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# Implantable Medical Devices

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Industry Study with Forecasts for **2015 & 2020**

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Study #2852 | March 2012 | \$5100 | 395 pages

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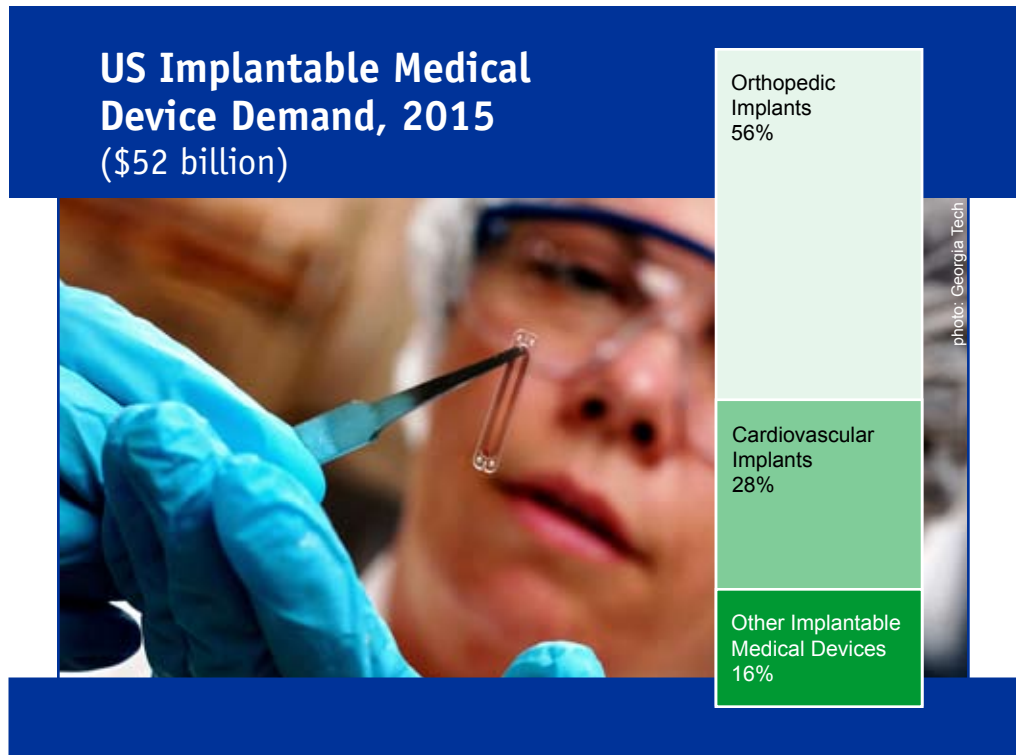
*Demand for implantable medical devices will benefit from advances that should raise overall confidence in these products, as well as a lack of alternative treatments for chronic disorders.*

## US demand to grow 7.7% annually through 2015

US demand for implantable medical devices is forecast to increase 7.7 percent annually to \$52 billion in 2015, benefiting from technological advances and the development of next generation devices that should increase patient and provider confidence in implant products. Demand will also benefit from the lack of alternative treatments for many chronic disorders and injuries. Over the long term, sales for medical implants will be challenged as insurance providers tighten control over implantation costs. However, the ability of medical implants to reduce overall treatment cost for many conditions, including osteoarthritis and chronic heart failure, will promote growth for these products.

## Orthopedic implants to remain largest segment

Orthopedic implants will remain the largest implantable device segment in market value. US demand for orthopedic implants is forecast to rise 8.8 percent annually through 2015, spurred by technological improvements and safety enhancements. Gains will also reflect the growing prevalence of degenerative musculoskeletal disorders and lifestyle changes that place people at risk for sports and exercise injuries. At the same time, as products become more durable and long-lived, demand will increasingly come from an enlarged patient base for new surgeries rather than for replace-



ments. Also challenging this segment over the long term will be advances in pharmaceutical alternatives to treat arthritic conditions. However, the segment will benefit from a strong base of insurance approvals for orthopedic implants, as well as a stable and well-funded medical delivery system and product designs that allow for less invasive surgeries.

## Pacing devices to realize greatest sales gains in cardiovascular segment

Cardiovascular implants have strong potential to reduce the overall treatment cost for heart disease, and at the same time contribute significantly to improved

quality of life. Demand for these devices is expected to grow 5.1 percent per year through 2015. Pacing devices will realize the greatest sales gains, largely due to growth in cardiac resynchronization therapy (CRT). A focus on developing new generations of pacing devices that reduce mortality and improve patient outcomes has resulted in greater pricing flexibility in an increasingly cost-conscious health care environment. Demand for cardiovascular stents and related devices will be similar to that of demand for pacing devices. The fastest growth will be in structural implants, as technological advances in heart valves, ventricular-assist devices and implantable monitors will encourage greater use.

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## Sample Text, Table & Chart

### ORTHOPEDIC IMPLANTS

#### Motion Preservation Devices

Demand for motion preservation devices is forecast to grow percent annually to \$1 billion by 2020. Motion preservation surgery, also called dynamic stabilization, is an alternative to spinal fusion for the treatment of degenerative disc disease. The procedure involves replacing a degenerated disc with an artificial disc or disc implants of this type. Synthes' PRODISC-C and PRODISC-L, which are engineered to relieve pain resulting from degenerative disc disease. Other artificial disc and disc nucleus replacements are in various stages of development. This procedure offers advantages in mobility over spinal fusion. Demand will be boosted by this benefit, along with advances in product technologies.

In traditional spinal fusion procedures for back and neck pain, degenerated discs are immobilized and stabilized through the use of bone grafts or substitutes. These procedures ease chronic pain, but usually impair overall mobility. Artificial discs function as joints and mimic natural flexion, extension and rotation provided by healthy intervertebral discs. As a result, they reduce pain and retain mobility.

These products have been used successfully in Europe since the 1980s, but were not available in the US until late 2004, when the FDA approved DePuy's CHARITE artificial disc for degenerative disease in the lumbar region. Synthes' PRODISC-L, a complete replacement, was authorized for US marketing in 2006, and the FDA approved Medtronic Sofamor Danek's PRESTIGE, artificial disc for cervical applications. Synthes soon followed with PRODISC-C for cervical implantation, which was approved in 2007, and in 2009 Medtronic Sofamor Danek received approval to market the BRYAN Cervical Disc for the treatment of level cervical disc disease. These devices are designed to relieve

87

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**SAMPLE  
TEXT**

TABLE III-12

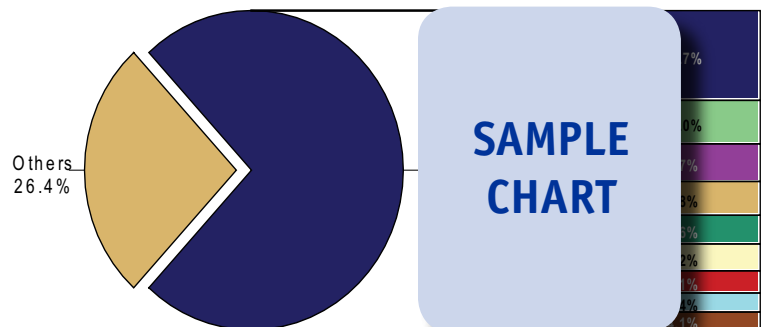
ORTHOBIOLIGICS DEMAND BY PRODUCT GROUP  
(million dollars)

Item	2000	2005	2010	2015	2020
Orthopedic Implant Procedures (000)	1,100	1,200	1,300	1,400	1,500
\$ orthobiologics/procedure	100	110	120	130	140
Orthobiologics Demand	110	132	156	182	210
Hyaluronic Acid	10	11	12	13	14
Bone Substitutes	15	16	17	18	19
Bone Growth Factors	20	21	22	23	24
Bone Cement	25	26	27	28	29
Tissue Implants	30	31	32	33	34
% orthobiologics	10%	11%	12%	13%	14%
Orthopedic Implants Demand	714	1,068	1,951	2,740	4,150

**SAMPLE  
TABLE**

CHART VI-1

US IMPLANTABLE MEDICAL DEVICES --  
MARKET SHARE BY COMPANY, 2010  
(\$36.0 billion)



**SAMPLE  
CHART**

## Sample Profile, Table & Forecast

**TABLE IV-6**  
**PACING ACCESSORIES DEMAND BY PRODUCT GROUP**  
 (million dollars)

Item	2000	2005	2010	2015	2020
Pacing Implant Procedures (000) pacing accessories/procedure				50	8
Pacing Accessories Demand (000 units)				2	0
Pacing Leads				2	0
Pacing Batteries				2	0
Pacing Leads (000\$/unit)				2	1
Pacing Batteries (000\$/unit)				0	0
Pacing Accessories Demand				0	0
Pacing Leads:				0	0
ICD Leads				0	0
ICP Leads				0	0
CRT-D Leads				0	0
Pacing Batteries				0	0
% pacing accessories				0	0
Pacing Device Demand	2920	4055	5747	7050	9400



### COMPANY PROFILES

#### Wright Medical Group Incorporated

5677 Airline Road  
 Arlington, TN 38002  
 901-867-9000  
<http://www.wrightmedical.com>

Sales: \$1.4 billion (2010)  
 US Sales: \$1.4 billion (2010)  
 Research & Development: \$100 million (2010)  
 Employees: 1,000 (2010)

**SAMPLE  
PROFILE**

**Key Products:** Total knee implants; synthetic and autologous grafts; and bone graft substitutes

Wright Medical Group is a manufacturer of orthopedic medical devices, specializing in reconstructive joint devices and orthobiologics. Wright Medical operates primarily through the Wright Medical Technology Incorporated subsidiary (Arlington, Tennessee).

The Company participates in the US implantable medical devices industry through the production and marketing of knee, hip and extremity reconstruction, and biologics products. These products are manufactured by the Wright Medical Technology subsidiary at a plant in Arlington, Tennessee that also houses warehousing and administrative offices.

**Knee Reconstruction Products** -- Wright Medical Technology's knee reconstructive devices, which generated 2010 sales of \$129 million, include total, partial and revision products. Specific total knee implants include the ADVANCE medial-pivot knee implant, which is engineered not to slide forward as it bends, thereby providing increased stability; ADVANCE STATURE femoral component implants, which

"Consisting of leads and batteries, pacing accessories are projected to post demand of \$1.4 billion in 2015. Pacing leads will generate virtually all sales, due to the availability of improved, value-added products. A small amount of demand will remain for pacing batteries which, because of their increased longevity, will need to be replaced less often. In current models, batteries are expected to last over the product life cycle, and replacements will be rare."  
 --Section IV, pg. 133



**OTHER STUDIES**

**World Disposable Medical Supplies**

World demand for disposable medical supplies will rise 6.2 percent annually to \$198 billion in 2016. The US and China will be the largest markets, while India will lead gains. Dialysis disposables, diagnostic and lab disposables, respiratory supplies and devices and infusion devices will be among the fastest growing types. This study analyzes the \$146.5 billion world disposable medical supply industry, with forecasts for 2016 and 2021 by product, world region and for 15 major countries. The study also evaluates company market share and profiles industry competitors.

#2951 ..... October 2012 ..... \$6200

**In Vitro Diagnostics**

US demand for *in vitro* diagnostic (IVD) products will rise 6.1 percent annually to \$24.7 billion in 2016. Molecular diagnostic products will grow the fastest due to their advantages in the detection of infectious diseases, tumors and genetic disorders. Hospital labs will continue to comprise the largest and most diverse market. This study analyzes the \$18.4 billion US IVD products industry, with forecasts for 2016 and 2021 by type, application and market. The study also considers market environment factors, evaluates company market share and profiles industry players.

#2923 ..... July 2012 ..... \$5100

**World Wound Management Products**

World demand for wound management products will increase 5.3 percent annually to \$39.3 billion in 2016. China will be the fastest growing market. Developed countries, led by the US, will remain a much larger market than developing countries. Wound healing agents and wound dressings will be among the fastest growing products. This study analyzes the \$30.3 billion world wound management product industry, with forecasts for 2016 and 2021 by type, world region and for 10 countries. The study also evaluates company market share and profiles industry players.

#2893 ..... May 2012 ..... \$6100

**Disposable Medical Supplies**

US disposable medical supplies demand will rise 4.3 percent yearly to \$46.7 billion in 2016. Syringes and inhalers, IV and urinary catheters, hemodialysis bloodlines, peritoneal dialysis kits, tissue sealants, biological wound dressings, Class IV garments and textiles, and blood glucose test strips will be among the fastest growing products. This study analyzes the \$37.8 billion US disposable medical supplies industry, with forecasts for 2016 and 2021 by product, market and material. The study also evaluates company market shares and profiles industry players.

#2853 ..... March 2012 ..... \$5100

**Drug Delivery Products**

US drug delivery product demand will rise 7.4 percent yearly to \$134 billion in 2015. Parenteral products will grow the fastest, led by monoclonal antibodies and polymer-encapsulated medicines. Other types expected to do well include prefilled dry powder and metered dose brachytherapy implants, and implantable drug delivery products. This study analyzes the \$93.8 billion US drug delivery system industry, with forecasts for 2015 and 2020 by material, product and application. The study also evaluates company market share and profiles industry players.

#2829 ..... January 2012 ..... \$4800

**About The Freedonia Group**

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