



Value-Based Care:

How To Enable The Medical Device
Organization Of The Future



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As health systems continue to experiment with and transition to value-based care, the priorities and needs of health care stakeholders are rapidly evolving. Value-based care aims to put the patient at the center of health care design and delivery to enhance quality, improve outcomes and reduce the total cost of care. For example, US insurer Aetna predicts that 59% of all US health care payments to its provider network will be value-based by 2021.¹ The change in the US is also illustrated by the rapid rise of accountable care organizations (ACOs), which have more than doubled in number over the last five years.² In other geographies, especially in Europe, the trend is exemplified by various interesting developments.

One is the creation of Germany's Institute for Quality Assurance and Transparency in Healthcare (IQTiG) to set and monitor quality standards for hospitals, mandatory quality reporting, and experimentation with advanced payment models, such as capitation, pay for performance and integrated care contracts. The Integrated Care Pioneers in the UK, IFAQ and PROPIAS programs in France, Gesundes Kinzigtal in Germany, and Health Quality Ontario quality improvement plans (QIPs) in Canada are other value-based care approaches in the public sector.

Transitioning to value-based care requires payers and providers to rethink several structural elements and processes of how health care has

been historically delivered and paid for. From Huron's recent work, where we try to assess, characterize and predict this transformation for our clients, we have identified three kinds of challenges for health systems and their stakeholders: infrastructural, cultural and incentive-based.

From a financial point of view within a value-based care model, providers – meaning hospitals, primary care groups, etc. – are required to take on significant financial risk tied to their performance relative to the national averages of a number of quality metrics. Tying financial performance and payment for health care services to quality metrics, such as reducing unplanned 30-day readmissions or reducing surgical site infections (both very expensive unplanned events for the system), incentivizes providers to reprioritize investment, redesign care delivery and seek innovative partnerships with new types of stakeholders to improve their performance.

This shift has challenged the business model for medical device companies, and, we argue and our research shows, has created tremendous future opportunities for value creation and growth. Today, there are several examples of how medical device companies have disrupted their business models to address emerging customer problems in the value-based care era. For example, several incumbents have created entirely new businesses or developed solutions beyond their traditional product mix, such as Medtronic Integrated Health Solutions, J&J CareAdvantage, Zimmer Biomet Signature Solutions, GE Healthcare Partners command centers and Siemens Healthineers Digital Marketplace. We also see new and improved product development roadmaps and organizational structures to deliver not stand-alone products, but turnkey solutions and services.

While rethinking the business model is not a trivial

exercise and change takes time, we argue that medical device leaders will need to further accelerate their transformation efforts and find new ways to partner with their customers to help them reap the rewards of value-based care. This is very important as we are observing how non-traditional health care companies partner directly with payers and providers, especially when part of the solution set is a cutting-edge technology using machine learning, analytics and big data. This is a potential competitive threat to medical device incumbents. For example, one top-of-mind and familiar example is diabetes care, which is being disrupted by health tech companies, such as Livongo and Omada, as well as by Google and its recent partnership with the Mayo Clinic.

Given this inflection point, Huron and *Medtech Insight* conducted a global survey of over 400 medical device leaders to understand the attitudes and perceptions of the industry's performance and transformation, to reveal the top challenges to the delivery of value-based care and to identify future opportunities for value creation and growth.

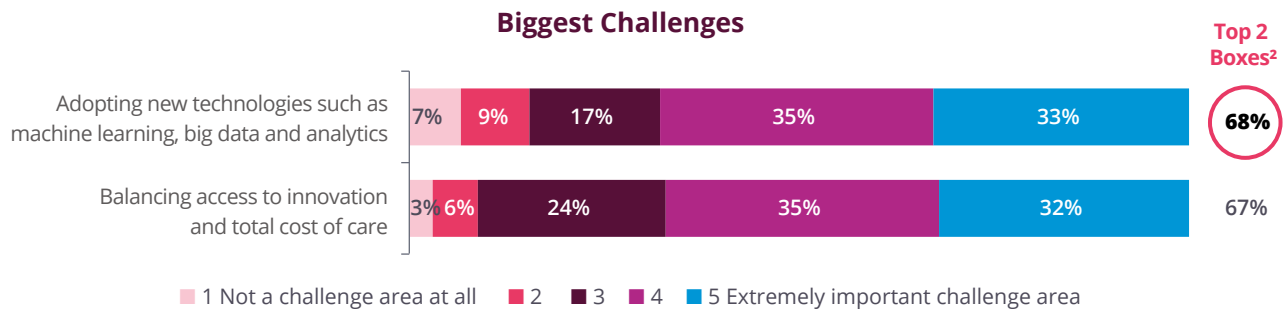
Our global survey revealed three key challenges facing the industry, and three critical innovations medical device companies are using to overcome hurdles and deliver value-based care.

The Top Challenges For The Medtech Industry

Challenge 1: Adoption Of New Technologies (machine learning, big data and analytics)

Data Point: The survey found 68% of medical device leaders identified the adoption of new technologies incorporating machine learning, big data and analytics as “very” or “extremely challenging,” making it the top challenge.

Implication: Medical device companies will need to develop a capability for sourcing, developing and



Question: Which of the following areas present the biggest challenges for payers and providers to deliver value-based care in the future?

Base: Total large & medium medical device companies (n=137)

commercializing these technologies as part of the solutions portfolio. As with traditional medical device products, commercial and market access functions will need to define, measure and articulate the value of these technologies using appropriate evidence. In the field, the commercial organization will need to adopt a flexible approach that allows for “co-creation” of solutions as technology will be one part of the system change required within the customer operating environment.

Challenge 2: Balancing Access To Innovation And Total Cost Of Care

Data Point: The survey respondents identified balancing access to innovation and total cost of care as the second biggest challenge in achieving value-based care. That challenge was characterized as “very” or “extremely important” by 67% of the respondents.

Implication: Medical innovations, as part of the care pathway, must not only improve clinical outcomes and patient experience, but also deliver cost benefits in the form of operating efficiencies, improved performance in quality metrics and a positive impact to the health system beyond the point at which these innovations are delivered. For example,

reducing post-op complications, reducing the need for pain medications and returning to work and daily life activities faster have been targeted. Achieving this balance does not mean that new medical innovations must be marketed at a lower price. Instead, moving away from price and toward value, this challenge points to the need to develop the right type and volume of evidence to articulate economic benefits to non-clinical stakeholders and maximize the value of the technology by meeting their needs.

Challenge 3: Establishing Payment Models That Reward Value And Innovation

Data Point: Establishing payment models that reward value and innovation was the other key challenge frequently cited by respondents, 67% of whom ranked it as “very” or “extremely important.”

Implication: Today, payers in US and EU5 markets have been actively forming value-based contracts with medical device manufacturers and with their provider networks. Recent work completed by Huron shows that more performance-based risk contracts will be implemented in the future. Specifically, our research shows a two-fold increase in value-based contracts in the next five years in the

US. However, doing so presents several challenges that medical device companies need to address. Namely, the desire to take on financial risk and provide performance guarantees, measuring and tracking outcomes data across the care pathway, and demonstrating that the potential savings (and rebates) outweigh the “cost of doing business” compose the enabling infrastructure required to be able to implement value-based contracts. Medical device leaders should assess both internal and external “readiness” to implement innovative risk-based contracts. Externally, this means discerning which customer accounts will be open to implement such contracts and how this more laborious and resource-intensive approach to contracting can drive financial ROI. Internally, this translates to determining what resources and capabilities are needed at the local level to implement and manage such contracts.

The Critical Innovations Needed To Deliver Value-Based Care

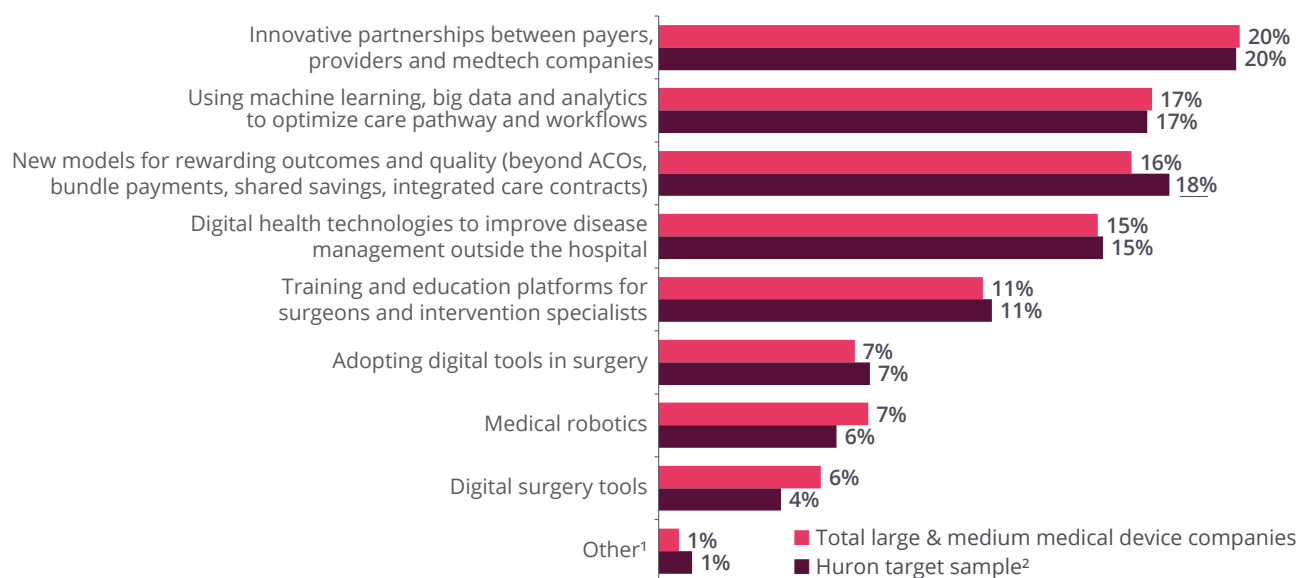
In the survey, medical device leaders collectively communicated that they face three main challenges to delivering value-based care. The responses show companies are looking to three critical innovations to overcome these hurdles.

Critical Innovation 1: Innovative Partnerships Between Payers, Providers And Medical Device Companies

Across all respondents, innovative partnerships between payers, providers and medtech companies was most frequently cited as the critical innovation that will drive the delivery of value-based care.

Medical device companies are already forming such innovative partnerships. Medtronic, for example, is significantly investing in health care

Most Needed Innovation – By Leadership Function



Question: Which of the following types of innovation will be the most critical for delivering value-based care in the future?

Base: Huron target sample²: 77 (n=261) / Total large & medium medical device companies: 135 (n=429); multiple answers permitted.

¹Other includes: Adoption of technologies that reduce the need for physician oversight in diagnosis and prescription.

²Huron target segment does not include ‘Regulatory’ job functions and ‘Manager’ seniority levels.

delivery. In addition to managing clinical support operations in cath labs and ORs, the company now owns a Dutch diabetes clinic and research center, Diabeter, and has invested in the operations of other providers, including the UK's Imperial College Healthcare NHS Trust.^{3,4}

Critical Innovation 2: Using Machine Learning, Big Data And Analytics To Optimize Care Pathways

The second most frequently cited critical innovation is the increased use of machine learning, big data and analytics, specifically in the optimization of care pathways and workflows.

The trend for companies to use technology to help providers optimize care pathways and workflows is prevalent in orthopedics, where firms such as Stryker are using data analytics to help customers. Stryker analyzes Medicare data to benchmark hospital performance and provide a breakdown of the cost of orthopedic care, helping its customers improve their operations. The average complication rate at sites enrolled in the program is 0.07%, compared with the Medicare national average of 3.1%.⁵

Critical Innovation 3: New Models For Rewarding Outcomes And Quality

The third critical innovation identified in the survey is the use of new risk-sharing models for rewarding outcomes and quality to deliver value-based care. In the US, these new models will go beyond current ACOs, bundle payments, shared savings and integrated care contracts.

The models will require medical device companies to take on financial risk tied to the performance of their innovations. This is already happening — St. Jude Medical (now part of Abbott) offers a 45% rebate on the cost of Quadra heart rhythm devices that require revision surgery in the first year —

but these new models require medical device companies to develop a new contracting capability across geographies.⁶

Medical device companies that adopt risk-sharing models must help their provider partners develop the IT infrastructure needed to capture outcomes at the patient level.

The Need For Better Cross-Functional Collaboration

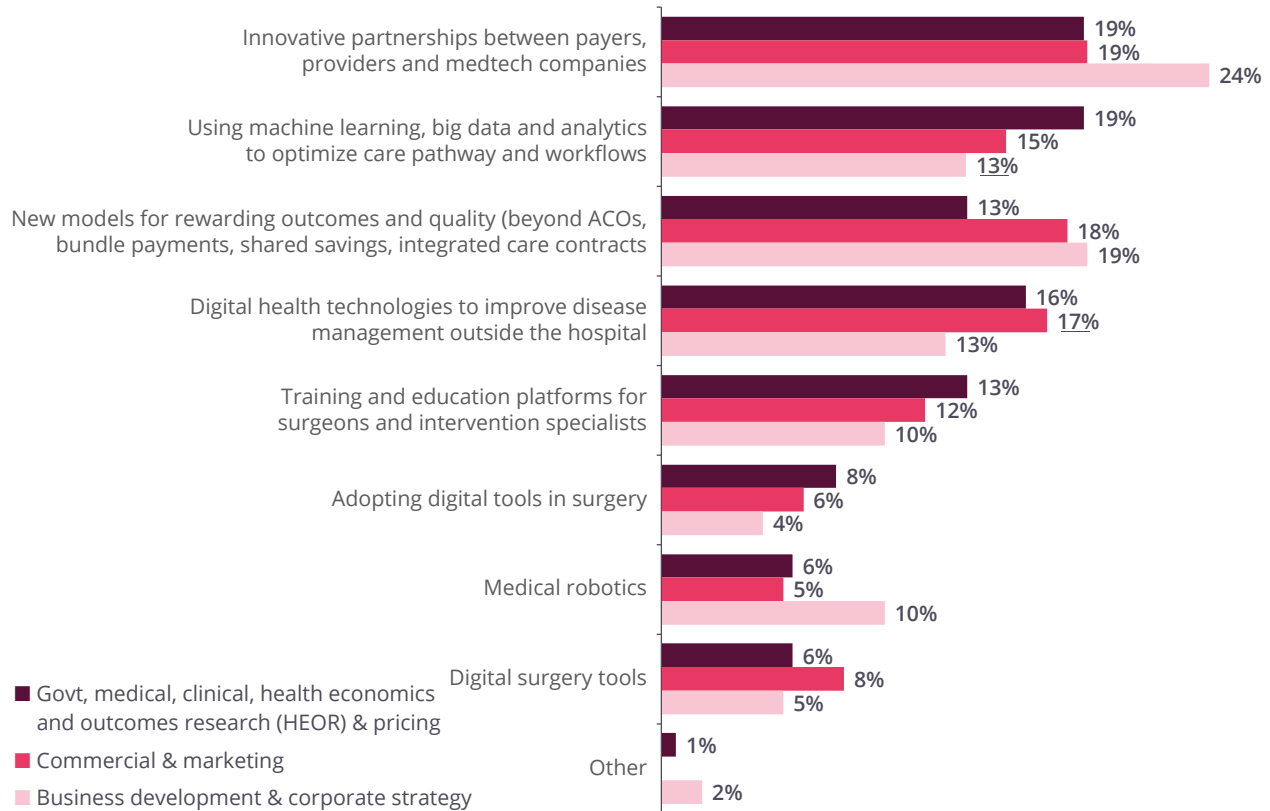
Medical device leaders across all functions value the three critical innovations identified in the survey. However, the survey data reveal differences in how much value the leaders in each function place on each of the critical innovations.

Among respondents in business development and corporate strategy functions, innovative partnerships between payers, providers and medical device companies are the most frequently cited needed critical innovation. In contrast, these business development and corporate strategy leaders appear to place less importance than their colleagues in other functional groups on using machine learning, big data and analytics to optimize care pathways and workflows.

Medical device companies may be wise to take the differences seriously given that their emerging operating model requires a level of cross-functional collaboration and orchestration far beyond what was needed to succeed in the volume-based era. To succeed, medical device leaders will need to stimulate new kinds of cross-functional efforts and strategies.

In parallel, medical device leaders should benchmark capabilities to identify gaps that can limit leaders from successfully executing their strategies. For example, a medical device company may want to invest in digital health and technology alliances, but may lack the capability to find and qualify new partners.

Critical Innovation In Delivering Value-based Care



Question: Which of the following types of innovation will be the most critical for delivering value-based care in the future?

Base: Huron target sample: 77 (n=261) / Total large & medium medical device companies: 135 (n=429); multiple answers permitted / Govt, medical, clinical, health economics and outcomes research (HEOR) & pricing 49 (n=156), Commercial & marketing 35 (n=112) & Business development & corporate strategy 38 (n=112). 'Sample does not include 'Regulatory' job functions and 'Manager' seniority levels.

Implications For The Medical Device Business Model

The survey results point to three key questions and related "calls to action" that medical device leaders should address as they continue to align their business models to the needs of value-based care.

- Question:** How can we frame customer value more holistically beyond the point of care and the use of specific medical devices, in our portfolio, at a certain intervention point? What are the future "jobs to be done" across the stakeholder ecosystem?
- Call to action:** Developing value frameworks, tools and resources that align the organization on a consistent lexicon of customer value and identifying key pain points and needs across the episode of care allows for benchmarking to standard of care or competitor solutions and guides evidence generation to show differentiated value.
- Question:** What kind of new commercial and market access capabilities do we need to implement innovative value-based

partnerships? How do we assess external and internal readiness to ensure ROI for all stakeholders involved?

- **Call to action:** Performing a “readiness” diagnostic helps to identify specific opportunities with priority accounts to develop innovative partnerships, and understand gaps to define new capabilities and tools needed to drive differentiation and ROI.
- **Question:** What new methods and tools can maximize the effectiveness of our efforts to bring new devices to market?
- **Call to action:** Assessing and refining the strategic and operating model to not only develop a strategy that meets the needs of the market, but also to support organizational development and cultural change management required to successfully execute upon and deliver the strategy in the market.

Given macro-economic, political and demographic trends, transforming health systems to reward value and volume is a key imperative to ensure that patients will continue to have access to medical innovations. The medical device industry should continue to evolve its business model to facilitate, and even accelerate, this transformation. Apart from medical and technological innovations, medical device leaders will need to rethink their capabilities mix – making their organizations fit to partner with the rest of the health care stakeholders across the broad ecosystem. The medical device leaders whom we surveyed identified innovative partnerships and new models of rewarding outcomes and quality

as two critical innovations needed to achieve value-based care. There are several calls to action that medical device leaders must follow to be prepared for the future. The end result will be not just competitive advantage, but also more efficient and cost-effective health care systems that deliver optimal benefits for everyone.

Note on Survey Methodology

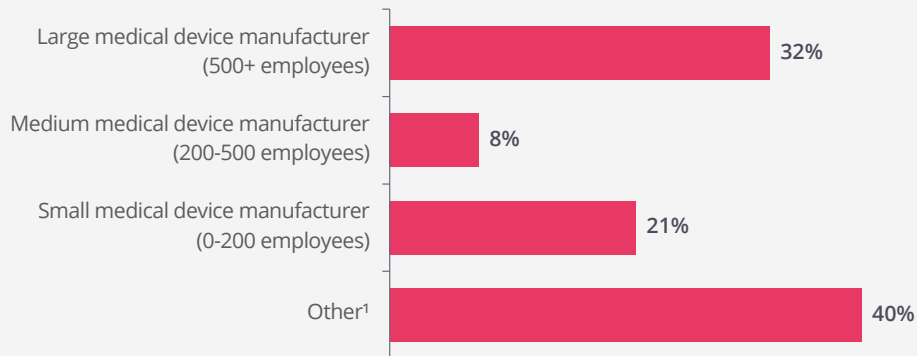
The survey featured 400 responses from individuals in leadership roles across medical device companies, and of those, 137 responses were from individuals working at large- and medium-sized medical device companies. This subset of responses was selected as the focus of the analysis. Half the responses came from the US and one-third came from Western Europe, with the rest from Asia-Pacific and Latam regions. Most of the respondents work in market access, regulatory, business development, marketing, commercial or corporate strategy. Managers and directors were the most prevalent levels of seniority, although VPs and C-suite leaders were included.

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Additional Figures/Appendix:

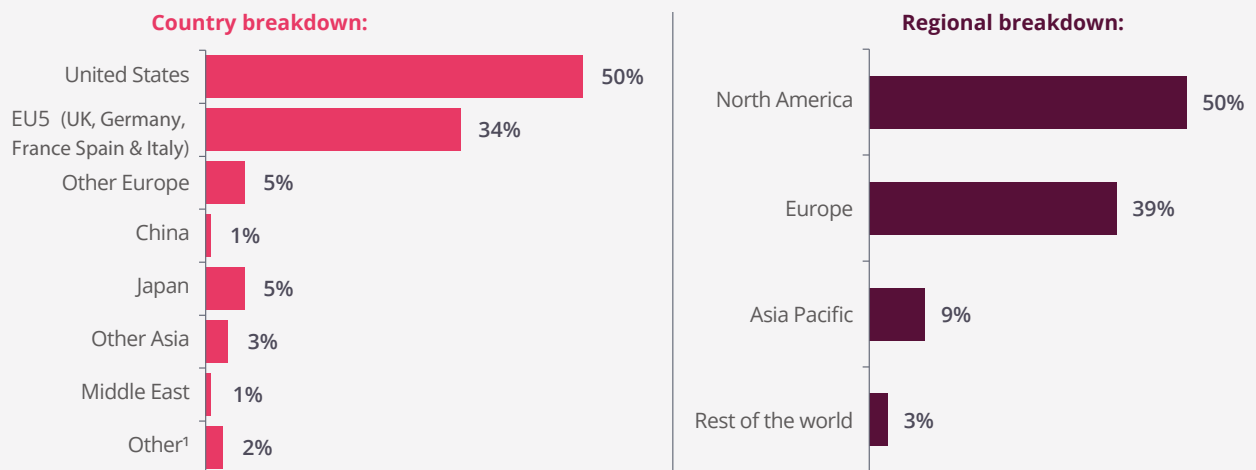
Organization Type



Question: What type of organization do you work for?

Base: All respondents (n=400). ¹Other includes: Biotech / Pharma company, Consultancy, CRO, Distributor, Financial services, Government agency, Market research, Marketing / Comms, Medical school, Medicalpublishing, PR agency, Regulatory body, Retail, Software provider & University.

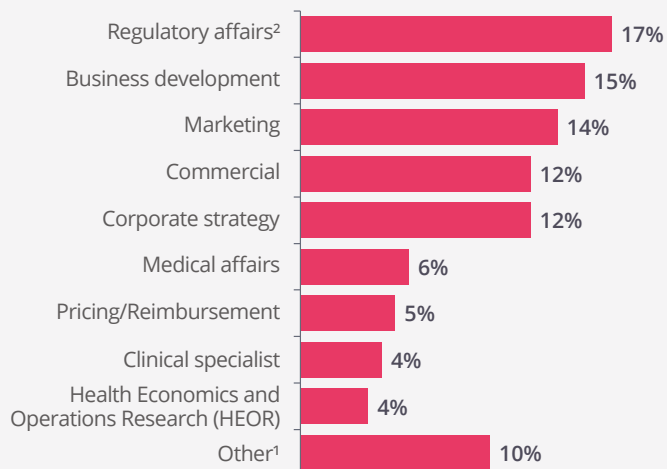
Company Location



Question: Where is your company based?

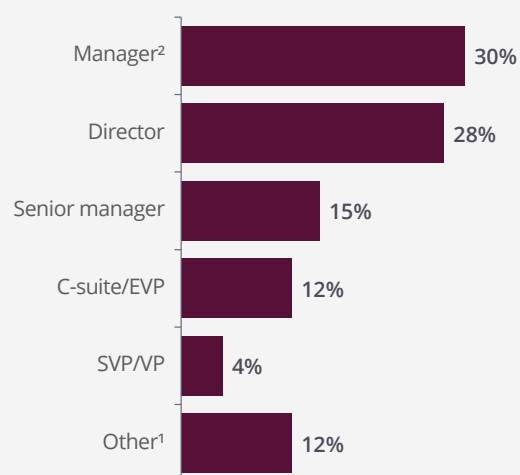
Base: Total large & medium medical device companies (n=137).¹Other includes: Global.

Job Focus & Seniority



Question: Which of the following best describes your job focus?

Base: Total large & medium medical device companies (n=137). ¹Other includes: Economist, Engineer, General management, Global innovation, IT, Market research, Data analytics, Operations, PR, Product management, Quality assurance, R&D & Technology and operations. ²Note: Huron target segment key findings does not include 'Regulatory' job functions and 'Manager'



Question: Which of the following best describes your level of seniority?

Base: Total large & medium medical device companies (n=137). ¹Other Includes: Analyst, Assistant manager, Associate, Consultant, Engineer, Principal, Sales agent & Senior specialist. ²Note: Huron target segment key findings does not include 'Regulatory' job functions and 'Manager' seniority levels.



Anne Smart

Managing Director, Life Sciences, Head of MedTech



Anne has over 20 years of broad healthcare experience from leadership positions spanning the life sciences industry, hospital management, and strategy consulting.

At Huron, she leads the medtech business within the Life Sciences Strategy practice. Her expert knowledge of the clinical and market dynamics and trends impacting medical devices, technologies, and tools enables her to develop customized growth strategies and value creation opportunities. Working closely as a thought partner with clients, she has delivered actionable strategic insights to medtech companies and investors that support them in achieving their business objectives. Her specific areas of expertise include: Business development and investment support (diligence, forecasting, portfolio strategy); Commercial / go-to-market strategy; and Market access / market development strategy.

Prior to joining Huron, Anne was a Managing Director at ClearView Healthcare Partners, where she built and led the global Medtech strategy business. She also spent several years at Navigant in the Life Sciences Strategy practice (formerly Easton Associates) and was a core member of the Medtech leadership team. Previously, Anne managed the Neurosurgery Department at The University of Chicago and the Pulmonary and Critical Care Medicine Division at NYU. She started her career at Vertex Pharmaceuticals as part of the original Strategy and R&D Planning groups.



Sotiris Rompas, Ph.D.

Director, Life Sciences



Sotiris has been working with market access, marketing, group strategy, and cross-functional teams of Fortune 500 MedTech Companies to assess the feasibility of new business models, and to develop value propositions for innovative medical devices and customer strategies.

He has covered Surgical tools (Heart Disease, Orthopedics), digital health technologies (chronic diseases such as COPD), and Imaging (CT, Ultrasound, Radiology, and Vascular Access).

Prior to joining Huron, Sotiris held senior positions at Boston Healthcare Associates and GfK. Sotiris started his consulting career at IQVIA in London. Sotiris holds a Ph.D. in strategic management from Warwick Business School where he was a ESRC fellow and has an M.Sc. in International Health Management from Imperial College. Sotiris was trained as a Computer Scientist, and is fluent in English and Greek.

Sotiris has expert working knowledge in various research methods, including strategy frameworks, quantitative research (conjoint, DCM models, MaxDiff, MCDA), and qualitative research (virtual ad boards, IDIs, scorecards).

Life science companies face a rapidly evolving landscape, leading to strategic opportunities as well as challenges and disruptions that require new ways to approach the market. Huron's Life Science practice is part of Huron's broad continuum of healthcare offerings supporting the development and commercialization of innovative products and services.

At Huron, we work with medtech, diagnostic, biotech and pharma companies and investors to address their most complex business issues. We have supported clients in various ways to drive growth and meet their business objectives, including:

- Developing winning strategies and new innovative business models that go beyond individual products and capabilities
- Building value that meets the needs of key stakeholders within the healthcare ecosystem
- Achieving affordable access to new innovations while managing uncertainty around underlying data in a value-based healthcare environment
- Harnessing the power of new technologies and approaches, such as digital solutions, use of real-world evidence and analytics, and companion diagnostics, to add value to the portfolio

Discover how Huron can help you to transform your business to stay ahead of the curve and win in a different future market.

- Corporate and Business Unit Strategy
- Portfolio Strategy
- Market Access and Pricing
- Transaction Support and Due Diligence
- Commercial Strategy
- Organization and Innovation Development
- Regulatory Strategy
- Digital Solutions and Technology



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