

NAVIGATING MARKET ENTRY IN SURGICAL ROBOTICS

A Strategic Guide for MedTech Companies

Informed by hospital administrator, procurement, and finance perspectives

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GAME CHANGERS



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EXECUTIVE SUMMARY

Executive Summary

In the rapidly evolving field of surgical robotics, where innovation and technological advancements are continuously reshaping the landscape, it is crucial for MedTech companies to stay proactively engaged in a dynamic market poised for change.

This report aims to provide valuable insights into the current state of surgical robotics. There is much written about the evolution of surgical robots, its revolutionary technology and benefits to both surgeon practice, and patient outcomes and experience. We seek to approach surgical robotics through a new and different lens that will consider the hospital administrator, procurement, and finance stakeholder perspectives, revealing profound changes currently taking place in the market that will affect decision making by those responsible for robotic purchases. In this report, we will use insights from hospital purchasers around the country to provide actionable recommendations for MedTech companies seeking to navigate the changing landscape and remain competitive in 2023 and beyond.

To get a firsthand account of the current state of surgical robotics and to gain insight into the future, Ipsos engaged with executive level purchasers, finance, and administrators. To enhance our perspective, Ipsos consulted subject matter experts and multiple industry data assets to build a comprehensive viewpoint.

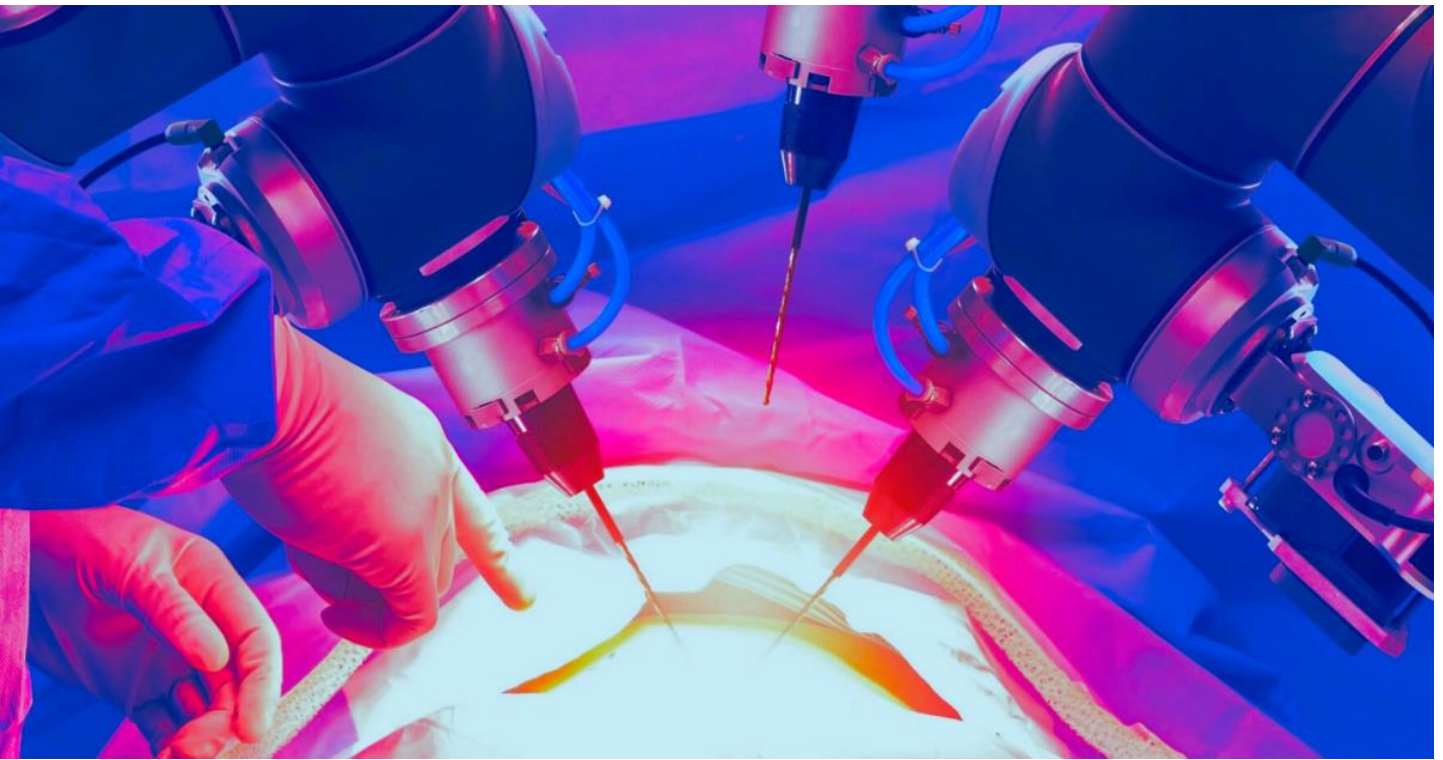


INTRODUCTION

I. Market Situation

Robotic-assisted surgery has witnessed remarkable growth in recent years both in the US and globally, propelled by several factors- including, but not limited to- continuous innovation, diversification into more niche areas of surgery, and most recently, the integration of artificial intelligence (AI).

While it is important to acknowledge that surgical robotics have existed in the US landscape for 20+ years (with somewhat limited adoption, see 'Future of the OR: Robotics; Ipsos 2020' for more information), a new era of surgical robotics is on the horizon which will reveal unprecedented opportunities for MedTech companies to expand their surgical robotics footprint in hospitals. In addition, this new period of innovation will present new competitive opportunities and challenges as the competitive field of play transforms.



CURRENT LANDSCAPE OF SURGICAL ROBOTICS

II. Current Landscape of Surgical Robotics

Even with 20+ years of experience behind us, the field of surgical robotics is still in its infancy. There are frequent and significant advancements being made domestically and globally, though the US market has yet to witness the full impact of surgical robotics innovation. While hospital systems like Duke University Hospital and Cedars-Sinai are renowned as pioneers in surgical robotics, the introduction of new, agile technology solutions and more nimble competitors will stimulate broader-based market adoption at facilities across the US.

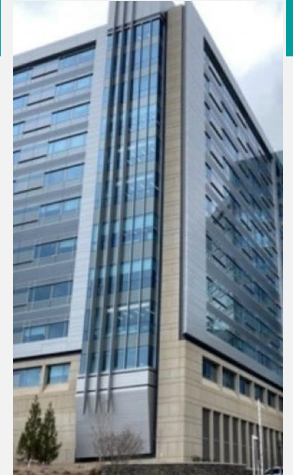
There are currently several underserved hospital groups or segments who have yet to fully adopt surgical robotics. These include (but are not limited to) smaller hospitals, hospitals in rural areas and ASCs, each of which present untapped potential for growth. Excitement and optimism about the use of surgical robotics in these facilities is growing.

Economics and Reimbursement Barriers Drive the Divide

Reimbursement policies for surgical robotics, particularly those enforced by CMS (Centers for Medicare and Medicaid Services), have made it more difficult for smaller and more rural hospital systems to justify the expense of these innovative investments. CMS advises that robotic-assisted and non-robotic procedures use the same procedural codes for seeking reimbursement. Most commercial payers follow the example set by CMS, meaning no incremental reimbursement is available to physicians or facilities for performing robotic procedures.

Understanding this context will be crucial for MedTech companies and hospital systems seeking to expand use of surgical robotics.

Attractive and innovative procurement approaches will be required to change the context of the economic considerations. Current robot owners are locked in – the initial substantial investment has been made, and owners are now subject to high service fees and additional costs for disposable products associated with robot use. Non-owners, especially those smaller facilities, see the steep costs as preventative. To compete successfully, manufacturers will need to reframe the economics and get creative regarding purchase costs, be it by offering leasing, per-procedure pricing, and bundling with existing surgical contracts, by example.



LOOKING AHEAD AT THE FUTURE LANDSCAPE

Looking ahead at the future landscape

With several surgical robots currently seeking FDA approval, the US competitive landscape will be transformed by new competitors with significant change expected within 10 years. For over 20 years, Intuitive has dominated the market with their DaVinci robot for soft tissue procedures. In the last two decades, Intuitive has faced little to no competition to DaVinci and many hospitals performing soft tissue robotic assisted surgery are now doing so with a DaVinci. Intuitive entered the pulmonary arena in 2019 with their ION navigation robot, competing against Ethicon's Monarch system.

For new competitors, including Medtronic's HUGO, and Senhance by Asensus, entering the US market may be an uphill battle:

- Installing the DaVinci system requires significant capital, infrastructure demands, new workflows, training, and specialized staffing. Given these significant and now well-established solutions, hospitals are often unwilling to change due to the complexity and cost of switching to viable alternatives
- Surgeons are often already trained on the DaVinci system and would need compelling reasons (including significant technical commitments and operating team support) to re-train on another machine, a compounding disincentive for a facility to bring in a new robot

- There is concern among purchasers that the newer robot entries are unproven and lack data on clinical efficacy, and given their sizeable market advantages, Intuitive has little incentive or obligation to make outcomes public
- Hospitals would rather consider smaller specialized robots for different applications in addition to the DaVinci

Prospective market entrants may view current surgical practices and workflows as either a barrier to entry or a value-driving opportunity. Opportunities exist for manufacturers who can demonstrate superior clinical outcomes or financial incentives relative to other surgical modalities or carve a market position outside of da Vinci's dominant footprint.

The global stage presents a different picture, where the landscape of surgical robotics may soon be impacted by transformative advancements occurring outside of the United States, particularly in regions such as Asia Pacific and Israel.

Surgical robotics companies like South Korea's Curexo and Taiwan's Point Robotics have been at the forefront of groundbreaking developments, introducing innovative technologies and pushing the boundaries of what is possible. The entrance of new competitors and their cutting-edge innovations, including the integration of artificial intelligence from abroad will undoubtedly challenge the status quo and propel the US surgical robotics industry into a new era of growth and competition. The time for US MedTech companies to embrace this global wave of innovation and position themselves at the forefront of the transformation is now.

THE PLAN FORWARD



III. The Plan Forward

In order to navigate the evolving landscape of surgical robotics effectively and to successfully challenge existing players, there are several opportunities MedTech companies may want to consider:

1. Find Your Niche and Embrace It

Identify the specific areas of expertise within surgical robotics where you can press a competitive advantage and meet targeted market needs. Differentiation will be vital to success in the evolving robotic market. Focus on how your technology exceeds that of existing players. Highlight your new technologies, additional therapeutic areas served, and the integration of Artificial Intelligence. Consider innovative partnerships with companies whose technologies will enhance your offering to create unique and targeted solutions. Hospital purchasers are currently focused on new innovations as opposed to phasing out their existing systems

2. Leverage your existing portfolio and don't underestimate the strength of your competition:

Companies who are well established in MedTech may find they can leverage their current knowledge and customer base to gain a competitive advantage over smaller start-ups. Companies like Medtronic and J&J/Ethicon have developed their reputation based on decades of technological growth and experience. Further, they have nurtured contracted relationships with GPOs, IDNs and medical institutions across the country, highlighting the interoperability of their robots with existing products and maximizing contracted cost savings, delivering a significant advantage.



THE PLAN FORWARD



3. Find the Current Gaps, for example, by partnering with Smaller Hospitals and ASCs

It is important to recognize the potential of underserved markets, and MedTech companies should shift their focus towards smaller hospitals and Ambulatory Surgical Centers (ASCs). These entities, often not part of larger systems, present unique opportunities for growth and partnership. Companies who can offer smaller, more flexible technologies and are willing to promote lower cost robotic options with creative financing, will establish a foothold in these environments. Promoting the development or enhancement of a new service line made possible by therapy-specific niche robots such as Stryker's Mako, and Zimmer Biomet's ROSA for orthopedics, create new opportunities for deployment in smaller facilities where a large, soft tissue robotic system is not viable.

4. Invest in Collaboration with Hospital Systems

Work with hospital systems and purchasers to overcome gaps in adoption and use of surgical robotics. In particular, MedTech companies can provide valuable support in helping hospitals create and defend their business case. This will include contributing metrics to allow hospitals to establish an accurate forecast of expected procedure growth and ROI and clinical data to increase confidence in surgical robotics among

increase confidence in surgical robotics among surgeons, hospital administration and patients. A successful partnership with hospitals and purchasers includes maximizing ease and cost savings, while providing superior technology and support. It will be imperative to find creative pricing models and incentives to facilitate the transition to a new robot, or to expedite the purchase of a new entry.

5. Establish your real-world data gathering plan:

The purchase of a surgical robot is a major investment for any hospital and creates a long-term relationship between the facility and the supplier. Support does not end with the sale. While creating and publishing real world evidence can be a lever in a more crowded competitive field, MedTech should consider all aspects of the full lifecycle of your solution, especially the integration with existing applications and workflows and determine which data points and information will benefit the facility at all stages of robot ownership.

6. Re-evaluate the Reimbursement Landscape:

Advocacy for the reevaluation of the reimbursement landscape is crucial for driving innovation. Addressing the existing limitations can create an environment conducive to the widespread adoption of surgical robotics, benefiting both healthcare providers and patients.

SUMMARY

IV. In Summary

In the rapidly evolving field of surgical robotics, MedTech companies must embrace the imminent changes and strategically position themselves for success. The current state of surgical robotics is dynamic, the potential impact on the US market is significant and the opportunity to seize competitive advantage by proactively navigating the market landscape is immediate. By finding a niche, targeting underserved markets, assisting hospital systems, and advocating for a re-evaluation of the reimbursement landscape, MedTech companies can position themselves as important players and partners and seize the opportunities that lie ahead. Embracing innovation, collaboration, and a patient-centric approach will be key to thriving in this dynamic field. Now is the time for MedTech companies to embrace the future of surgical robotics and drive transformative change in healthcare.



ABOUT IPSOS

About the Research

This research was designed and conducted by Ipsos in March 2023. Interviews were conducted with executive-level employees of hospitals in the United States. Participants were selected by an independent recruiting firm and were screened to include a varied sample based on hospital size, network membership and geographic location. The interviewees remained anonymous.

About Ipsos

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Contact us to discuss how
we can partner with you

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