Surgical Equipment Market to 2018

Increased Access to Ambulatory Surgical Centers to Drive Outpatient Surgery Volumes

GBI Research
Global Business Intelligence

GBI Research Report Guidance

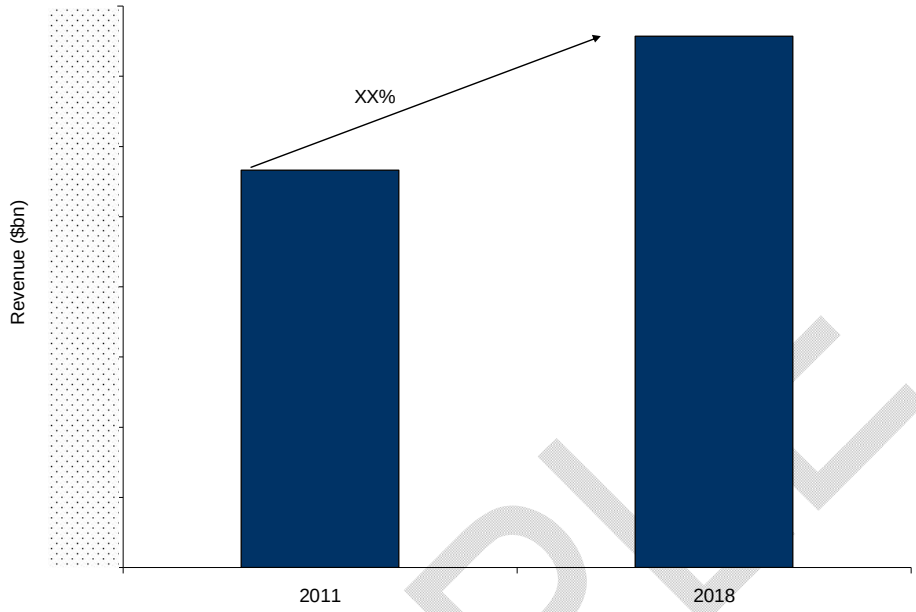
- The next chapter provides an introduction to surgical equipment providing an overview of the market.
- The chapter "Surgical Equipment: Global Market Characterization" provides information on market size from 2004 to 2011 and for the forecast period 2011 to 2018. It also has information related to the surgical equipment market trends and market dynamics. In the market dynamics section, comprehensive information is provided on market drivers and restraints. The competitive landscape for the overall surgical equipment market is also provided.
- In the next chapter, the surgical equipment market categories which include surgical sutures, hand instruments and electrosurgical devices are discussed. Market size information for the historic (2004 to 2011) and the forecast (2011 to 2018) periods are discussed for each category, along with market dynamics and competition. Leading companies' products, features and benefits are also discussed
- This is followed by a chapter on country analysis and forecasts. The surgical equipment market's size information for the historic (2004 to 2011) and the forecast (2011 to 2018) periods are provided for the US, Canada, the UK, France, Germany, Italy, Spain, Japan, China, India, Australia and Brazil. A cross-country analysis of these countries is also discussed.
- The next chapter focuses on a competitive assessment. Profiles of the leading surgical equipment companies are also provided.
- This is followed by a chapter on pipeline products. Surgical suture, hand instrument and electrosurgical device products are listed and discussed in detail. Product approval and expected launch dates are provided for some products.
- The last chapter discusses the consolidation landscape in the surgical equipment industry. The total number of deals that took place from 2008 to 2011 is provided.

Executive Summary

The Global Surgical Equipment Market to exceed $ XX billion by 2018

The Global Market for Surgical Equipment is Forecast to Exceed $XX Billion by 2018 with a Compound Annual Growth Rate (CAGR) of XX% from 2011 to 2018

Surgical Equipment, Global, Overall Revenues ($ billion), 2011–2018



Source: GBI Research Proprietary Database [accessed on April 16, 2012]; Interviews with marketing managers and surgical equipment industry experts

The global market for surgical equipment is forecast to exceed $XX billion by 2018 with a Compound Annual Growth Rate (CAGR) of XX% from 2011 to 2018. The market is expected to be driven by increased healthcare expenditure in emerging countries, improved healthcare infrastructure, an increase in the number of surgical procedures and a growing patient pool. Growing demand for plastic surgery and minimally invasive surgery, as well as an increase in the number of outpatient surgeries will drive the market growth.

Popularity of Minimally Invasive Surgical Procedures is Increasing across the World

The healthcare sector is witnessing a growing demand for Minimally Invasive Surgeries (MIS). Minimally invasive surgical techniques have been applied to most surgical specialties, such as neurology, cosmetic, cardiothoracic, ophthalmology, orthopedic, urology, vascular and dentistry. The advantages offered by MIS have resulted in an increase in the number of surgical procedures. MIS offer several benefits such as reduced post-operative pain, superior cosmetic results, faster recovery, reduced risk of infection, less bleeding, improved accuracy and visualization, and are cost-effective.

The introduction of new instruments and technologies has led to the growing popularity of MIS. Innovative laparoscopic instruments such as single umbilical ports, bendable grasping instruments and flexible-tip cameras have led to the development of single-port laparoscopic surgery. Other advanced technologies such as robotic assistance, single-incision laparoscopic surgery, video-assisted thoracoscopic and natural orifice transluminal endoscopic surgery have contributed to the expansion of MIS procedures in new specialties. The continued expansion of MIS has lead to a growing demand for advanced instruments such as laparoscopes, trocar/cannula systems, electrosurgical devices, and staples and sutures. During MIS, electrosurgical units are the most commonly used hemostatic devices as they are versatile and cost-effective.

This growing demand for surgical equipment is driving the overall growth of the surgical equipment market.

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2 Introduction

The global surgical equipment market has grown steadily during the last decade due to an increase in the number of hospitals and a rise in the number of surgical procedures performed both in developed and emerging economies. In the future, the number of surgical procedures performed in emerging economies is expected to grow at a faster rate than in developed economies, due to the higher economic growth forecasts for emerging regions.

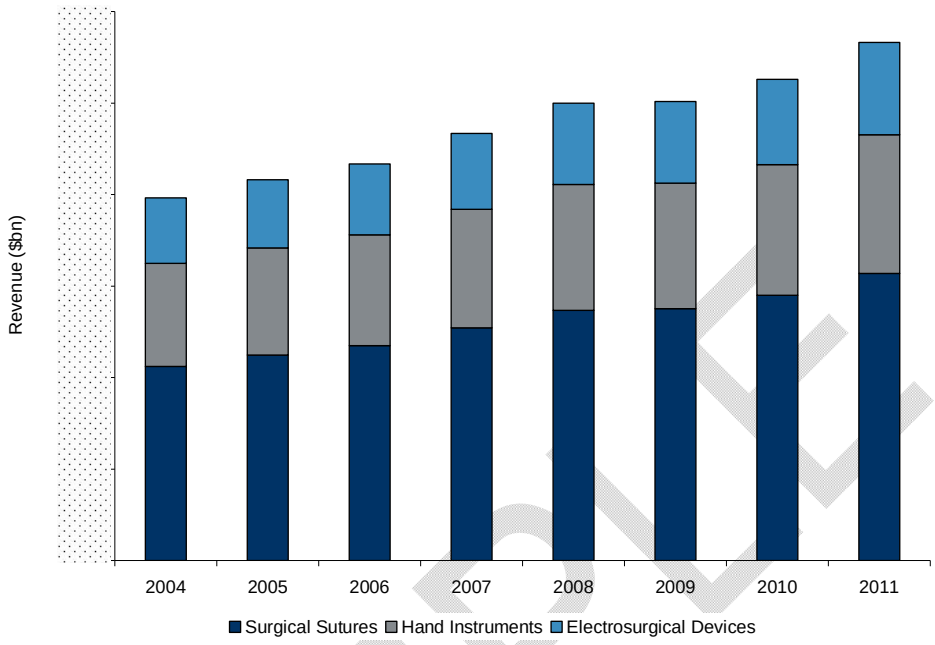
The surgical equipment market is highly competitive and fragmented with a healthy mix of international and local players. The addition of new hospitals and an increase in the number of operating rooms in existing hospitals in the emerging economies provide growth opportunities for both established players and new entrants.

The surgical equipment market is categorized into surgical sutures (absorbable and non-absorbable), hand instruments, and electrosurgical devices (electrosurgical generators and electrosurgical disposables and accessories). Surgical sutures are used as wound closure devices after the surgery is performed. Hand instruments and electrosurgical devices are used during the actual surgery.

3 Surgical Equipment: Market Characterization

3.1 Global Surgical Equipment Market, Revenue ($ billion), 2004–2011

Figure 1: Surgical Equipment Market, Global, Revenue ($bn), 2004–2011



Source: GBI Research Proprietary Database [accessed on April 16, 2012]; interviews with marketing managers and other industry experts

Table 1: Surgical Equipment Market, Global, Revenue ($bn), 2004–2011

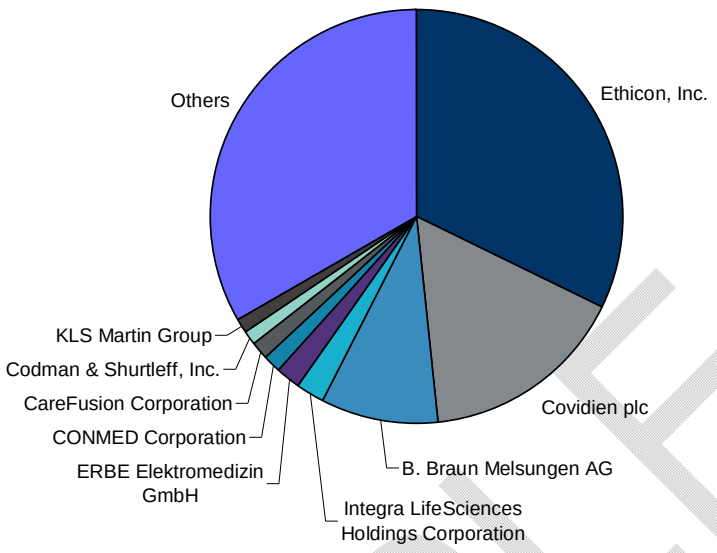
	2004	2005	2006	2007	2008	2009	2010	2011	CAGR 2004–2011
Surgical Sutures									
Hand Instruments									
Electrosurgical Devices									
Total									

Source: GBI Research Proprietary Database [accessed on April 16, 2012]; interviews with marketing managers and other industry experts

The global surgical equipment market was valued at $XX billion in 2011 and grew at a Compounded Annual Growth Rate (CAGR) of XX% between 2004 and 2011.The surgical sutures category was the largest, with revenues of $XX billion in 2011. An increase in the patient population requiring surgery, an increase in the percentage of the elderly in populations worldwide, technological advancements and the growing demand for Minimally Invasive Surgeries (MIS) have been the major drivers for the growth of the surgical equipment market

3.3 Global Surgical Equipment Market, Key Company Share (%), 2011

Figure 3: Surgical Equipment Market, Global, Company Share (%), 2011



Source: GBI Research Proprietary Database [accessed on April 16, 2012]; interviews with marketing managers and other industry experts

Table 3: Surgical Equipment Market, Global, Key Company Revenue ($m), 2011

Company Name	Revenue ($m) 2011
Ethicon,	
Covidien	
B. Braun Melsungen AG	
Integra LifeSciences Holdings Corporation	
ERBE Elektromedizin	
Conmed Corporation	
CareFusion Corporation	
Codman & Shurtleff,	
KLS Martin Group	
Others	
Total	

Source: GBI Research Proprietary Database [accessed on April 16, 2012]; interviews with marketing managers and other industry experts

Ethicon was the leader in the global surgical equipment market in 2011 with a share of XX%, followed by Covidien (XX%) and B. Braun Melsungen (XX%). The market is highly fragmented and contains numerous companies.

Ethicon has a wide product portfolio and a good influence on the Group Purchasing Organizations (GPOs) in markets such as the US. The company has contracts with GPOs that control more than XX% of the total hospital supplies market in the US

9 Appendix

9.1 Definitions

9.1.1 Surgical Equipment

The surgical equipment market includes devices used during surgical procedures to aid in the process of the surgery. These are typically devices used in the operation room setting. Electrosurgical devices, hand instruments, surgical sutures have been tracked under this market.

9.1.1.1 Electrosurgical Devices

Electrosurgical devices use high frequency electrical current to cauterize or coagulate tissue during surgical procedures. One unit of an electrosurgical device consists of an electrosurgical generator, electrode and electrode probe. Electrosurgical generators, electrosurgical disposables and accessories have been tracked under this category.

9.1.1.1.1 Electrosurgical Disposables and Accessories

Electrosurgical disposables and accessories are devices which are meant for single use during electrosurgical procedures such as tissue ablation. They include single use electrodes, electrode probes, electrode loop, and blade.

9.1.1.1.2 Electrosurgical Generator

Electrosurgical generator produces high frequency current waveform that is delivered to tissues via the connecting cable, probe and electrode to cauterize or coagulate tissue. Both monopolar and bipolar electrosurgical generators are included in this segment.

9.1.1.2 Hand Instruments

Hand instruments are hand-held devices which are used in the immediate operative field during general surgery. Scissors, forceps, needle holders, retractors, scalpels and towel clamps have been tracked under this category.

9.1.1.3 Surgical Sutures

Surgical sutures are used to hold body tissues together after injury or surgery to enhance the natural healing process. They are commonly used on the skin, internal tissues, organs and blood vessels. Two types of surgical sutures-absorbable and non-absorbable sutures are tracked under this category.

9.1.1.3.1 Absorbable Sutures

Absorbable suture is a surgical suture which is absorbed or broken down by the human body after a given period of time. Sutures made up of natural materials such as catgut and synthetic materials including polyglycolic acid, Polydioxanone, and caprolactone have been tracked under this segment as one unit. One unit refers to one box of sutures with 10 sutures unit.

9.1.1.3.2 Non Absorbable Sutures

Non-absorbable suture is made up of a material unaffected by biological body mechanism and needs to be removed after specified time. Sutures made of silk, nylon, polypropylene and polyester have been tracked under this segment. One unit refers to one box of sutures with 10 sutures unit.

9.2 Acronyms

AHRQ: Agency for Healthcare Research and Quality

ASAPS: American Society for Aesthetic Plastic Surgery

ASCs: Ambulatory Surgical Centers

BAAPS: British Association of Aesthetic Plastic Surgeons

CAGR: Compound Annual Growth Rate

CDC: Center for Disease Control

CPB: Cardiopulmonary Bypass

ERCP: Endoscopic Retrograde Cholangio-Pancreatography

GDP: Gross Domestic Product

GPO: Group Purchasing Organizations

ISAPS: International Society of Aesthetic Plastic Surgery

MIDCAB: Minimally Invasive Direct Coronary Artery Bypass Graft

MIS: Minimally Invasive Surgery

NHS: National Health Service

NOTES: Natural Orifice Translumenal Endoscopic Surgery

NRCMS: New Rural Cooperative Medical System

RF: Radiofrequency

SILS: Stitch Articulating Suturing instrument

TECAB: Totally Endoscopic Coronary Artery Bypass Graft

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9.4 Research Methodology

GBI Research's dedicated Research and Analysis Teams consists of experienced professionals with a pedigree in marketing, market research, consulting background in the medical devices industry and advanced statistical expertise.

GBI Research adheres to the Codes of Practice of the Market Research Society (www.mrs.org.uk) and the Strategic and Competitive Intelligence Professionals (www.scip.org).

All GBI Research databases are continuously updated and revised. The following research methodology is followed for all databases and reports.

9.4.1 Secondary Research

The research process begins with exhaustive secondary research on internal and external sources being carried out to source qualitative and quantitative information relating to each market.

The secondary research sources that are typically referred to include, but are not limited to:

- Company websites, annual reports, financial reports, broker reports, investor presentations and SEC Filings.
- Industry trade journals, scientific journals and other technical literature.
- Internal and external proprietary databases.
- Relevant patent and regulatory databases.
- National government documents, statistical databases and market reports.
- Procedure registries.
- News articles, press releases and web-casts specific to the companies operating in the market.

9.4.2 Primary Research

GBI Research conducts hundreds of primary interviews a year with industry participants and commentators in order to validate its data and analysis. A typical research interview fulfills the following functions:

- It provides first-hand information on the market size, market trends, growth trends, competitive landscape, future outlook etc.
- Helps in validating and strengthening the secondary research findings.
- Further develops the Analysis Team's expertise and market understanding.

Primary research involves e-mail correspondence, telephone interviews as well as face-to-face interviews for each market, category, segment and sub-segment across geographies.

The participants who typically take part in such a process include, but are not limited to:

- Industry participants: CEOs, VPs, marketing/product managers, market intelligence managers and national sales managers.
- Hospital stores, laboratories, pharmacies, distributors and para-medics.
- Outside experts: investment bankers, valuation experts, research analysts specializing in specific medical equipment markets.
- Key opinion leaders: physicians and surgeons specializing in different therapeutic areas corresponding to different kinds of medical equipment.

9.4.3 Models

Where no hard data is available GBI Research uses modeling and estimates in order to produce comprehensive data sets. The following rigorous methodology is adopted:

Available hard data is cross referenced with the following data types to produce estimates:

- Demographic data: population, split by segment.
- Macro-economic indicators: GDP, inflation rate etc.
- Healthcare Indicators: health expenditure, physicians' base, healthcare infrastructure and facilities.
- Selected epidemiological and procedure statistics.

Data is then cross checked by the expert panel.

All data and assumptions relating to modeling are stored and are available to clients on request.

9.4.4 Forecasts

GBI Research uses proprietary forecast models. The following four factors are utilized in the forecast models:

- Historic growth rates.
- Macro indicators such as population trends and healthcare spending.
- Forecast epidemiological data.
- Qualitative trend information and assumptions

Data is then cross checked by the Expert Panel.

9.4.5 Expert Panels

GBI Research uses a panel of experts to cross verify its databases and forecasts.

GBI Research's expert panel comprises marketing managers, product specialists, international sales managers from medical device companies; academics from research universities, KOLs from hospitals, consultants from venture capital funds and distributors/suppliers of medical equipment and supplies.

Historic data and forecasts are relayed to GBI Research's Expert Panel for feedback and adjusted in accordance with this feedback.

9.6 Disclaimer