

Spine Implants Market Assessment, By Product Type [Fusion Implants, Non-Fusion Implants, Bone Grafts], By Procedure [Open Surgery, Minimally Invasive Surgery], By Material [Stainless Steel, Titanium, Cobalt Chrome, Polyetheretherketone, Others], By Application [Spinal Fusion, Non-Fusion Procedures, Vertebral Compression Fracture, Spinal Decompression, Others], By End-user [Hospitals, Orthopedic Centers, Others], By Region, Opportunities and Forecast, 2017-2031F

<https://marketpublishers.com/r/SA0FEDDB4FA7EN.html>

Date: March 2025

Pages: 221

Price: US\$ 4,500.00 (Single User License)

ID: SA0FEDDB4FA7EN

Abstracts

Global spine implants market is projected to witness a CAGR of 5.56% during the forecast period 2024-2031, growing from USD 12.27 billion in 2023 to USD 18.91 billion in 2031. The global spine implants market is propelled by several factors like the growing prevalence of spinal disorders, technological advancements in spinal treatments, growing number of spinal surgeries being performed, rising preference for minimally invasive surgeries, awareness about implants and their efficacy, regulatory focus on implant technology, and strengthened insurance coverage. Additionally, industry and academia collaborations are also helping in developing effective products capable of expanding the market in the forecasted period.

The growing geriatric population is one of the factors that drives the demand for spine implants, as they are highly prone to spinal damage. Rapidly increasing cases of road accidents that lead to spinal injury also contribute to expanding the market demand for spinal implants. However, high costs associated with spinal implants, prospective risks,

and post-operative challenges are some of the challenges to tackle for the manufacturers to expand the market.

In November 2023, Spinal Elements announced the commercial launch of the Ventana 3D-Printed Interbody Portfolio that includes Ventana C Anterior Cervical Interbody System, Ventana P/T Posterior Lumbar Interbody System, and Ventana L Lateral Lumbar Interbody System. The Ventana portfolio is a new addition to the MIS Ultra platform. Spinal Elements is an established spine technology provider firm based in California.

Growing Prevalence of Spinal Disorders

The growing prevalence of spinal disorders is critical for expanding the spine implants market. The growing geriatric population is highly prone to spinal disorders due to degenerative wear and tear that comes with aging, which is anticipated to cause a significant increase in spinal disorder cases. Growing obesity, long sitting hours among working professionals, nutritional deficits, lack of physical exercise, and a huge number of accidents leading to spinal injuries are some of the factors expected to cause a high prevalence of spinal disorders. Additionally, inherited disorders, inflammations, and infections causing spine damage are also contributing to the growth in the prevalence of spine disorders.

For instance, as World Spine Care estimates, around 1 billion people worldwide experience spine pain. Annually, around 72% of the global population is anticipated to have a bout of back pain and at any given instance, around 59% of people are identified with back pain. World Spine Care also estimates that low back pain is the leading cause of disability, while neck pain is the fourth leading cause of disability, globally.

Technological Advancements in Spinal Treatments

Technical advances in the field of spinal implants, minimally invasive surgeries, and spine surgery solutions are major contributors to the growth of the spine implants market. In recent times, advances like three-dimensional (3D) printing to customize the implants, the development of expandable devices for spinal damage, and advances in motion preservation technologies, such as disc arthroplasty, seek to maintain spinal segment mobility and function, reducing the need for fusion in some cases. The involvement of automation and robotics in spine surgeries has significantly contributed to the expansion of spinal implants market. Research and development done by key market players and stakeholders to come up with innovative solutions is further driving

the demand in the market.

For instance, in January 2024, Accelus launched a linesider modular-cortical system for spinal implant surgeries. The said spinal implant system is meant to be used in vertebral compression fracture repair and is anticipated to generate USD 149 million in the United States by 2030. The technology helps surgeons to place screw shanks early in the spinal procedure and customize the construction with modular tulips and rods. Accelus is a United States-based medical technology firm dedicated to providing spinal solutions.

Road Accidents and Falls Causing Spinal Damage

The high prevalence of road accidents and falls causing spinal damage is driving the demand for spine implants. Several studies have shown that growing cases of road accidents and falls lead to spinal damage. The sheer force of impact from road accidents or the trauma from falls can lead to damage to the neck, mid-back, or lower back structures, which protect the spinal cord. This damage can result in chronic pain or paralysis. Auto and motorcycle accidents are the leading cause of spinal cord injuries, while falls are the leading cause of spinal cord injuries in individuals over the age of 65. These spinal injuries usually end up either in permanent damage or in corrective surgeries involving spine implants. Thus, road accidents and falls are crucial factors contributing to the growth in demand for spinal implants.

For example, in September 2023, The Indian Spinal Injuries Centre (ISIC) released data on traumatic spinal cord injury admissions from 2012 to 2022, which reveals that despite several road safety guidelines, road traffic accidents are the leading cause of spinal injuries contributing to around 44% of spinal injury admissions. Another study published in *Frontiers of Neurology* on December 2023 states that globally, more than 50% of spinal cord injuries are caused due to falls, followed by road accidents and interpersonal violence.

Dominance of Fusion Implants Segment

The fusion implants segment has established its dominance with strong statistics in the market. Fusion implants are used during spinal fusion surgery and include rods, plates, screws, and interbody cages. They help hold the vertebrae in place and promote the fusion of the affected spinal segments. These implants are preferred due to their ability to provide better pain and symptom relief, lower the risk of implant failure, reduce the risk of complications, and contribute to faster healing and recovery. Although based on

the type of treatment required, the choice of the implant can be different. The use of fusion implants is widespread due to their effectiveness in stabilizing the spine and promoting the fusion process, leading to better patient outcomes.

For instance, in October 2023, NovApproach Spine, which owns the patent for OneLIF interbody spinal fusion system, announced its full market launch during the North American Spine Society's Annual Meeting. OneLIF device offers surgeons versatility for single-position, anterior lumbar spine surgery. NovApproach Spine is one of the fast-growing spinal implant companies based in Florida.

Dominance of Stainless-Steel Material for Spine Implants and Highest CAGR to PEEK

The stainless-steel segment under the material type category in the spine implants market is anticipated to dominate the market. Stainless steel and titanium are the most widely used materials for spinal implants due to their strength and compatibility with MRI scans. Stainless steel is a type of metal alloy that contains iron, chromium, and nickel, and it has good corrosion resistance and mechanical properties. It is also biocompatible and has been used in medical devices for decades. Nowadays, titanium implants are in trend due to their high durability and lightweight as compared to stainless steel. Polyetheretherketone (PEEK) offers advantages such as radiolucency, which allows for better visualization on imaging studies, and a modulus of elasticity close to that of bone, reducing stress shielding and the risk of subsidence, and thus it is expected to grow at a faster rate.

For instance, in March 2023, Curiteva, Inc. announced that it has got FDA 510(k) clearance for its truly novel 3D printed PEEK implant. As per the FDA, the porous PEEK cervical interbody fusion system is suitable for intervertebral body fusion of the spine in skeletally mature patients. Curiteva, Inc. is an Alabama-based technology company dedicated to offering solutions for orthopedics.

Asia-Pacific to be the Fastest Growing Region

Asia-Pacific is anticipated to be the fastest-growing region in the spine implants market. The Asia-Pacific region has the highest prevalence of spine disorders due to various factors, such as population growth, aging, and changes in lifestyle and work habits, which drives the high demand for spine implants and associated surgeries. Additionally, growing awareness about spinal surgeries, huge opportunities in untapped markets, developing healthcare infrastructure, rising disposable incomes, and a relatively high number of road accidents in the region are some other factors leading to the fast

expansion of the spine implants market in the region.

Future Market Scenario (2024 – 2031F)

The growing prevalence of spinal disorders and back pain among the global population is majorly driving the demand in the spine implants market.

Technological advances in implant design and material to improve patient compliance and reduce risk associated with spine procedures is anticipated to expand the spine implants market.

Fusion implants segment is expected to be the leading segment in the spine implants market due to their effectiveness in stabilizing the spine and promoting the fusion process.

Increasing road accidents and falling cases worldwide are expected to significantly drive the demand for spine implants.

Key Players Landscape and Outlook

Key participants in the spine implants market include Zimmer Biomet Holdings Inc., B. Braun Melsungen AG, Smith & Nephew plc, Stryker Corporation, Johnson & Johnson Services, Inc., and many more. These players are actively incorporating innovations and new technologies in spinal implant solutions to strengthen their market position and cater to the varying needs of patients. Mergers & acquisitions and collaborations are some common business expansion strategies opted for by these players.

In December 2023, ZimVie Inc. announced a definitive agreement to sell its spine business to H.I.G. Capital, a leading global alternative investment firm, for USD 375 million. ZimVie plans to use the post-tax earnings to pay down debt in accordance with its declared priorities for capital allocation. ZimVie's revenue growth rate, EBITDA margin, and cash flow conversion rate are anticipated to increase as a result of the transaction since it will enable the business to better focus and streamline operations as a pure-play dental firm in higher-growing end markets.

In October 2023, Silony Medical acquired Centinel Spine's global fusion business. The deal combines Silony's Verticale posterior screw & rod fusion Platform, its Roccia and Favio Interbody Fusion (IBF) Systems, with the Centinel Spine's STALIF Technology

Platform, creating first-in-class occiput to sacrum, posterior, lateral, and anterior spinal fusion portfolio for open and minimally invasive spinal fusion cases.

Contents

1. RESEARCH METHODOLOGY

2. PROJECT SCOPE & DEFINITIONS

3. EXECUTIVE SUMMARY

4. GLOBAL SPINE IMPLANTS MARKET OUTLOOK, 2017-2031F

4.1. Market Size & Forecast

4.1.1. By Value

4.1.2. By Volume

4.2. By Product Type

4.2.1. Fusion Implants

4.2.1.1. Rods

4.2.1.2. Screws

4.2.1.3. Hooks

4.2.1.4. Plates

4.2.1.5. Cages

4.2.2. Non-Fusion Implants

4.2.2.1. Growth-sparing devices

4.2.2.2. Artificial discs

4.2.3. Bone grafts

4.3. By Procedure

4.3.1. Open Surgery

4.3.2. Minimally Invasive Surgery

4.4. By Material

4.4.1. Stainless Steel

4.4.2. Titanium

4.4.3. Cobalt Chrome

4.4.4. Polyetheretherketone (PEEK)

4.4.5. Others

4.5. By Application

4.5.1. Spinal Fusion

4.5.2. Non-Fusion Procedures

4.5.3. Vertebral Compression Fracture (VCF)

4.5.4. Spinal Decompression

4.5.5. Others

- 4.6. By End-user
 - 4.6.1. Hospitals
 - 4.6.2. Orthopedic Clinics
 - 4.6.3. Others
- 4.7. By Region
 - 4.7.1. North America
 - 4.7.2. Europe
 - 4.7.3. Asia-Pacific
 - 4.7.4. South America
 - 4.7.5. Middle East and Africa
- 4.8. By Company Market Share (%), 2023

5. GLOBAL SPINE IMPLANTS MARKET OUTLOOK, BY REGION, 2017-2031F

- 5.1. North America*
 - 5.1.1. Market Size & Forecast
 - 5.1.1.1. By Value
 - 5.1.1.2. By Volume
 - 5.1.2. By Product Type
 - 5.1.2.1. Fusion Implants
 - 5.1.2.1.1. Rods
 - 5.1.2.1.2. Screws
 - 5.1.2.1.3. Hooks
 - 5.1.2.1.4. Plates
 - 5.1.2.1.5. Cages
 - 5.1.2.2. Non-Fusion Implants
 - 5.1.2.2.1. Growth-sparing devices
 - 5.1.2.2.2. Artificial discs
 - 5.1.2.3. Bone grafts
 - 5.1.3. By Procedure
 - 5.1.3.1. Open Surgery
 - 5.1.3.2. Minimally Invasive Surgery
 - 5.1.4. By Material
 - 5.1.4.1. Stainless Steel
 - 5.1.4.2. Titanium
 - 5.1.4.3. Cobalt Chrome
 - 5.1.4.4. Polyetheretherketone (PEEK)
 - 5.1.4.5. Others
 - 5.1.5. By Application

- 5.1.5.1. Spinal Fusion
- 5.1.5.2. Non-Fusion Procedures
- 5.1.5.3. Vertebral Compression Fracture (VCF)
- 5.1.5.4. Spinal Decompression
- 5.1.5.5. Others
- 5.1.6. By End-user
 - 5.1.6.1. Hospitals
 - 5.1.6.2. Orthopedic Clinics
 - 5.1.6.3. Others
- 5.1.7. United States*
 - 5.1.7.1. Market Size & Forecast
 - 5.1.7.1.1. By Value
 - 5.1.7.1.2. By Volume
 - 5.1.7.2. By Product Type
 - 5.1.7.2.1. Fusion Implants
 - 5.1.7.2.1.1. Rods
 - 5.1.7.2.1.2. Screws
 - 5.1.7.2.1.3. Hooks
 - 5.1.7.2.1.4. Plates
 - 5.1.7.2.1.5. Cages
 - 5.1.7.2.2. Non-Fusion Implants
 - 5.1.7.2.2.1. Growth-sparing devices
 - 5.1.7.2.2.2. Artificial discs
 - 5.1.7.2.3. Bone grafts
 - 5.1.7.3. By Procedure
 - 5.1.7.3.1. Open Surgery
 - 5.1.7.3.2. Minimally Invasive Surgery
 - 5.1.7.4. By Material
 - 5.1.7.4.1. Stainless Steel
 - 5.1.7.4.2. Titanium
 - 5.1.7.4.3. Cobalt Chrome
 - 5.1.7.4.4. Polyetheretherketone (PEEK)
 - 5.1.7.4.5. Others
 - 5.1.7.5. By Application
 - 5.1.7.5.1. Spinal Fusion
 - 5.1.7.5.2. Non-Fusion Procedures
 - 5.1.7.5.3. Vertebral Compression Fracture (VCF)
 - 5.1.7.5.4. Spinal Decompression
 - 5.1.7.5.5. Others

5.1.7.6. By End-user

5.1.7.6.1. Hospitals

5.1.7.6.2. Orthopedic Clinics

5.1.7.6.3. Others

5.1.8. Canada

5.1.9. Mexico

*All segments will be provided for all regions and countries covered

5.2. Europe

5.1.8. Germany

5.1.9. France

5.1.10. Italy

5.1.11. United Kingdom

5.1.12. Russia

5.1.13. Netherlands

5.1.14. Spain

5.1.15. Turkey

5.1.16. Poland

5.2. Asia-Pacific

5.2.8. India

5.2.9. China

5.2.10. Japan

5.2.11. Australia

5.2.12. Vietnam

5.2.13. South Korea

5.2.14. Indonesia

5.2.15. Philippines

5.3. South America

5.3.8. Brazil

5.3.9. Argentina

5.4. Middle East & Africa

5.4.8. Saudi Arabia

5.4.9. UAE

5.4.10. South Africa

6. MARKET MAPPING, 2023

6.1. By Product Type

6.2. By Procedure

6.3. By Material

- 6.4. By Application
- 6.5. By End-user
- 6.6. By Region

7. MACRO ENVIRONMENT AND INDUSTRY STRUCTURE

- 7.1. Demand Supply Analysis
- 7.2. Import Export Analysis
- 7.3. Value Chain Analysis
- 7.4. PESTEL Analysis
 - 7.4.1. Political Factors
 - 7.4.2. Economic System
 - 7.4.3. Social Implications
 - 7.4.4. Technological Advancements
 - 7.4.5. Environmental Impacts
 - 7.4.6. Legal Compliances and Regulatory Policies (Statutory Bodies Included)
- 7.5. Porter's Five Forces Analysis
 - 7.5.1. Supplier Power
 - 7.5.2. Buyer Power
 - 7.5.3. Substitution Threat
 - 7.5.4. Threat from New Entrant
 - 7.5.5. Competitive Rivalry

8. MARKET DYNAMICS

- 8.1. Growth Drivers
- 8.2. Growth Inhibitors (Challenges and Restraints)

9. REGULATORY FRAMEWORK AND INNOVATION

- 9.1. Patent Landscape
- 9.2. Regulatory Approvals
- 9.3. Innovations/Emerging Technologies

10. KEY PLAYERS LANDSCAPE

- 10.1. Competition Matrix of Top Five Market Leaders
- 10.2. Market Revenue Analysis of Top Five Market Leaders (in %, 2023)
- 10.3. Mergers and Acquisitions/Joint Ventures (If Applicable)

10.4. SWOT Analysis (For Five Market Players)

11. CASE STUDIES

12. KEY PLAYERS OUTLOOK

12.1. Medtronic Plc

12.1.1. Company Details

12.1.2. Key Management Personnel

12.1.3. Products & Services

12.1.4. Financials (As reported)

12.1.5. Key Market Focus & Geographical Presence

12.1.6. Recent Developments

12.2. Alphatec Spine Inc.

12.3. NuVasive Inc.

12.4. Globus Medical

12.5. Aesculap Inc.

12.6. Integra LifeSciences

12.7. Zimmer Biomet Holdings Inc

12.8. B. Braun Melsungen AG

12.9. Stryker Corporation

12.10. Johnson & Johnson Services, Inc.

*Companies mentioned above DO NOT hold any order as per market share and can be changed as per information available during research work.

13. STRATEGIC RECOMMENDATIONS

14. ABOUT US & DISCLAIMER

I would like to order

Product name: Spine Implants Market Assessment, By Product Type [Fusion Implants, Non-Fusion Implants, Bone Grafts], By Procedure [Open Surgery, Minimally Invasive Surgery], By Material [Stainless Steel, Titanium, Cobalt Chrome, Polyetheretherketone, Others], By Application [Spinal Fusion, Non-Fusion Procedures, Vertebral Compression Fracture, Spinal Decompression, Others], By End-user [Hospitals, Orthopedic Centers, Others], By Region, Opportunities and Forecast, 2017-2031F

Product link: <https://marketpublishers.com/r/SA0FEDDB4FA7EN.html>

Price: US\$ 4,500.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/SA0FEDDB4FA7EN.html>