diabetes

Our Diabetes business develops advanced diabetes management solutions. We are the world leader in integrated diabetes management systems, insulin pump therapy, continuous glucose monitoring systems and therapy management software, and are committed to providing improved tools and technologies to help people with diabetes live longer, healthier lives.

Conditions Treated

Our Diabetes business offers solutions for the treatment of diabetes—the inability to control glucose (blood sugar) levels resulting from the body’s failure to produce or properly use insulin.

Table of Contents

The charts below set forth net sales of our Diabetes business as a percentage of our total net sales for each of the last three fiscal years:

Our Diabetes products help patients maintain near-normal glucose control. Diabetes afflicts roughly 250 million people worldwide, and almost 21 million people in the U.S. Currently, our products serve the insulin-dependent population, approximately five million people in the U.S. The key to managing diabetes is to maintain tight control of glucose levels. If not well-managed, diabetes can lead to blindness, kidney failure, amputation, impotence and heart failure. More than $174 billion is spent annually on diabetes and its complications, including $116 billion in direct medical costs.

Integrated Diabetes Management Systems. The MiniMed Paradigm REAL-Time System is the first and only integrated insulin pump and continuous glucose monitoring system. The MiniMed Paradigm REAL-Time System is made up of two components, a REAL-Time Continuous Glucose Monitor (CGM), and a MiniMed Paradigm insulin pump. The system receives glucose readings every five minutes from a glucose sensor worn on the body. This REAL-Time glucose information is displayed on the insulin pump, allowing patients to take immediate action to improve their glucose control after taking a confirmatory fingerstick. The REAL-Time System is indicated for any patient seven years of age or older.

Integrating an insulin pump with REAL-Time CGM is a major step toward the development of a closed-loop insulin delivery system that may one day mimic some functions of the human pancreas. Medtronic is testing future systems that would employ advanced scientific algorithms to proactively recommend insulin dosages to patients. Through this process, Medtronic anticipates developing an external, closed-loop system designed to simplify and improve patient diabetes management.

External Insulin Pumps. Our insulin pumps are primarily used by patients with type 1 diabetes, which occurs when the pancreas stops producing insulin. In order to survive, people with type 1 diabetes must administer insulin using injections or an insulin pump. Our therapies are also helpful in managing insulin-dependent type 2 diabetes, which results from the body’s inability to produce enough insulin or properly use the insulin.
Our MiniMed Paradigm insulin pump is currently the leading choice in insulin pump therapy. Worn like a pager, the Paradigm insulin pump calculates complex diabetes math and recommends precise insulin dosages to patients helping manage their disease without daily insulin injections. Because MiniMed Paradigm insulin pump therapy delivers precise micro-doses of insulin to the body, it helps diabetes patients keep their glucose levels within a near-normal range, offering both short- and long-term health benefits. The MiniMed Paradigm REAL-Time System is indicated for all patients requiring insulin.

**Continuous Glucose Monitors.** Our Guardian REAL-Time System is intended to help protect diabetes patients from high and low glucose levels, and to maintain tighter glucose control. Unique features include predictive and rate-of-change alarms as well as expanded trend graphs. In addition to standard high and low glucose alerts, new early warning alerts warn patients before their glucose reaches preset thresholds. The system also includes the MiniLink REAL-Time Transmitter, a rechargeable, waterproof transmitter approximately one-third the size of previous transmitters.

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**Table of Contents**

**CareLink Therapy Management Software.** Medtronic offers therapy management software solutions to help patients and their healthcare providers optimize their diabetes control and quality of life. These Web-based platforms consist of CareLink Personal software for patients and CareLink Pro software for healthcare providers. It allows patients to quickly and easily upload data from their diabetes management devices to a secure online database. And because the platform is totally integrated, healthcare providers can quickly and easily download patient data remotely in advance of the office visit. Both the patient and healthcare provider can save time to focus on optimizing therapy.

**Strategic Partnerships**

In August 2007, we announced an exclusive U.S. agreement with LifeScan, Inc., a Johnson & Johnson company, to distribute and co-market new blood glucose meters developed by LifeScan for Medtronic patients. Concurrently, we announced an alliance with a division of Bayer HealthCare LLC, a member of the Bayer Group, to distribute and co-market a new blood glucose meter for Medtronic patients outside the U.S. beginning in Canada and Europe. These new meters will wirelessly transmit blood glucose test results directly to our MiniMed Paradigm insulin pumps and GuardianREAL-Time Systems. Wireless communications make data entry easier and more convenient for patients. As part of the agreement with LifeScan, we are working together to promote awareness of insulin pump therapy, the growth of the insulin pump market and proactive strategies for diabetes management.

**Clinical Trials**

In order to drive broad acceptance of sensor-augmented insulin pump therapy, we are conducting the Sensor Augmented Therapy for A1C Reduction (STAR) trials, which will evaluate sensor-augmented insulin pump therapy versus traditional insulin pumps and multiple daily injection therapy. The STAR trials are designed to drive therapy acceptance and improved reimbursement for insulin pump and continuous glucose monitoring therapy based on anticipated positive results.
In June 2007, preliminary results for STAR 1 were presented at the American Diabetes Association Scientific Sessions in Chicago, IL. The study did not meet its primary endpoint in A1C reduction; however, the results showed that usage compliance strongly correlated to benefit of therapy.

The STAR 3 trial is designed to compare the efficacy of the Paradigm REAL-Time System versus today’s standard of care, Multiple Daily Injections with frequent fingerstick testing. The trial was designed with input from the findings of STAR 1, and is currently targeting completion of patient enrollment in fiscal year 2009.

Customers and Competitors

The primary medical specialists who use our diabetes products are endocrinologists, diabetologists, and internists. Our most significant competitors for diabetes products are Abbott Laboratories, DexCom, Inc., Insulet Corporation, Johnson & Johnson, Roche Ltd. and Smiths Group PLC.

Surgical Technologies

Our Surgical Technologies business develops, manufactures, and markets products and therapies to treat diseases and conditions of the ear, nose and throat (ENT), and certain neurological disorders. In addition, the segment manufactures and markets image guided surgery systems that facilitate surgical planning during precision cranial, spinal, sinus and orthopedic surgeries. As a market leader in ENT and neurosurgery, we are changing the way ENT surgery is performed with innovative, minimally invasive products and techniques that benefit both patients and surgeons.

Conditions Treated

Our Surgical Technologies products are used in the treatment of the conditions described below.

- ENT diseases and disorders, such as chronic sinusitis, chronic otitis media, hearing loss, Ménière’s disease, thyroid diseases, and tumors of the head and neck.
- Neurological diseases and disorders, including both pediatric and normal pressure hydrocephalus, traumatic brain injury, and spinal conditions.

Table of Contents

A broad range of cranial, spinal, sinus, and orthopedic maladies through the use of computer-assisted navigation during surgery.

The charts below set forth net sales of our Surgical Technologies business as a percentage of our total net sales for each of the last three fiscal years:

Our primary Surgical Technologies products include powered tissue-removal systems, high-speed powered surgical drill systems to facilitate surgical access in the spine and cranium, fluid-control products including shunts for pediatric
and normal pressure hydrocephalus and systems for the treatment of traumatic brain injury, a full line of cranial fixation devices that include both titanium and resorbable plates and screws, nerve monitoring systems, image-guided surgery systems, and a Ménière’s disease therapy device.

**Chronic rhinosinusitis (sinus infections).** For the surgical treatment of chronic sinus infections, we offer powered and manual instruments with a variety of blade tips for removing diseased tissue and bone. Our bioresorbable nasal packing and dressings, such as MeroGel Dressing, aid in wound-healing and help reduce postoperative complications following these procedures. We also offer image-guided surgery systems to improve safety and efficacy when surgeons operate near critical structures such as the brain and eyes. The LandmarX Evolution Plus provides a robust, expandable system that may be used for virtually any ENT image guidance procedure. The LandmarX Element is a simple and convenient system ideal for functional endoscopic sinus surgery and novice image guided system users. In November 2007, we announced that results of a laboratory study published in the *American Journal of Rhinology* suggests that pressurized irrigation of the sinuses in conjunction with a specially designed irrigation solution under development by Medtronic may offer new options to reduce bacteria associated with chronic rhinosinusitis.

**Chronic otitis media (ear infections).** For the treatment of chronic otitis media, we provide a wide range of middle ear ventilation tubes to facilitate ventilation and prevent fluid accumulation. We also offer powered instruments and drills, such as the XPS 3000 Powered ENT System, to remove enlarged adenoid tissue, enable surgical access and remove diseased bone. Untreated chronic otitis media is the most common cause of hearing loss in children, which can impair learning and speech development. It can also spread to other areas of the head and neck and lead to serious complications.

**Hearing loss.** To correct conductive hearing loss, we offer various types of implantable middle ear prostheses that replace missing bone(s) in the ear necessary to conduct sound. These products are malleable/trimmable and may be shaped by the surgeon to fit each particular patient’s anatomy.

**Thyroid disease.** For surgery related to thyroid disease, we offer the NIM-Response 2.0 Nerve Integrity Monitor, NIM-Neuro 2.0 Nerve Integrity Monitor, and NIM EMG Tubes. These products assist surgeons in identifying and continuously monitoring the recurrent laryngeal or vagus nerves during complicated, high-risk thyroid surgery. Since the actual nerve damage during surgery is much higher than perceived, using our nerve monitoring products in these procedures is a benefit to both the patient and the surgeon, reducing the risk of patient injury and enabling more precise, complete dissection.

**Ménière’s disease.** To alleviate debilitating vertigo associated with the inner ear condition known as Ménière’s disease, we offer the portable, minimally invasive Meniett Low-Pressure Pulse Generator.

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**Table of Contents**

Severe vertigo, which can cause nausea and vomiting, is considered by patients to be the most problematic and debilitating symptom of Ménière’s disease, often affecting their ability to work or participate in daily activities. Using Meniett therapy, patients can self-administer their treatment at home or work for a few minutes each day by delivering low-pressure air pulses through a tube connected to an earpiece placed in the outer ear. In August 2007, we announced that results of a survey published in *Otology & Neurotology* indicated that our Meniett Low Pressure Pulse Generator...
is the preferred treatment method after diet modification for patients diagnosed with Ménière’s Disease.

**Surgical Access and Cranial Fixation.** To facilitate surgical access in cranial, spinal and orthopedic procedures, we offer the Legend electric and pneumatic high-speed powered surgical drill systems. The Stylus system, the most recent addition to the high-speed drill line, provides significant power in a small, ergonomic design. We also offer titanium and resorbable polymer plates and screw systems designed to provide for rigid fixation of the skull. In addition to plates and screws, our Durepair dura substitute is indicated for use as both an on-lay and sutureable graft for repair of the dura skin layer.

**Hydrocephalus.** The Strata valve is an adjustable shunt system for the treatment of hydrocephalus, a condition characterized by an abnormal accumulation of cerebral spinal fluid in the brain. There are two primary forms of hydrocephalus; congenital or pediatric hydrocephalus, and normal pressure hydrocephalus, which afflict the elderly. The Strata valve allows surgeons to non-invasively adjust the valve’s performance level settings with an external magnetic adjustment device. This enables the surgeon to change the valve’s performance characteristics over time without subjecting the patient to additional surgery. The shunt line also includes a wide assortment of nonadjustable valves.

**Brain Injury.** We also provide a large selection of external drainage and monitoring systems such as the Becker and Exacta systems as well as catheters that are used for the treatment of traumatic brain injury. These systems are designed to remove fluid from the brain in a controlled fashion to alleviate the build-up of intracranial pressure, which can be life threatening.

**Navigation.** We are one of the leaders in the field of computer-assisted surgery (CAS) and have installed approximately 2,500 StealthStation Treatment Guidance Systems in hospitals worldwide. In recent years, the pace of innovation in CAS has quickened considerably. We have developed and delivered new and updated hardware and software solutions to assist with varied surgeries including total joint replacements, minimally invasive spinal surgery, cranial tumor resection, biopsies, functional neurosurgery, and functional endoscopic sinus surgery. In June 2007, Medtronic acquired the O-arm Imaging System assets of Breakaway Imaging, LLC, a privately held developer of medical imaging systems for surgery. With this acquisition, Medtronic now owns, rather than licenses, exclusive worldwide distribution and marketing rights of the O-arm Imaging System, an intraoperative crossover technology enabling two-dimensional, multi-plane two-dimensional, and three-dimensional volumetric imaging.

**Customers and Competitors**

Our primary customers for products relating to our ENT diseases and disorders are ENT surgeons and the hospitals and clinics where they perform surgery. The most significant competitors in this part of our Surgical Technologies business are Olympus Corporation and Stryker Corporation.

Our primary customers for our ENT neurosurgical products are neurosurgeons, spinal surgeons, and the hospitals and clinics where they perform surgery. Significant competitors are Johnson & Johnson, Stryker Corporation and Integra LifeSciences Holdings Corporation.

Our primary customers for our computer assisted surgery products are hospitals and clinics. The primary competitors of our computer assisted surgery products are BrainLAB, Inc. and Stryker Corporation.

**Physio-Control**

We develop, manufacture, market and service external defibrillators, including manual defibrillator/monitors used by hospitals and emergency response personnel and automated external defibrillators (AEDs) used in commercial and public settings. In addition to the portfolio of external defibrillation and emergency response systems, we offer related data management solutions and support services.
Conditions Treated

Our Physio-Control products are used in the treatment of the condition described below.

Sudden Cardiac Arrest (SCA) is a condition in which the heartbeat stops suddenly and unexpectedly. SCA is caused by life-threatening arrhythmias or abnormalities in the heart’s electrical system.

The charts below set forth net sales of our Physio-Control business as a percentage of our total net sales for each of the last three fiscal years:

External Defibrillators. Many victims of SCA could be saved if they had quicker access to AEDs. In the U.S., the survival rate for victims of sudden cardiac arrest is only about 5 percent because the average response time to an emergency call for help is six to twelve minutes. Chances of survival are reduced significantly if the victim is not treated within five minutes. In August 2004, results from the largest-ever clinical trial studying the outcomes of public access to defibrillation were published in the New England Journal of Medicine. The data indicated that the use of portable AEDs by trained volunteers can significantly improve the probability of saving lives that otherwise might have been lost to sudden cardiac arrest. Hospitals, emergency medical services (EMS) and targeted responders rely on LIFEPAK products in the most urgent cardiac emergencies. Our LIFEPAK series of external defibrillators are designed to adapt to the physical needs of the patient and surrounding emergency conditions enabling fast, smooth transitions from the care from EMS to the treatment at the hospital. Physio-Control offers a broad range of life-saving tools for multiple user needs and our products have been incorporated in environments ranging from hospitals to emergency medical units to public places such as airports, sports arenas, schools, and workplaces. Today there are more than 650,000 LIFEPAK devices distributed worldwide.

On December 4, 2006, we announced our intention to pursue a spin-off of Physio-Control into an independent, publicly traded company. However, shortly thereafter, on January 15, 2007, we announced our voluntary suspension of U.S. shipments of Physio-Control products manufactured at our facility in Redmond, Washington in order to address quality system issues. In the months following the suspension of U.S. shipments, we worked diligently with the FDA to address the quality system issues and resumed limited shipments to critical need customers. As a result of the work performed to date, on April 28, 2008, we announced that we had reached an agreement on a consent decree with the FDA regarding quality system improvements for our external defibrillator products. The agreement was filed on April 25, 2008 in the U.S. District Court for the Western District of Washington and was approved by the court on May 9, 2008. The agreement addresses issues raised by the FDA during inspections regarding Physio-Control’s quality system processes and outlines the actions Physio-Control must take in order to resume unrestricted distribution of our external defibrillators. Following the resolution of the quality system issue, we intend to pursue the spin-off of Physio-Control.

Customers and Competitors
The primary customers for our manual external defibrillators are EMS personnel, emergency care doctors and highly-trained nurses. Our primary competitors in the manual external defibrillator business are Zoll Medical Corporation, Philips Medical Systems, Defibtech, LLC and Welch Allyn Inc.

Table of Contents

The primary customers for our AED products are hospitals, schools, governments, businesses, and any other public facility. Our primary competitors in the AED business are Cardiac Science, Inc., Zoll Medical Corporation, Philips Medical Systems, Defibtech, LLC, and Welch Allyn Inc.

Research and Development

The markets in which we participate are subject to rapid technological advances. Constant improvement of products and introduction of new products is necessary to maintain market leadership. Our research and development efforts are directed toward maintaining or achieving technological leadership in each of the markets we serve in order to help ensure that patients using our devices and therapies receive the most advanced and effective treatment possible. We are committed to developing technological enhancements and new indications for existing products, as well as less invasive and new technologies to address unmet patient needs and to help reduce patient care costs and length of hospital stays. We have not engaged in significant customer or government-sponsored research.

During fiscal years 2008, 2007, and 2006, we spent $1.275 billion (9.4 percent of net sales), $1.239 billion (10.1 percent of net sales) and $1.113 billion (9.9 percent of net sales) on research and development, respectively. Our research and development activities include improving existing products and therapies, expanding their indications and applications for use, and developing new products. While we continue to make substantial investments for the expansion of our existing product lines and for the search of new innovative products, we have also focused heavily on carefully planned clinical trials, which lead to market expansion and enable further penetration of our life changing devices.

Acquisitions and Investments

Our strategy to provide a broad range of therapies to restore patients to fuller, healthier lives requires a wide variety of technologies, products, and capabilities. The rapid pace of technological development in the medical industry and the specialized expertise required in different areas of medicine make it difficult for one company alone to develop a broad portfolio of technological solutions. In addition to internally generated growth through our research and development efforts, historically we have relied, and expect to continue to rely, upon acquisitions, investments, and alliances to provide access to new technologies both in areas served by our existing businesses as well as in new areas.

We expect to make future investments or acquisitions where we believe that we can stimulate the development of, or acquire new technologies and products to further our strategic objectives and strengthen our existing businesses. Mergers and acquisitions of medical technology companies are inherently risky and no assurance can be given that any of our previous or future acquisitions will be successful or will not materially adversely affect our consolidated results of operations, financial condition, or cash flows.
On April 15, 2008, we recorded an in process research and development (IPR&D) charge of $42 million related to the acquisition of NDI Medical (NDI), a development stage company focused on commercially developing technology to stimulate the dorsal genital nerve as a means to treat urinary incontinence. Total consideration for NDI was approximately $42 million which included $39 million in cash and the forgiveness of $3 million of pre-existing loans provided to NDI. The acquisition will provide us with exclusive rights to develop and use NDI’s technology in the treatment of urinary urge incontinence. This payment was expensed as IPR&D since technological feasibility of the underlying projects had not yet been reached and such technology has no future alternative use.

On November 2, 2007, we consummated the acquisition of Kyphon and it became our wholly owned subsidiary. Kyphon develops and markets medical devices designed to restore and preserve spinal function using minimally invasive technology. Kyphon’s primary products are used in balloon kyphoplasty for the treatment of spinal compression fractures caused by osteoporosis or cancer, and in the IPD procedure for treating the symptoms of lumbar spinal stenosis. It is expected that the acquisition of Kyphon will add to the growth of our existing Spinal business by extending its product offerings into some of the fastest growing product segments of the spine market, enabling us to provide physicians with a broader range of therapies for use at all stages of the care continuum.

Under the terms of the agreement announced on July 27, 2007, Kyphon shareholders received $71 per share in cash for each share of Kyphon common stock they owned. Total consideration for the transaction was $4.203 billion which includes payments to Kyphon shareholders for the cancellation of outstanding shares, the assumption and settlement of existing Kyphon debt, and payment of direct acquisition costs. Total debt assumed relates to Kyphon’s obligations under existing credit and term loan facilities and outstanding senior convertible notes. As of the date of the transaction, the existing credit and term loan facilities were fully paid and terminated. The senior convertible notes were converted by the holders in the weeks following the close of the transaction and have been included in the total purchase consideration above. In addition, the total consideration includes the estimated proceeds of unwinding the related convertible note hedges and cancellation and payment of the warrants to the hedge participants that were originally issued by Kyphon in February 2007.

The transaction was financed through a combination of $3.303 billion cash on hand, the issuance of $600 million short-term commercial paper and borrowing $300 million through a new long-term unsecured revolving credit facility.

The results of operations related to Kyphon have been included in our consolidated statements of earnings since the date of the acquisition and include the full amortization of a $34 million inventory write-up recorded as part of the Kyphon acquisition accounting. The pro forma impact of Kyphon was significant to our results for fiscal year 2008. See Note 4 to the consolidated financial statements set forth in Exhibit 13 hereto for more information including the unaudited pro forma results of operations for fiscal years 2008 and 2007.

On November 1, 2007, we recorded an IPR&D charge of $20 million related to the acquisition of Setagon, Inc. (Setagon), a development stage company focused on commercially developing metallic nanoporous surface modification technology. The acquisition will provide us with exclusive rights to use and develop Setagon’s Controllable Elution Systems (CES) technology in the treatment of cardiovascular disease. Total consideration for
Setagon was approximately $20 million in cash, subject to purchase price increases, which would be triggered by the achievement of certain milestones. This payment was expensed as IPR&D since technological feasibility of the underlying project had not yet been reached and such technology has no future alternative use.

On June 25, 2007, we exercised a purchase option and acquired substantially all of the O-arm Imaging System (O-arm) assets of Breakaway Imaging, LLC (Breakaway), a privately held company. Prior to the acquisition, we had the exclusive rights to distribute and market the O-arm. The O-arm provides multi-dimensional surgical imaging for use in spinal and orthopedic surgical procedures. The acquisition is expected to bring the O-arm into a broad portfolio of image guided surgical solutions. Total consideration for Breakaway was approximately $26 million in cash, subject to purchase price increases, which would be triggered by the achievement of certain milestones. The pro forma impact of the acquisition of Breakaway was not significant to our results for fiscal years 2008 and 2007. The results of operations related to Breakaway have been included in our consolidated statement of earnings since the date of acquisition.

Patents and Licenses

We rely on a combination of patents, trademarks, copyrights, trade secrets, and nondisclosure and non-competition agreements to establish and protect our proprietary technology. We have filed and obtained numerous patents in the U.S. and abroad, and regularly file patent applications worldwide in our continuing effort to establish and protect our proprietary technology. In addition, we have entered into exclusive and non-exclusive licenses relating to a wide array of third-party technologies. We have also obtained certain trademarks and trade names for our products to distinguish our genuine products from our competitors products, and we maintain certain details about our processes, products and strategies as trade secrets. Our efforts to protect our intellectual property and avoid disputes over proprietary rights have included ongoing review of third-party patents and patent applications. See Item 1A. Risk Factors and Note 15 to the consolidated financial statements set forth in Exhibit 13 hereto for additional information.

Markets and Distribution Methods

We sell most of our medical devices through direct sales representatives in the U.S. and a combination of direct sales representatives and independent distributors in international markets. The three

24

Table of Contents

largest markets for our medical devices are the U.S., Western Europe, and Japan. Markets outside the U.S. are an area of increasing focus and opportunity as we believe they remain under penetrated. Our primary customers include physicians, hospitals, other medical institutions, and group purchasing organizations.

Our marketing and sales strategy is focused on rapid, cost-effective delivery of high-quality products to a diverse group of customers worldwide. To achieve this objective, we organize our marketing and sales teams around physician specialties. This focus enables us to develop highly knowledgeable and dedicated sales representatives who are able to foster strong relationships with physicians and other customers, and enhance our ability to cross-sell complementary products. We believe that we maintain excellent working relationships with physicians and others in the medical industry that enable us to gain a detailed understanding of therapeutic and diagnostic developments, trends
and emerging opportunities, and respond quickly to the changing needs of physicians and patients. We attempt to enhance our presence in the medical community through active participation in medical meetings and by conducting comprehensive training and educational activities. We believe that these activities contribute to physician expertise.

In keeping with the increased emphasis on cost-effectiveness in healthcare delivery, the current trend among hospitals and other customers of medical device manufacturers is to consolidate into larger purchasing groups to enhance purchasing power. As a result, transactions with customers have become increasingly significant, more complex, and tend to involve more long-term contracts than in the past. This enhanced purchasing power may also lead to pressure on pricing and increased use of preferred vendors. We are not dependent on any single customer for more than 10 percent of our total net sales.

Competition and Industry

We compete in both the therapeutic and diagnostic medical markets in more than 120 countries throughout the world. These markets are characterized by rapid change resulting from technological advances and scientific discoveries. In the product lines in which we compete, we face a mixture of competitors ranging from large manufacturers with multiple business lines to small manufacturers that offer a limited selection of products. In addition, we face competition from providers of alternative medical therapies such as pharmaceutical companies.

Major shifts in industry market share have occurred in connection with product problems, physician advisories and safety alerts, reflecting the importance of product quality in the medical device industry. In the current environment of managed care, economically motivated buyers, consolidation among healthcare providers, increased competition, and declining reimbursement rates, we have been increasingly required to compete on the basis of price. In order to continue to compete effectively, we must continue to create or acquire advanced technology, incorporate this technology into proprietary products, obtain regulatory approvals in a timely manner, and manufacture and successfully market these products.

Worldwide Operations

For financial reporting purposes, net sales and long-lived assets attributable to significant geographic areas are presented in Note 17 to the consolidated financial statements set forth in Exhibit 13 hereto and will be included in our 2008 Annual Report.

Table of Contents

Impact of Business Outside of the U.S.

Our operations in countries outside the U.S. are accompanied by certain financial and other risks. Relationships with customers and effective terms of sale vary by country, often with longer-term receivables than are typical in the U.S. Inventory management is an important business concern due to the potential for obsolescence, long lead times from sole source providers and currency exposure. Currency exchange rate fluctuations can affect net sales from, and profitability of, operations outside the U.S. We attempt to hedge these exposures to reduce the effects of foreign
currency fluctuations on net earnings. See the Market Risk section of Management’s Discussion and Analysis of Financial Condition and Results of Operations and Note 5 to the consolidated financial statements set forth in Exhibit 13 hereto and will be included in our 2008 Annual Report. In addition, the repatriation of certain earnings of our foreign subsidiaries may result in substantial U.S. tax cost.

Production and Availability of Raw Materials

We manufacture most of our products at 22 manufacturing facilities located in various countries throughout the world. The largest of these manufacturing facilities are located in Arizona, California, Florida, Indiana, Ireland, Massachusetts, Mexico, Minnesota, Puerto Rico, Switzerland, Texas, and Washington. We purchase many of the components and raw materials used in manufacturing these products from numerous suppliers in various countries. For reasons of quality assurance, sole source availability, or cost effectiveness, certain components and raw materials are available only from a sole supplier. We work closely with our suppliers to help ensure continuity of supply while maintaining high quality and reliability. Due to the FDA’s requirements regarding manufacture of our products, we may not be able to quickly establish additional or replacement sources for certain components or materials. Generally, we have been able to obtain adequate supplies of such raw materials and components. However, the reduction or interruption in supply, and an inability to develop alternative sources for such supply, could adversely affect our operations.

Employees

On April 25, 2008, we employed approximately 40,000 employees. Our employees are vital to our success. We believe we have been successful in attracting and retaining qualified personnel in a highly competitive labor market due to our competitive compensation and benefits, and our rewarding work environment. We believe our employee relations are excellent.

Seasonality

Worldwide sales do not reflect any significant degree of seasonality.

Government Regulation and Other Considerations

Our medical devices are subject to regulation by numerous government agencies, including the FDA and comparable foreign agencies. To varying degrees, each of these agencies requires us to comply with laws and regulations governing the development, testing, manufacturing, labeling, marketing, and distribution of our medical devices.

Authorization to commercially distribute a new medical device in the U.S. is generally received in one of two ways. The first, known as the 510(k) process, requires us to demonstrate that our new medical device is substantially equivalent to a legally marketed medical device. In this process, we must submit data that supports our equivalence claim. If human clinical data is required, it must be gathered in compliance with FDA investigational device exemption regulations. We must receive an order from the FDA finding substantial equivalence to another legally marketed medical device before we can commercially distribute the new medical device. Modifications to cleared medical devices can be made without using the 510(k) process if the changes do not significantly affect safety or effectiveness. A very small number of our devices are exempt from 510(k) clearance requirements.

The second, more rigorous process, known as PMA, requires us to independently demonstrate that the new medical device is safe and effective. We do this by collecting data, including human clinical data for the medical device. The FDA will authorize commercial release if it determines there is reasonable...
assurance that the medical device is safe and effective. This process is generally much more time-consuming and expensive than the 510(k) process.

Both before and after a product is commercially released, we have ongoing responsibilities under FDA regulations. The FDA reviews design and manufacturing practices, labeling and record keeping, and manufacturers’ required reports of adverse experience and other information to identify potential problems with marketed medical devices. We may be subject to periodic inspection by the FDA for compliance with the FDA’s good manufacturing practice regulations among other FDA requirements, such as restrictions on advertising and promotion. These regulations, also known as the Quality System Regulations, govern the methods used in, and the facilities and controls used for, the design, manufacture, packaging and servicing of all finished medical devices intended for human use. If the FDA were to conclude that we are not in compliance with applicable laws or regulations, or that any of our medical devices are ineffective or pose an unreasonable health risk, the FDA could ban such medical devices, detain or seize adulterated or misbranded medical devices, order a recall, repair, replacement, or refund of such devices, and require us to notify health professionals and others that the devices present unreasonable risks of substantial harm to the public health. The FDA may also impose operating restrictions, enjoin and restrain certain violations of applicable law pertaining to medical devices, and assess civil or criminal penalties against our officers, employees, or us. The FDA may also recommend prosecution to the Department of Justice.

The FDA, in cooperation with U.S. Customs and Border Protection (CBP), administers controls over the import of medical devices into the U.S. The CBP imposes its own regulatory requirements on the import of our products, including inspection and possible sanctions for noncompliance. The FDA also administers certain controls over the export of medical devices from the U.S. International sales of our medical devices that have not received FDA approval are subject to FDA export requirements. Each foreign country to which we export medical devices also subjects such medical devices to their own regulatory requirements. Frequently, we obtain regulatory approval for medical devices in foreign countries first because their regulatory approval is faster or simpler than that of the FDA. However, as a general matter, foreign regulatory requirements are becoming increasingly stringent.

In the European Union, a single regulatory approval process has been created, and approval is represented by the CE Mark. To obtain a CE Mark in the European Union, defined products must meet minimum standards of safety and quality (i.e., the essential requirements) and then comply with one or more of a selection of conformity routes. A Notified Body assesses the quality management systems of the manufacturer and the product conformity to the essential and other requirements within the Medical Device Directive. Medtronic is subject to inspection by Notified Bodies for compliance.

To be sold in Japan, most medical devices must undergo thorough safety examinations and demonstrate medical efficacy before they are granted approval, or shonin. The Japanese government, through the Ministry of Health, Labour, and Welfare (MHLW), regulates medical devices under the Pharmaceutical Affairs Law (PAL). Implementation of PAL and enforcement practices thereunder are evolving, and compliance guidance from MHLW is still in development. Consequently, companies continue to work on establishing improved systems for compliance with PAL. Penalties for a company’s noncompliance with PAL could be severe, including revocation or suspension of a company’s business license and criminal sanctions.

The process of obtaining approval to distribute medical products is costly and time-consuming in virtually all of the major markets where we sell medical devices. We cannot assure that any new medical devices we develop will be
approved in a timely or cost-effective manner or approved at all.

Federal and state laws protect the confidentiality of certain patient health information, including patient medical records, and restrict the use and disclosure of patient health information by healthcare providers. In particular, in April 2003, the U.S. Department of Health and Human Services (HHS) published patient privacy rules under the Health Insurance Portability and Accountability Act of 1996 (HIPAA privacy rule) and, in April 2005, published security rules for protected health information. The HIPAA privacy and security rules govern the use, disclosure and security of protected health information by Covered Entities, which are healthcare providers that submit electronic claims, health plans and healthcare clearinghouses. Other than our Diabetes operating segment and our health insurance plans, each of which is a Covered Entity, and where we operate as a Business Associate (which is anyone that performs a service on behalf of a Covered Entity involving the use or disclosure of protected health information and is not a member of the covered entity’s workforce), the HIPAA privacy and security rules only affect us indirectly. The patient data that we receive and analyze may include protected health information. We are committed to maintaining patients’ privacy and working with our customers and business partners in their HIPAA compliance efforts. The ongoing costs and impacts of assuring compliance with the HIPAA privacy and security rules are not material to our business.

Government and private sector initiatives to limit the growth of healthcare costs, including price regulation, competitive pricing, coverage and payment policies, and managed-care arrangements, are continuing in many countries where we do business, including the U.S. These changes are causing the marketplace to put increased emphasis on the delivery of more cost-effective medical devices. Government programs, including Medicare and Medicaid, private healthcare insurance, and managed-care plans have attempted to control costs by limiting the amount of reimbursement they will pay for particular procedures or treatments, and other mechanisms designed to constrain utilization and contain costs, including, for example, gainsharing, where a hospital agrees with physicians to share any realized cost savings resulting from the physicians’ collective change in practice patterns such as standardization of devices where medically appropriate. This has created an increasing level of price sensitivity among customers for our products. Some third-party payors must also approve coverage for new or innovative devices or therapies before they will reimburse healthcare providers who use the medical devices or therapies. Even though a new medical device may have been cleared for commercial distribution, we may find limited demand for the device until reimbursement approval has been obtained from governmental and private third-party payors. In addition, some private third-party payors require that certain procedures or that the use of certain products be authorized in advance as a condition of reimbursement. As a result of our manufacturing efficiencies and cost controls, we believe we are well-positioned to respond to changes resulting from the worldwide trend toward cost-containment; however, uncertainty remains as to the nature of any future legislation, making it difficult for us to predict the potential impact of cost-containment trends on future operating results.

The delivery of our devices is subject to regulation by HHS and comparable state and foreign agencies responsible for reimbursement and regulation of healthcare items and services. U.S. laws and regulations are imposed primarily in connection with the Medicare and Medicaid programs, as well as the government’s interest in regulating the quality and cost of healthcare. Foreign governments also impose regulations in connection with their healthcare
reimbursement programs and the delivery of healthcare items and services.

Federal healthcare laws apply when we or customers submit claims for items or services that are reimbursed under Medicare, Medicaid or other federally-funded healthcare programs. The principal federal laws include: (1) the False Claims Act which prohibits the submission of false or otherwise improper claims for payment to a federally-funded health care program; (2) the Anti-Kickback Statute which prohibits offers to pay or receive remuneration of any kind for the purpose of inducing or rewarding referrals of items or services reimbursable by a Federal healthcare program; and (3) the Stark law which prohibits physicians from referring Medicare or Medicaid patients to a provider that bills these programs for the provision of certain designated health services if the physician (or a member of the physician’s immediate family) has a financial relationship with that provider; and (4) healthcare fraud statutes that prohibit false statements and improper claims with any third-party payor. There are often similar state false claims, anti-kickback, and anti-self referral and insurance laws that apply to claims submitted under state Medicaid or state-funded healthcare programs. In addition, the U.S. Federal Corrupt Practices Act can be used to prosecute companies in the U.S. for arrangements with physicians, or other parties outside the U.S. if the physician or party is a government official of another country and the arrangement violates the law of that country.

The laws applicable to us are subject to change, and to evolving interpretations. If a governmental authority were to conclude that we are not in compliance with applicable laws and regulations, Medtronic and its officers and employees could be subject to severe criminal and civil penalties including substantial penalties, fines and damages, and exclusion from participation as a supplier of product to beneficiaries covered by Medicare or Medicaid.

We operate in an industry characterized by extensive patent litigation. Patent litigation can result in significant damage awards and injunctions that could prevent the manufacture and sale of affected products or result in significant royalty payments in order to continue selling the products. At any given time, we are involved as both a plaintiff and a defendant in a number of patent infringement actions. While it is not possible to predict the outcome of patent litigation incident to our business, we believe the costs associated with this type of litigation could have a material adverse impact on our consolidated results of operations, financial position or cash flows. See Note 15 to the consolidated financial statements set forth in Exhibit 13 hereto and will be included in our 2008 Annual Report for additional information.

We operate in an industry susceptible to significant product liability claims. These claims may be brought by individuals seeking relief or by groups seeking to represent a class. In addition, product liability claims may be asserted against us in the future based on events we are not aware of at the present time.

We are also subject to various environmental laws and regulations both within and outside the U.S. Like other medical device companies, our operations involve the use of substances regulated under environmental laws, primarily manufacturing and sterilization processes. We do not expect that compliance with environmental protection laws will have a material impact on our consolidated results of operations, financial position, or cash flows.
We have elected to self-insure most of our insurable risks, including medical and dental costs, disability coverage, physical loss to property, business interruptions, workers' compensation, comprehensive general, director and officer, and product liability. This decision was made based on conditions in the insurance marketplace that have led to increasingly higher levels of self-insurance retentions, increasing number of coverage limitations, and dramatically higher insurance premium rates. We continue to monitor the insurance marketplace to evaluate the value to us of obtaining insurance coverage in the future. Based on historical loss trends, we believe that our self-insurance program accruals will be adequate to cover future losses. Historical trends, however, may not be indicative of future losses. These losses could have a material adverse impact on our consolidated results of operations, financial position, or cash flows.

Executive Officers of Medtronic

Set forth below are the names and ages of current executive officers of Medtronic, Inc., as well as information regarding their positions with Medtronic, their periods of service in these capacities, and their business experiences. There are no family relationships among any of the officers named, nor is there any arrangement or understanding pursuant to which any person was selected as an officer.

William A. Hawkins, age 54, has been a Director of Medtronic since March 2007 and President and Chief Executive Officer since August 2007. He served as President and Chief Operating Officer of Medtronic since May 2004. He served as Senior Vice President and President, Medtronic Vascular, from January 2002 to May 2004. He served as President and Chief Executive Officer of Novoste Corporation from 1998 to 2002. He is also a member of the board of visitors of the Engineering School of Duke University and the Guthrie Theatre board.

Susan Alpert, Ph.D., M.D., age 62, has been Senior Vice President, Chief Regulatory Officer since May 2008. Prior to that, she was Senior Vice President, Chief Quality and Regulatory Officer from November 2005 to May 2008, and prior to that, Vice President, Chief Quality and Regulatory Officer from May 2004 to November 2005, and Vice President, Regulatory Affairs and Compliance from July 2003 to May 2004. Prior to that, she was Vice President of Regulatory Sciences at C.R. Bard, Inc. from October 2000 to July 2003. She held a variety of positions at the FDA from June 1987 to August 2000.

Martha Goldberg Aronson, age 40, has been Senior Vice President and Chief Talent Officer since March 2008. Prior to that, she was Vice President, Investor Relations from May 2006 to March 2008, Vice President of the Neurological, Gastroenterology/Urology, Obesity Management, ENT/Neurologic Technology and Diabetes businesses in Western Europe from May 2003 to May 2006 and Vice President and General Manager of Medtronic Gastroenterology/Urology from 2001 to May 2003. She joined Medtronic in April 1991, from Bain & Company, a global management consulting firm.

Robert H. Blankemeyer, age 61, has been Senior Vice President and President of Surgical Technologies since June 2008. Prior to that, he was President of the Ear, Nose & Throat and Neurologic Technologies business unit from April 2000 until its merger into Surgical Technologies in 2008. Prior to joining Medtronic, he was President of Storz
Ophthalmics, where he held several business leadership positions.

**Jean-Luc Butel**, age 51, has been Senior Vice President and President, International since May 2008. Prior to that, he was Senior Vice President and President, Asia Pacific from August 2003 to May 2008 and President of Independence Technology, a Johnson & Johnson company, from 1999 to 2003. From 1991 to 1999, he worked for Becton Dickinson, initially as General Manager of its Microbiology business in Japan and then as President of Nippon Becton Dickinson. His last assignment at Becton, Dickinson and Company was President, Worldwide Consumer Healthcare.

**Terrance L. Carlson**, age 55, has been Senior Vice President, General Counsel and Corporate Secretary since October 2004. Prior to that, he was Senior Vice President, Business Development, General Counsel and Secretary at PerkinElmer, Inc. from June 1999 to September 2004; Deputy General Counsel of AlliedSignal (now Honeywell International) and General Counsel of AlliedSignal Aerospace from April 1994 to June 1999; and an associate and partner of Gibson Dunn & Crutcher from November 1978 to April 1994.

**H. James Dallas**, age 49, has been Senior Vice President, Quality and Operations since April 2008. Prior to that he was Senior Vice President and Chief Information Officer from April 2006 to April 2008. He was Vice President and Chief Information Officer of Georgia Pacific from December 2002 to December 2005; General Manager of the Transportation Division and President of the Lumber Division from October 2001 to December 2002; and Vice President, Building Products Distribution Sales and Logistics, Georgia Pacific Corporation from October 2000 to October 2001.

**Gary L. Ellis**, age 51, has been Senior Vice President and Chief Financial Officer since May 2005. Prior to that, he was Vice President, Corporate Controller and Treasurer since October 1999 and Vice President Corporate Controller from August 1994. Mr. Ellis joined Medtronic in 1989 as Assistant Corporate Controller and was promoted to Vice President of Finance for Medtronic Europe in 1992, until being named as Corporate Controller in 1994. Mr. Ellis is a member of the board of directors of The Toro Company and chairman of the American Heart Association.

**Richard Kuntz, M.D.**, age 51, has been Senior Vice President and President, Neuromodulation since October 2005. Prior to that, he was an interventional cardiologist and Chief of the Division of Clinical Biometrics at Brigham and Women’s Hospital, Associate Professor of Medicine and Chief Scientific Office of the Harvard Clinical Research Institute.

**Steve La Neve**, age 49, has been Senior Vice President and President Spinal and Biologics since April 2008. Prior to that, he was President of Medtronic Japan from April 2004 to April 2008. He was Senior Vice President of Business Development and Supplier Integration and Executive Vice President of Relationship Management at Premier, Inc. from September 2000 to March 2004. He was Vice President and General Manager and Director of Sales and Marketing at Becton, Dickinson and Company from March 1990 to August 2000, and prior to that, he held other healthcare management roles with Hoffmann-La Roche and EM Diagnostic Systems.

**James P. Mackin**, age 41, has been Senior Vice President and President Cardiac Rhythm Disease Management (CRDM) since August 2007. Prior to that, he was Vice President, CRDM Commercial Operations from November 2006 to August 2007 and Vice President, Vascular, Western Europe, from July 2004 to November 2006. He was Vice President and General Manager of Medtronic Vascular’s Endovascular business from October 2002 to July 2004. Prior to joining Medtronic, he served in a number of sales and executive positions at Genzyme Corporation from 1996 to 2004.
Stephen H. Mahle, age 62, has been Executive Vice President Healthcare Policy and Regulatory since April 2008. Prior to that he was Executive Vice President and Senior Healthcare Policy Advisor from August 2007 to April 2008, and prior to that was Executive Vice President and President, Cardiac Rhythm Disease Management since May 2004. He was Senior Vice President and President, Cardiac Rhythm Management, since January 1998. Prior to that, he was President, Brady Pacing, from 1995 to 1997 and Vice President and General Manager, Brady Pacing, from 1990 to 1995. Mr. Mahle has been with the Company for 35 years and served in various general management positions prior to 1990. Mr. Mahle serves on the board of directors of ATMI, Inc.

Christopher J. O'Connell, age 41, has been Senior Vice President and President, Diabetes, since October 2006. Prior to that, he was President of Medtronic's Emergency Response Systems division from May 2005 to October 2006, and prior to that, he was Vice President of Sales and Marketing of Medtronic's Cardiac Rhythm Disease Management division from November 2001 to May 2005 and Vice President/General Manager of the Patient Management Business from January 2000 to November 2001. Mr. O'Connell has served in various management positions since joining the Company in 1994.

Stephen N. Oesterle, M.D., age 57, has been Senior Vice President, Medicine and Technology, since January 2002. Prior to that, he was Associate Professor of Medicine at Harvard Medical School and Director of Invasive Cardiology Services at Massachusetts General Hospital from 1998 to 2002, and was Associate Professor of Medicine at Stanford University and Director of Cardiac Catheterization and Coronary Intervention Laboratories at the Stanford University Medical Center from 1992 to 1998. Prior to that he held other academic positions and directed interventional cardiology programs at Georgetown University and in Los Angeles, CA.

Catherine Szyman, age 41, has been Senior Vice President, Strategy and Innovation since April 2008. Prior to that, she was Vice President and General Manager of Endovascular Innovations, part of the CardioVascular business unit, from October 2004 to April 2008. From 1991 to 2004, she held numerous management and leadership roles at Medtronic, including Vice President of Corporate Strategy and Vice President of Finance for the Vascular business.

Scott R. Ward, age 48, has been Senior Vice President and President, CardioVascular since May 2007. Prior to that he was Senior Vice President and President, Vascular from May 2004 to May 2007, Senior Vice President and President, Neurological and Diabetes Business, from February 2002 to May 2004, and was President, Neurological, from January 2000 to January 2002. He was Vice President and General Manager of Medtronic's Drug Delivery Business from 1995 to 2000. Prior to that, Mr. Ward led the Company's Neurological Ventures in the successful development of new therapies. Mr. Ward also held various research, regulatory and business development positions since joining Medtronic in 1981.

Item 1A. Risk Factors

Investing in Medtronic involves a variety of risks and uncertainties, known and unknown, including, among others, those discussed below.

The medical device industry is highly competitive and we may be unable to compete effectively.

We compete in both the therapeutic and diagnostic medical markets in more than 120 countries throughout the world. These markets are characterized by rapid change resulting from technological advances and scientific discoveries. In the product lines in which we compete, we face a mixture of competitors ranging from large manufacturers with multiple business lines to small manufacturers that offer a limited selection of products. Development by other
companies of new or improved products, processes or technologies may make our products or proposed products less competitive. In addition, we face competition from providers of alternative medical therapies such as pharmaceutical companies. Competitive factors include:

- product reliability,
- product performance,
- product technology,
- product quality,
- breadth of product lines,
- product services,
- customer support,
- price, and
- reimbursement approval from healthcare insurance providers.

Major shifts in industry market share have occurred in connection with product problems, physician advisories and safety alerts, reflecting the importance of product quality in the medical device industry. In the current environment of managed care, consolidation among healthcare providers, increased competition, and declining reimbursement rates, we have been increasingly required to compete on the basis of price. In order to continue to compete effectively, we must continue to create, invest in, or acquire advanced technology, incorporate this technology into our proprietary products, obtain regulatory approvals in a timely manner, and manufacture and successfully market our products. Given these factors, we cannot guarantee that we will be able to continue our level of success in the industry.

Reduction or interruption in supply and an inability to develop alternative sources for supply may adversely affect our manufacturing operations and related product sales.

We manufacture most of our products at 22 manufacturing facilities located throughout the world. We purchase many of the components and raw materials used in manufacturing these products from numerous suppliers in various countries. Generally we have been able to obtain adequate supplies of such raw materials and components. However, for reasons of quality assurance, cost effectiveness, or availability, we procure certain components and raw materials only from a sole supplier. While we work closely with our suppliers to try to ensure continuity of supply while maintaining high quality and reliability, we cannot guarantee that these efforts will be successful. In addition, due to the stringent regulations and requirements of the U.S. FDA regarding the manufacture of our products, we may not be able to quickly establish additional or replacement sources for certain components or materials. A reduction or interruption in supply, and an inability to develop alternative sources for such supply, could adversely affect our ability to manufacture our products in a timely or cost effective manner and to make our related product sales.

We are subject to many laws and governmental regulations and any adverse regulatory action may materially adversely affect our financial condition and business operations.
Our medical devices are subject to regulation by numerous government agencies, including the FDA and comparable foreign agencies. To varying degrees, each of these agencies requires us to comply with laws and regulations governing the development, testing, manufacturing, labeling, marketing, and distribution of our medical devices. We cannot guarantee that we will be able to obtain marketing clearance for our new products, or enhancements or modifications to existing products, and if we do, such approval may:

- take a significant amount of time,
- require the expenditure of substantial resources,
- involve stringent clinical and pre-clinical testing,
- involve modifications, repairs or replacements of our products, and
- result in limitations on the proposed uses of our products.

Both before and after a product is commercially released, we have ongoing responsibilities under FDA regulations. If the FDA were to conclude that we are not in compliance with applicable laws or regulations, or that any of our medical devices are ineffective or pose an unreasonable health risk, the FDA could ban such medical devices, detain or seize adulterated or misbranded medical devices, order a recall, repair, replacement, or refund of such devices, and require us to notify health professionals and others that the devices present unreasonable risks of substantial harm to the public health. The FDA may also impose operating restrictions, enjoin and restrain certain violations of applicable law pertaining to medical devices, and assess civil or criminal penalties against our officers, employees, or us. The FDA may also recommend prosecution to the Department of Justice. Any adverse regulatory action, depending on its magnitude, may restrict us from effectively marketing and selling our products.

Foreign governmental regulations have become increasingly stringent and more common, and we may become subject to more rigorous regulation by foreign governmental authorities in the future. Penalties for a company’s noncompliance with foreign governmental regulation could be severe, including revocation or suspension of a company’s business license and criminal sanctions. Any domestic or foreign governmental law or regulation imposed in the future may have a material adverse effect on us.

We are also subject to various environmental laws and regulations both within and outside the U.S. Our operations involve the use of substances regulated under environmental laws, primarily those used in manufacturing and sterilization processes. We cannot guarantee that compliance with environmental protection laws and regulations will not have a material impact on our consolidated earnings, financial condition, or cash flows.

Our failure to comply with strictures relating to reimbursement and regulation of healthcare goods and services may subject us to penalties and adversely impact our reputation and business operations.
Our devices are subject to regulation regarding quality and cost by the HHS, including the Centers for Medicare & Medicaid Services (CMS) as well as comparable state and foreign agencies responsible for reimbursement and regulation of healthcare goods and services. Foreign governments also impose regulations in connection with their healthcare reimbursement programs and the delivery of healthcare goods and services. U.S. federal government healthcare laws apply when we submit a claim on behalf of a U.S. federal healthcare program beneficiary, or when a customer submits a claim for an item or service that is reimbursed under a U.S. federal government funded healthcare program, such as Medicare or Medicaid. The principal U.S. federal laws implicated include those that prohibit the filing of false or improper claims for federal payment, those that prohibit unlawful inducements for the referral of business reimbursable under federally-funded healthcare programs, known as the anti-kickback laws, and those that prohibit healthcare service providers seeking reimbursement for providing certain services to a patient who was referred by a physician that has certain types of direct or indirect financial relationships with the service provider, known as the Stark law.

The laws applicable to us are subject to evolving interpretations. If a governmental authority were to conclude that we are not in compliance with applicable laws and regulations, we and our officers and employees could be subject to severe criminal and civil penalties, including, for example, exclusion from participation as a supplier of product to beneficiaries covered by CMS. If we are excluded from participation based on such an interpretation it could adversely affect our reputation and business operations.

**Quality problems with our processes, goods, and services could harm our reputation for producing high quality products and erode our competitive advantage.**

Quality is extremely important to us and our customers due to the serious and costly consequences of product failure. Our quality certifications are critical to the marketing success of our goods and services. If we fail to meet these standards our reputation could be damaged, we could lose customers and our revenue could decline. Aside from specific customer standards, our success depends generally on our ability to manufacture to exact tolerances precision engineered components, subassemblies, and finished devices from multiple materials. If our components fail to meet these standards or fail to adapt to evolving standards, our reputation as a manufacturer of high quality components will be harmed, our competitive advantage could be damaged, and we could lose customers and market share.

**We are substantially dependent on patent and other proprietary rights and failing to be successful in patent or other litigation may result in our payment of significant money damages and/or royalty payments, negatively impact our ability to sell current or future products, or prohibit us from enforcing our patent and proprietary rights against others.**

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**Table of Contents**

We operate in an industry characterized by extensive patent litigation. Patent litigation can result in significant damage awards and injunctions that could prevent our manufacture and sale of affected products or require us to pay significant royalties in order to continue to manufacture or sell affected products. At any given time, we are generally involved as both a plaintiff and a defendant in a number of patent infringement actions, the outcomes of which may not be known for prolonged periods of time. While it is not possible to predict the outcome of patent litigation incident to our business, we believe the results associated with any litigation could result in our payment of significant money...
damages and/or royalty payments, negatively impact our ability to sell current or future products or prohibit us from enforcing our patent and proprietary rights against others, which would generally have a material adverse impact on our consolidated earnings, financial condition, or cash flows.

We rely on a combination of patents, trade secrets and nondisclosure and non-competition agreements to protect our proprietary intellectual property, and will continue to do so. While we intend to defend against any threats to our intellectual property, there can be no assurance that these patents, trade secrets, or other agreements will adequately protect our intellectual property. There can also be no assurance that pending patent applications owned by us will result in patents issuing to us, that patents issued to us or licensed by us in the past or in the future will not be challenged or circumvented by competitors or that such patents will be found to be valid or sufficiently broad to protect our technology or to provide us with any competitive advantage. Third parties could also obtain patents that may require us to negotiate licenses to conduct our business, and there can be no assurance that the required licenses would be available on reasonable terms or at all. We also rely on nondisclosure and non-competition agreements with certain employees, consultants and other parties to protect, in part, trade secrets and other proprietary rights. There can be no assurance that these agreements will not be breached, that we will have adequate remedies for any breach, that others will not independently develop substantially equivalent proprietary information, or that third parties will not otherwise gain access to our trade secrets or proprietary knowledge.

**Product liability claims could adversely impact our financial condition and our earnings and impair our reputation.**

Our business exposes us to potential product liability risks which are inherent in the design, manufacture and marketing of medical devices. In addition, many of the medical devices we manufacture and sell are designed to be implanted in the human body for long periods of time. Component failures, manufacturing flaws, design defects or inadequate disclosure of product-related risks or product-related information with respect to these or other products we manufacture or sell could result in an unsafe condition or injury to, or death of, a patient. The occurrence of such a problem could result in product liability claims or a recall of, or safety alert relating to, one or more of our products which could ultimately result, in certain cases, in the removal from the body of such products and claims regarding costs associated therewith. We have elected to self-insure with respect to product liability risks. Product liability claims or product recalls in the future, regardless of their ultimate outcome, could have a material adverse effect on our business and reputation and on our ability to attract and retain customers for our products.

**Our self-insurance program may not be adequate to cover future losses.**

We have elected to self-insure most of our insurable risks. We made this decision based on conditions in the insurance marketplace that have led to increasingly higher levels of self-insurance retentions, increasing numbers of coverage limitations and dramatically higher insurance premium rates. We continue to monitor the insurance marketplace to evaluate the value to us of obtaining insurance coverage in the future. While based on historical loss trends we believe that our self-insurance program accruals will be adequate to cover future losses, we cannot guarantee that this will remain true. Historical trends may not be indicative of future losses. These losses could have a material adverse impact on our consolidated earnings, financial condition, or cash flows.

**If we experience decreasing prices for our goods and services and we are unable to reduce our expenses, our results of operations will suffer.**

We may experience decreasing prices for the goods and services we offer due to pricing pressure experienced by our customers from managed care organizations and other third-party payors; increased
market power of our customers as the medical device industry consolidates; and increased competition among medical engineering and manufacturing services providers. If the prices for our goods and services decrease and we are unable to reduce our expenses, our results of operations will be adversely affected.

Our international operations are subject to a variety of risks that could adversely affect those operations and thus our profitability and operating results.

Our operations in countries outside the U.S., which accounted for 38 percent of our net sales for the year ended April 25, 2008, are accompanied by certain financial and other risks. We intend to continue to pursue growth opportunities in sales internationally, which could expose us to greater risks associated with international sales and operations. Our international operations are, and will continue to be, subject to a number of risks and potential costs, including:

- changes in foreign medical reimbursement programs and policies,
- changes in foreign regulatory requirements,
- local product preferences and product requirements,
- longer-term receivables than are typical in the U.S.,
- fluctuations in foreign currency exchange rates,
- less protection of intellectual property in some countries outside of the U.S.,
- trade protection measures and import and export licensing requirements,
- work force instability,
- political and economic instability, and
- the potential payment of U.S. income taxes on certain earnings of our foreign subsidiaries upon repatriation.

Consolidation in the healthcare industry could have an adverse effect on our revenues and results of operations.

Many healthcare industry companies, including medical device companies, are consolidating to create new companies with greater market power. As the healthcare industry consolidates, competition to provide goods and services to industry participants will become more intense. These industry participants may try to use their market power to negotiate price concessions or reductions for medical devices that incorporate components produced by us. If we are forced to reduce our prices because of consolidation in the healthcare industry, our revenues would decrease and our consolidated earnings, financial condition, or cash flows would suffer.

Healthcare policy changes may have a material adverse effect on us.

Healthcare costs have risen significantly over the past decade. There have been and may continue to be proposals by legislators, regulators, and third-party payors to keep these costs down. Certain proposals, if passed, could impose limitations on the prices we will be able to charge for our products, or the amounts of reimbursement available for our products from governmental agencies or third-party payors. These limitations could have a material adverse effect on
our financial position and results of operations.

**Our business is indirectly subject to healthcare industry cost containment measures that could result in reduced sales of medical devices containing our components.**

Most of our customers, and the healthcare providers to whom our customers supply medical devices, rely on third-party payors, including government programs and private health insurance plans, to reimburse some or all of the cost of the procedures in which medical devices that incorporate components we manufacture or assemble are used. The continuing efforts of government, insurance companies, and other payors of healthcare costs to contain or reduce these costs could lead to patients being unable to obtain approval for payment from these third-party payors. If that were to occur, sales of finished medical devices that include our components may decline significantly and our customers may reduce or eliminate purchases of our components. The cost containment measures that healthcare providers are instituting, both in the U.S. and internationally, could harm our ability to operate profitably. For example, managed care organizations have successfully negotiated volume discounts for pharmaceuticals. While this type of discount pricing does not currently exist for medical devices, if managed care or other organizations were able to affect discount pricing for devices, it may result in lower prices to our customers from their customers and, in turn, reduce the amounts we can charge our customers for our medical devices.

**Our research and development efforts rely upon investments and alliances, and we cannot guarantee that any previous or future investments or alliances will be successful.**

Our strategy to provide a broad range of therapies to restore patients to fuller, healthier lives requires a wide variety of technologies, products, and capabilities. The rapid pace of technological development in the medical industry and the specialized expertise required in different areas of medicine make it difficult for one company alone to develop a broad portfolio of technological solutions. In addition to internally generated growth through our research and development efforts, historically we have relied, and expect to continue to rely, upon investments and alliances to provide us access to new technologies both in areas served by our existing businesses as well as in new areas.

We expect to make future investments where we believe that we can stimulate the development of, or acquire, new technologies and products to further our strategic objectives and strengthen our existing businesses. Investments and alliances in and with medical technology companies are inherently risky, and we cannot guarantee that any of our previous or future investments or alliances will be successful or will not materially adversely affect our consolidated earnings, financial condition, or cash flows.

**The success of many of our products depends upon strong relationships with physicians.**

If we fail to maintain our working relationships with physicians, many of our products may not be developed and marketed in line with the needs and expectations of the professionals who use and support our products, which could cause a decline in earnings and profitability. The research, development, marketing, and sales of many of our new and
improved products is dependent upon our maintaining working relationships with physicians. We rely on these professionals to provide us with considerable knowledge and experience regarding our products and the marketing of our products. Physicians assist us as researchers, marketing and product consultants, inventors, and as public speakers. If we are unable to maintain our strong relationships with these professionals and continue to receive their advice and input, the development and marketing of our products could suffer, which could have a material effect on our consolidated earnings, financial condition, or cash flows.

**We may be unable to successfully integrate Kyphon’s operations or realize the anticipated benefits of the merger.**

We entered into a merger agreement with Kyphon because we believe that the merger will be beneficial to us and our shareholders. Achieving the anticipated benefits of the merger depends in part on whether we can successfully integrate Kyphon’s business with our existing business. We may not be successful in integrating Kyphon’s business as efficiently and effectively as we anticipate. The integration of certain operations following the merger will require significant management resources which may distract attention from our day-to-day business. Any inability of management to successfully integrate Kyphon’s business could have a material adverse effect on our business and result of operations. We may not achieve anticipated cost synergies or long-term strategic benefits of the merger. An inability to realize the full extent of, or any of, the anticipated benefits of the merger, as well as any delays encountered in the integration process, could have an adverse effect on our business and results of operations, which may affect the value of our common stock after completion of the merger. Risks we may encounter in connection with the integration of Kyphon’s business also include:

- difficulty incorporating acquired technologies or products with our existing product lines and maintaining uniform standards, controls, procedures and policies,

**Negative conditions in the global credit market may impair our commercial paper program, our auction rate securities and our other fixed income securities, which may cause losses and cause us to face liquidity issues.**

We have investments in marketable debt securities which are classified and accounted for as available-for-sale. Our debt securities include government securities, commercial paper, corporate bonds, bank certificates of deposit, and mortgage backed and other asset backed securities, including auction rate securities. Recent market conditions indicate significant uncertainty on the part of investors on the economic outlook for the U.S. and for financial institutions that have potential exposure to the sub-prime housing market. This uncertainty has created reduced liquidity across the fixed income investment market, including the securities that we invest in. As a result, some of our investments have experienced reduced liquidity. In the event we need to sell these securities, we may not be able to do so in a timely manner or for a value that is equal to the underlying principal. In addition, we may be required to adjust the carrying value of the securities and record an impairment charge. If we determine that the fair value of the
securities is temporarily impaired, we would record a temporary impairment within other comprehensive income, a component of shareholders’ equity. If it is determined that the fair value of these securities is other-than-temporarily impaired, we would record a loss in our consolidated statements of earnings, which could materially adversely impact our results of operations and financial condition.

Additionally, if uncertainties in the credit and capital markets continue, these markets deteriorate further or we experience any rating downgrades on any investments in our portfolio, funds associated with these securities may not be liquid or available to fund current operations, and/or we may incur further temporary or other-than-temporary impairments in the carrying value of our investments, which could negatively affect our financial condition, cash flow and reported earnings. Negative market conditions may also impair our ability to access the capital markets through the issuance of commercial paper or debt securities, or may impact our ability to sell such securities at a reasonable price, and may negatively impact our ability to borrow from financial institutions.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our principal offices are owned by us and located in the Minneapolis, Minnesota metropolitan area. Manufacturing or research facilities are located in Arizona, California, Colorado, Connecticut, Florida, Indiana, Massachusetts, Michigan, Minnesota, Tennessee, Texas, Washington, Puerto Rico, China, France, Ireland, Mexico, The Netherlands, and Switzerland. Our total manufacturing and research space is approximately 3.0 million square feet, of which approximately 75 percent is owned by us and the balance is leased.

We also maintain sales and administrative offices in the U.S. at approximately 90 locations in 40 states or jurisdictions and outside the U.S. at approximately 130 locations in 38 countries. Most of these locations are leased. We are using substantially all of our currently available productive space to develop, manufacture, and market our products. Our facilities are in good operating condition, suitable for their respective uses and adequate for current needs.

Item 3. Legal Proceedings

The information in Note 15 to the consolidated financial statements is incorporated herein by reference set forth in Exhibit 13 hereto and will be included in our 2008 Annual Report.

Table of Contents

The Company has received two letter requests from the chair of the U.S. Senate Committee on Finance. On September 20, 2007, the chair sent a letter requesting information about financial ties between the medical device industry and practicing physicians. On October 16, 2007, the chair sent a letter requesting information about the Company’s decision to suspend distribution of its Sprint Fidelis family of defibrillation leads. The Company is cooperating with the information requests.
On September 25, 2007, the Company received a letter from the SEC requesting information relating to any potential violations of the U.S. Foreign Corrupt Practices Act in connection with the sale of medical devices in an unspecified number of foreign countries, including Greece, Poland and Germany. The letter notes that the Company is a significant participant in the medical device industry, and seeks any information concerning certain types of payments made directly or indirectly to government-employed doctors. A number of competitors have publicly disclosed receiving similar letters. On November 16, 2007, the Company received a letter from the Department of Justice requesting any information provided to the SEC. The Company is cooperating with both requests.

On or about October 31, 2007, the Company received a letter from the United States Attorney’s Office for the Eastern District of Pennsylvania requesting documents relating to the Company’s relationship with one of its customers and any payments or things of value provided by the Company to physicians, physician groups, hospitals, medical practices or other entities relating to the purchase of the Company’s cardiac resynchronization therapy devices and cardiac stents. The Company is cooperating with the investigation.

Item 4. Submission of Matters to a Vote of Security Holders

Not applicable.

PART II

Item 5. Market for Medtronic’s Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities

The information in the sections entitled Price Range of Medtronic Stock and Stock Exchange Listing are incorporated by reference herein set forth in Exhibit 13 hereto and will be included in our 2008 Annual Report.

In October 2005 and June 2007, the Company’s Board of Directors authorized the repurchase of 40 million and 50 million shares of the Company’s stock, respectively. In addition, in April 2006, the Board of Directors made a special authorization for the repurchase of up to 50 million shares in connection with the $4.400 billion Senior Convertible Note offering. As authorized by the Board of Directors each program expires when its total number of authorized shares has been repurchased.

The following table provides information about the shares repurchased by Medtronic during fourth quarter of fiscal year 2008:

<table>
<thead>
<tr>
<th>Fiscal Period</th>
<th>Total Number of Shares Purchased</th>
<th>Average Price Paid per Share</th>
<th>Total Number of Shares Purchased as a Part of Publicly Announced Program</th>
<th>Maximum Number of Shares that May Yet Be Purchased Under the Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/28/08</td>
<td>1,719,900</td>
<td>$ 46.51</td>
<td>1,719,900</td>
<td>34,347,561</td>
</tr>
<tr>
<td>2/25/08</td>
<td></td>
<td></td>
<td></td>
<td>34,347,561</td>
</tr>
<tr>
<td>3/31/08</td>
<td></td>
<td></td>
<td></td>
<td>34,347,561</td>
</tr>
<tr>
<td>Total</td>
<td>1,719,900</td>
<td>$ 46.51</td>
<td>1,719,900</td>
<td>34,347,561</td>
</tr>
</tbody>
</table>

On June 23, 2008, there were approximately 53,600 shareholders of record of the Company’s common stock. Cash dividends declared and paid totaled 12.5 cents per share for each quarter of fiscal year 2008 and 11 cents per share for
each quarter of fiscal year 2007. Stock price comparison follows:

<table>
<thead>
<tr>
<th>Fiscal Qtr.</th>
<th>1st Qtr.</th>
<th>2nd Qtr.</th>
<th>3rd Qtr.</th>
<th>4th Qtr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008 High</td>
<td>$54.05</td>
<td>$57.86</td>
<td>$51.21</td>
<td>$50.44</td>
</tr>
<tr>
<td>2008 Low</td>
<td>50.57</td>
<td>47.00</td>
<td>45.25</td>
<td>46.19</td>
</tr>
<tr>
<td>2007 High</td>
<td>51.43</td>
<td>50.93</td>
<td>54.51</td>
<td>54.58</td>
</tr>
<tr>
<td>2007 Low</td>
<td>46.86</td>
<td>42.47</td>
<td>48.33</td>
<td>48.67</td>
</tr>
</tbody>
</table>

Item 6. Selected Financial Data

The information for fiscal years 2004 through 2008 in the section entitled “Selected Financial Data” is incorporated herein by reference to Exhibit 13 hereto and will be included in our 2008 Annual Report.

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations

The information in the section entitled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” is incorporated herein by reference to Exhibit 13 hereto and will be included in our 2008 Annual Report.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

The information in the sections entitled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Market Risk” as well as Note 5 to the consolidated financial statements is incorporated herein by reference to Exhibit 13 hereto and will be included in our 2008 Annual Report.

Item 8. Financial Statements and Supplementary Data

The Consolidated Financial Statements and Notes thereto, together with the report of independent registered public accounting firm, are incorporated herein by reference to Exhibit 13 hereto and will be included in our 2008 Annual Report.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Not applicable.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e)
under the Securities Exchange Act of 1934 (the Exchange Act)) and changes in the Company’s internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) as of the end of the period covered by this report. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of the period covered by this annual report, our disclosure controls and procedures (as defined in Rule 13a-15(e) of the Exchange Act) are effective and are adequately designed to ensure that information required to be disclosed by us in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in applicable rules and forms.

Management’s Annual Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. Management conducted an evaluation of the effectiveness of internal control over financial reporting based on the framework in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this evaluation, management concluded that the Company’s internal control over financial reporting was effective as of April 25, 2008. Our internal control over financial reporting as of April 25, 2008, has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm who has also audited our consolidated financial statements, as stated in their report which is included herein.

Changes in Internal Control over Financial Reporting

We continue to implement a new enterprise resource planning (ERP) system using a multi-phased approach which has resulted in certain changes in internal controls. During the second quarter of fiscal year 2008, portions of our Cardiac Rhythm Disease Management, CardioVascular, and Neuromodulation operating segments implemented the new ERP system which resulted in some changes in internal controls. There have been no other changes in the Company’s internal control over financial reporting during the period covered by this Annual Report on Form 10-K that have materially affected, or are reasonably likely to materially affect, the Company’s internal control over financial reporting.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The sections entitled Proposal 1 Election of Directors Directors and Nominees, Governance of Medtronic Committees of the Board and Meetings, Governance of Medtronic Audit Committee, Governance of Medtronic Audit Committee Independence and Financial Experts, Governance of Medtronic Corporate
We have adopted a written Code of Ethics that applies to our Chief Executive Officer, Chief Financial Officer, Corporate Treasurer, Corporate Controller and other senior financial officers performing similar functions who are identified from time to time by the Chief Executive Officer. We have also adopted a written Code of Business Conduct and Ethics for Board members. The Code of Ethics for senior financial officers, which is part of our broader Code of Conduct applicable to all employees, and the Code of Business Conduct and Ethics for Board members are posted on our website, www.medtronic.com under the Corporate Governance caption. Any amendments to, or waivers for executive officers or directors of, these ethics codes will be disclosed on our website promptly following the date of such amendment or waiver.

Item 11. Executive Compensation

The sections entitled Governance of Medtronic Director Compensation, Governance of Medtronic Compensation Committee Compensation Committee Interlocks and Insider Participation, Compensation Discussion and Analysis, and Executive Compensation in our Proxy Statement for our 2008 Annual Shareholders Meeting are incorporated herein by reference. The section entitled Compensation Committee Report in our Proxy Statement for our 2008 Annual Shareholders Meeting is furnished herein by reference.


The sections entitled Share Ownership Information and Executive Compensation Equity Compensation Plan Information in our Proxy Statement for our 2008 Annual Shareholders Meeting are incorporated herein by reference.

Item 13. Certain Relationships, Related Transactions and Director Independence

The sections entitled Proposal 1 Election of Directors Certain Relationships and Related Transactions and Proposal 1 Election of Directors Director Independence in our Proxy Statement for our 2008 Annual Shareholders Meeting are incorporated herein by reference.

Table of Contents

Item 14. Principal Accounting Fees and Services

The sections entitled Governance of Medtronic Audit Committee Audit Committee Pre-Approval Policies and Report of the Audit Committee Audit and Non-Audit Fees in our Proxy Statement for our 2008 Annual Shareholders Meeting are incorporated herein by reference.
Item 15. Exhibits, Financial Statement Schedules

(a) Financial Statements

The following report and consolidated financial statements are incorporated herein by reference in Item 8.


The section entitled Consolidated Balance Sheets April 25, 2008 and April 27, 2007 is set forth in Exhibit 13 hereto and will be included in our 2008 Annual Report.

The section entitled Consolidated Statements of Shareholders Equity years ended April 25, 2008, April 27, 2007, and April 28, 2006 is set forth in Exhibit 13 hereto and will be included in our 2008 Annual Report.

The section entitled Consolidated Statements of Cash Flows years ended April 25, 2008, April 27, 2007, and April 28, 2006 is set forth in Exhibit 13 hereto and will be included in our 2008 Annual Report.

The section entitled Notes to Consolidated Financial Statements is set forth in Exhibit 13 hereto and will be included in our 2008 Annual Report.

2. Financial Statement Schedules


All other schedules are omitted because they are not applicable or the required information is shown in the financial statements or Notes thereto.

3. Exhibits

2.1 Agreement and Plan of Merger Among Medtronic, Inc., Jets Acquisition Corporation and Kyphon Inc. (Dated as of July 26, 2007) (Exhibit 2.1). (u)

3.1 Medtronic Restated Articles of Incorporation, as amended (Exhibit 3.1).(a)

3.2 Medtronic Bylaws, as amended to date (Exhibit 3.2).(b)

4.1 Rights Agreement, dated as of October 26, 2000, between Medtronic, Inc. and Wells Fargo Bank Minnesota, National Association, including as: Exhibit A thereto the form of Certificate of Designations, Preferences and Rights of Series A Junior Participating Preferred Shares of Medtronic, Inc.; and Exhibit B the form of Preferred Stock Purchase Right Certificate (Exhibit 4.1).(c)

4.2 Indenture, dated as of September 11, 2001, between Medtronic, Inc. and Wells Fargo Bank Minnesota, N.A. (Exhibit 4.2).(d)
## Table of Contents

4.3 Credit Agreement ($1,000,000,000 Five Year Revolving Credit Facility) dated as of January 20, 2005, among Medtronic, Inc. as Borrower, certain of its subsidiaries as guarantors, Citicorp USA, Inc., as Administrative Agent and Bank of America, N.A. as Syndication Agent, and Citigroup Global Markets Inc. and Banc of America Securities LLC as Joint Lead Arrangers and Joint Book Managers (Exhibit 4.1).(e)

4.4 Form of Indenture between Medtronic, Inc. and Wells Fargo Bank, National Association (Exhibit 4.1).(f)

4.5 Indenture dated as of September 15, 2005 between the Company and Wells Fargo Bank, National Association, as Trustee, with respect to the 4.375% Senior Notes due 2010 and 4.750% Senior Notes due 2015 (including the Forms of Notes thereof) (Exhibit 4.1).(g)

4.6 Form of 4.375% Senior Notes, Series B due 2010 (Exhibit 4.2).(g)

4.7 Form of 4.750% Senior Notes, Series B due 2015 (Exhibit 4.3).(g)

4.8 Indenture by and between Medtronic, Inc. and Wells Fargo Bank, N.A., as trustee dated as of April 18, 2006 (including the Forms of Convertible Senior Notes thereof) (Exhibit 4.1).(h)

4.9 Credit Agreement dated as of December 20, 2006, among Medtronic, Inc., as Borrower, the Lenders party thereto, Bank of America N.A., as Issuing Bank, and Citicorp USA, Inc., as Administrative Agent, Issuing Bank and Swingline Lender (Exhibit 4.1).(i)

*10.1 1994 Stock Award Plan (amended and restated effective as of January 1, 2008) (Exhibit 10.1).(t)

*10.2 Medtronic Incentive Plan (amended and restated effective as of January 1, 2008) (Exhibit 10.2).(t)

*10.3 Executive Incentive Plan (Appendix C).(l)

*10.4 Form of Employment Agreement for Medtronic executive officers (Exhibit 10.5).(a)

*10.5 Capital Accumulation Plan Deferral Program (as amended and restated generally effective January 1, 2008)

*10.6 Stock Option Replacement Program (Exhibit 10.8).(a)

*10.7 Medtronic, Inc. 1998 Outside Director Stock Compensation Plan (as amended and restated effective as of January 1, 2008) (Exhibit 10.3).(t)

*10.8 Amendment effective October 25, 2001, regarding change in control provisions in the Management Incentive Plan (Exhibit 10.10).(j)

10.9 Indemnification Trust Agreement (Exhibit 10.11).(b)


*10.11 Form of Restricted Stock Award Agreement (Exhibit 10.3).(e)

*10.12 Form of Non-Qualified Stock Option Agreement 2003 Long-Term Incentive Plan (four year vesting) (Exhibit 10.1).(e)

*10.13 Form of Non-Qualified Stock Option Agreement 2003 Long-Term Incentive Plan (immediate vesting) (Exhibit 10.2).(e)

*10.14 Form of Initial Option Agreement under the Medtronic, Inc. 1998 Outside Director Stock Compensation Plan (Exhibit 10.17).(o)

*10.15 Form of Annual Option Agreement under the Medtronic, Inc. 1998 Outside Director Stock Compensation Plan (Exhibit 10.18).(o)

*10.16 Form of Replacement Option Agreement under the Medtronic, Inc. 1998 Outside Director Stock Compensation Plan (Exhibit 10.19).(o)
<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.17</td>
<td>Form of Restricted Stock Units Award Agreement 2003 Long-Term Incentive Plan (Exhibit 10.20).(o)</td>
</tr>
<tr>
<td>10.18</td>
<td>Form of Performance Share Award Agreement 2003 Long-Term Incentive Plan (Exhibit 10.21).(o)</td>
</tr>
<tr>
<td>10.19</td>
<td>Medtronic, Inc. Supplemental Executive Retirement Plan (as restated generally effective January 1, 2008) (Exhibit 10.1).(s)</td>
</tr>
<tr>
<td>10.20</td>
<td>Purchase Agreement by and among Medtronic, Inc. and the Initial Purchasers named therein dated as of April 12, 2006 (Exhibit 10.1).(h)</td>
</tr>
<tr>
<td>10.21</td>
<td>Registration Rights Agreement by and among Medtronic, Inc. and the other parties named therein dated as of April 18, 2006 (Exhibit 4.2).(h)</td>
</tr>
<tr>
<td>10.22</td>
<td>2003 Long-Term Incentive Plan (as Amended and Restated effective as of January 1, 2008) (Exhibit 10.4).(t)</td>
</tr>
<tr>
<td>10.23</td>
<td>Form of Option Agreement under the 2003 Long-Term Incentive Plan effective June 22, 2006 (Exhibit 10.23).(q)</td>
</tr>
<tr>
<td>10.24</td>
<td>Form of Restricted Stock Agreement under the 2003 Long-Term Incentive Plan effective June 22, 2006 (Exhibit 10.24).(q)</td>
</tr>
<tr>
<td>10.25</td>
<td>Form of Restricted Stock Unit Agreement under the 2003 Long-Term Incentive Plan effective June 22, 2006 (Exhibit 10.25).(q)</td>
</tr>
<tr>
<td>10.26</td>
<td>Form of Performance Award Agreement under the 2003 Long-Term Incentive Plan effective June 22, 2006 (Exhibit 10.26).(q)</td>
</tr>
<tr>
<td>10.27</td>
<td>Form of Confirmations of Convertible Note Hedge related to Convertible Senior Notes issued on April 12, 2006, including Schedule thereto (Exhibit 10.27).(q)</td>
</tr>
<tr>
<td>10.28</td>
<td>Form of Warrants issued on April 12, 2006, including Schedule thereto (Exhibit 10.28).(q)</td>
</tr>
<tr>
<td>10.29</td>
<td>Form of Amendment issued on April 13, 2006 to Form of Warrants issued on April 12, 2006, including Schedule thereto (Exhibit 10.29).(q)</td>
</tr>
<tr>
<td>10.30</td>
<td>Amendment No. 1 dated September 5, 2006, to Indemnification Trust Agreement (Exhibit 10.1).(r)</td>
</tr>
<tr>
<td>10.31</td>
<td>Summary of Compensation Arrangements for Named Executive Officers and Directors</td>
</tr>
<tr>
<td>10.32</td>
<td>Form of Restricted Stock Award Agreement under the 2003 Long-Term Incentive Plan (Exhibit 10.3).(s)</td>
</tr>
<tr>
<td>10.33</td>
<td>Form of Restricted Stock Unit Award Agreement under the 2003 Long-Term Incentive Plan (Exhibit 10.4).(s)</td>
</tr>
<tr>
<td>10.34</td>
<td>Medtronic, Inc. Israeli Amendment to the 2003 Long-Term Incentive Plan (Exhibit 10.5).(t)</td>
</tr>
<tr>
<td>10.35</td>
<td>Medtronic, Inc. Kyphon Inc. 2002 Stock Plan (Amended and Restated July 26, 2007, as further amended on October 18, 2007) (Exhibit 10.6).(t)</td>
</tr>
<tr>
<td>10.36</td>
<td>Addendum: Medtronic, Inc. Kyphon Inc. 2002 Stock Plan (dated December 13, 2007) (Exhibit 10.7).(t)</td>
</tr>
<tr>
<td>10.37</td>
<td>Letter Agreement dated April 29, 2008 between Michael DeMane and Medtronic, Inc.</td>
</tr>
<tr>
<td>10.38</td>
<td>Form of Change of Control Employment Agreement for Medtronic Executive Officers</td>
</tr>
<tr>
<td>10.39</td>
<td>Form of Non-Qualified Stock Option Agreement 2003 Long-Term Incentive Plan</td>
</tr>
<tr>
<td>10.40</td>
<td>Form of Restricted Stock Unit Award Agreement 2003 Long-Term Incentive Plan</td>
</tr>
</tbody>
</table>
Table of Contents

13 This exhibit contains the information referenced under Part II, Items 5, 6, 7, 7A and 8
21 List of Subsidiaries
23 Consent of Independent Registered Public Accounting Firm
24 Powers of Attorney
31.1 Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2 Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1 Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2 Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

(a) Incorporated herein by reference to the cited exhibit in our Annual Report on Form 10-K for the year ended April 27, 2001, filed with the Commission on July 26, 2001.


(c) Incorporated herein by reference to the cited exhibit in our Report on Form 8-A, including the exhibits thereto, filed with the Commission on November 3, 2000.

(d) Incorporated herein by reference to the cited exhibit in our Report on Form 8-K/A, filed with the Commission on November 13, 2001.

(e) Incorporated herein by reference to the cited exhibit in our Quarterly Report on Form 10-Q for the quarter ended January 28, 2005, filed with the Commission on March 7, 2005.

(f) Incorporated herein by reference to the cited exhibit in our registration statement on Amendment No. 2 to Form S-4, filed with the Commission on January 10, 2005.

(g) Incorporated herein by reference to the cited exhibit in our Form S-4, filed with the Commission on December 6, 2005.

(h) Incorporated herein by reference to the cited exhibit in our Current Report on Form 8-K, filed with the Commission on April 18, 2006.

(i) Incorporated herein by reference to the cited exhibit in our Quarterly Report on Form 10-Q for the quarter ended January 26, 2007, filed with the Commission on March 6, 2007.


Incorporated herein by reference to the cited exhibit in our Form S-8, filed with the Commission on November 21, 2005.

Incorporated herein by reference to the cited appendix to our 2005 Proxy Statement, filed with the Commission on July 21, 2005.

Incorporated herein by reference to the cited exhibit in our Annual Report on Form 10-K for the year ended April 29, 2005, filed with the Commission on June 29, 2005.

Incorporated herein by reference to the cited exhibit in our Quarterly Report on Form 10-Q for the quarter ended October 28, 2005, filed with the Commission on December 6, 2005.

Incorporated herein by reference to the cited exhibit in our Annual Report on Form 10-K for the year ended April 28, 2006, filed with the Commission on June 28, 2006.

Incorporated herein by reference to the cited exhibit in our Quarterly Report on Form 10-Q for the quarter ended October 27, 2006, filed with the Commission on December 5, 2006.

Incorporated herein by reference to the cited exhibit in our Quarterly Report on Form 10-Q for the quarter ended October 26, 2007, filed with the Commission on December 4, 2007.


Incorporated herein by reference to the cited exhibit in our Current Report on Form 8-K, filed with the Commission on July 30, 2007.

*Items that are management contracts or compensatory plans or arrangements required to be filed as an exhibit pursuant to Item 15(a)(3) of Form 10-K.

Confidential treatment requested as to portions of the exhibit. Confidential portions omitted and filed separately with the Securities and Exchange Commission.
SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

MEDTRONIC, INC.

Dated: June 24, 2008

By: /s/ William A. Hawkins
    William A. Hawkins
    President and
    Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, the report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

MEDTRONIC, INC.

Dated: June 24, 2008

By: /s/ William A. Hawkins
    William A. Hawkins
    President and
    Chief Executive Officer

Dated: June 24, 2008

By: /s/ Gary L. Ellis
    Gary L. Ellis
    Senior Vice President and
    Chief Financial Officer
    (Principal Financial and
    Accounting Officer)

Directors

Richard H. Anderson
David L. Calhoun
Arthur D. Collins, Jr.
Victor J. Dzau, M.D.
William A. Hawkins
Shirley Ann Jackson, Ph.D
James T. Lenehan
Denise M. O’Leary
Kendall J. Powell
Robert C. Pozen
Jean-Pierre Rosso
Jack W. Schuler

Terrance L. Carlson, by signing his name hereto, does hereby sign this document on behalf of each of the above named directors of the registrant pursuant to powers of attorney duly executed by such persons.

Dated: June 24, 2008

By: /s/ Terrance L. Carlson
Table of Contents

MEDTRONIC, INC. AND SUBSIDIARIES
SCHEDULE II  VALUATION AND QUALIFYING ACCOUNTS

(dollars in millions)

<table>
<thead>
<tr>
<th></th>
<th>Balance at Beginning of Fiscal Year</th>
<th>Charges to Earnings</th>
<th>Other Changes (Debit) Credit</th>
<th>Balance at End of Fiscal Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allowance for doubtful accounts:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year ended 4/25/08</td>
<td>$160</td>
<td>$31</td>
<td>$(101)(a)</td>
<td>$99</td>
</tr>
<tr>
<td></td>
<td>$</td>
<td>$9(b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year ended 4/27/07</td>
<td>$184</td>
<td>$31</td>
<td>$(59)(a)</td>
<td>$160</td>
</tr>
<tr>
<td></td>
<td>$</td>
<td>$4(b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year ended 4/28/06</td>
<td>$175</td>
<td>$39</td>
<td>$(24)(a)</td>
<td>$184</td>
</tr>
<tr>
<td></td>
<td>$</td>
<td>$(6)(b)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(a) Uncollectible accounts written off, less recoveries.

(b) Reflects primarily the effects of foreign currency fluctuations.