

Healthcare provision is undergoing unprecedented change, and posing challenges for healthcare systems and providers. In the United States, providers' profit margins are forecast to fall by as much as 2 percentage points by 2019. In Europe, the projected gap between public health expenditure and government budgets is increasing and expected to reach about 2% of GDP by 2030 in some countries. Inevitably, health systems are under budget pressure and must actively manage their costs.

In light of these changes, we surveyed 157 hospital executives and service line leaders in the United States and Europe about their strategic priorities, and asked what innovative models within the industry had the potential to deal with the challenges ahead. The survey results show that executives who are beginning to systematically disaggregate the factors that drive both costs and efficiency are increasingly considering partnerships with medical technology companies. Despite early skepticism, there is growing awareness of the contribution these companies can make toward curtailing costs and improving the quality of care.

The opportunity lies in medtech companies working closely with healthcare providers to deliver not just equipment but also innovative services, often enabled with software, that meet specific provider needs. Such “beyond-the-product” collaborations offer significant opportunities for both sides. They can help hospital executives lower fixed costs and improve service levels, and present medtech companies with the opportunity to tap new revenue streams—potentially worth some \$44 billion in the United States alone.

Obstacles remain, however. The survey reveals that many medtech companies will need to build credibility with providers, raise awareness of the potential value in partnerships, and overcome

providers' apparent preferences for working with larger medical equipment companies and those with a proven track record. For many medtech companies, this will mean changing the business model.

We conducted the survey in collaboration with Gerson Lehrman Group, which provides services to business professionals via an expert network.

Improving healthcare while curbing cost: Medtech companies offer a solution

In the United States and Europe, healthcare providers' finances are under strain. US providers' profit margins could fall by as much as 2% by 2019, according to our research, largely because of changes brought about by the Affordable Care Act. In the United States and Europe, gaps are opening between public healthcare expenditure and government healthcare budgets.

To find out how hospital executives are responding to these pressures we conducted a survey of 157 individuals, either C-level executives or department heads representing one of five service lines, in the United States and EU5 countries. (For details, see “About the survey.”) The survey showed the majority ranked operational optimization alongside clinical care optimization at the top of their list of strategic priorities. In other words, they aim to reduce the cost of each patient procedure while improving patient outcomes.

The balance between these two priorities differs by service line. But wherever it lies, the survey, backed by our own experience, shows service line leaders are giving careful thought to the precise components that drive both quality and cost of care with a view to managing them better. Radiology departments, for example, cite the need to optimize clinical care by improving image quality and reducing radiation doses, while managing costs by improving patient

turnover and using consumables, such as contrast agents, more efficiently. In critical care units, many leaders aim to reduce the length of hospital stays, and to streamline workflows by standardizing processes and even rethinking details such as where supplies are kept. In emergency departments, there is a focus on optimizing clinical care by finding ways to reduce queues so that people do not give up and leave without being seen.

The opportunity for medtech companies

Medtech companies can help meet healthcare providers' aims of lowering fixed costs and improving service levels. In addressing inefficiencies among healthcare providers, we estimate that they will be able to tap new revenue streams worth up to \$44 billion in the United States

alone.¹ Importantly, the opportunity lies not simply in delivering a product but in delivering a “solution.”

There is little agreement in the healthcare industry as to what constitutes a solution, however. We believe that it can range from the provision of a single service—capital financing or equipment maintenance, for example—to the outsourcing of entire departments. A solution can also be a combination of a product, software, and a service, such as the automated monitoring of sponge use to reduce surgical malpractice. Nurses spend much time before and after surgery counting surgical sponges to ensure none is left inside a patient's body. The solution is to incorporate into the sponge (the product) a radio-frequency identification tag (the software) that will enable staff to monitor use of

Exhibit 1

Assessment of value pools that can be addressed by solutions “beyond the product” in the United States

	US value pool USD billions	Potential “beyond the product” solutions description
Operational optimization	6	<ul style="list-style-type: none"> Maximize operational efficiencies to realize 10-15% cost reductions (e.g., use of clinical decision support applications and services to view patient deterioration)
Clinical care optimization	12	<ul style="list-style-type: none"> Improve efficiency and quality of services provided (e.g., improve recovery time after surgery)
Commercial, patient access	13	<ul style="list-style-type: none"> Gain access to new patient volumes creating new sources of revenues (e.g., improve physician referrals and show innovation through social media campaign)
Financial	13	<ul style="list-style-type: none"> Maximize revenues for services provided and increase capital efficiency (e.g., full “outstanding solution” of catheterization lab to move from capex to opex)

Source: McKinsey Advamed (2014)—Bottom up value pool assessment in US provider landscape

1 McKinsey Advamed (2014). Representative hospitals were assessed for improvement opportunities that could be tackled with beyond-the-product solutions or any professional service that a medtech company could provide. Their value was estimated by understanding the impact of solutions and services on costs or revenue (through attracting better-reimbursed cases or increased throughput, for example). The results were extrapolated to arrive at total potential value of \$44 billion.

the sponge, and to train nurses in how to use it (the service). All solutions have one thing in common, though: they are crafted to meet specific customer needs.

The current state of play

Overall, some 44% of survey respondents² have already taken steps toward working more closely with medtech companies, and are aware of the value of collaboration. However, a small group of them indicated that they would not consider such partnerships, concerned that they might compromise their product purchasing decisions.

The survey revealed the extent to which different departments use solutions, as well as the different types of solutions used.

Usage by department

European hospitals tend to be the highest users of solutions, with the exception of IT departments (Exhibit 2). In Europe, invasive cardiology, diagnostics laboratories, radiology, and IT are the most likely departments to turn to solution providers.

Of course, financial objectives can influence these decisions. In Europe, some hospitals are keen for

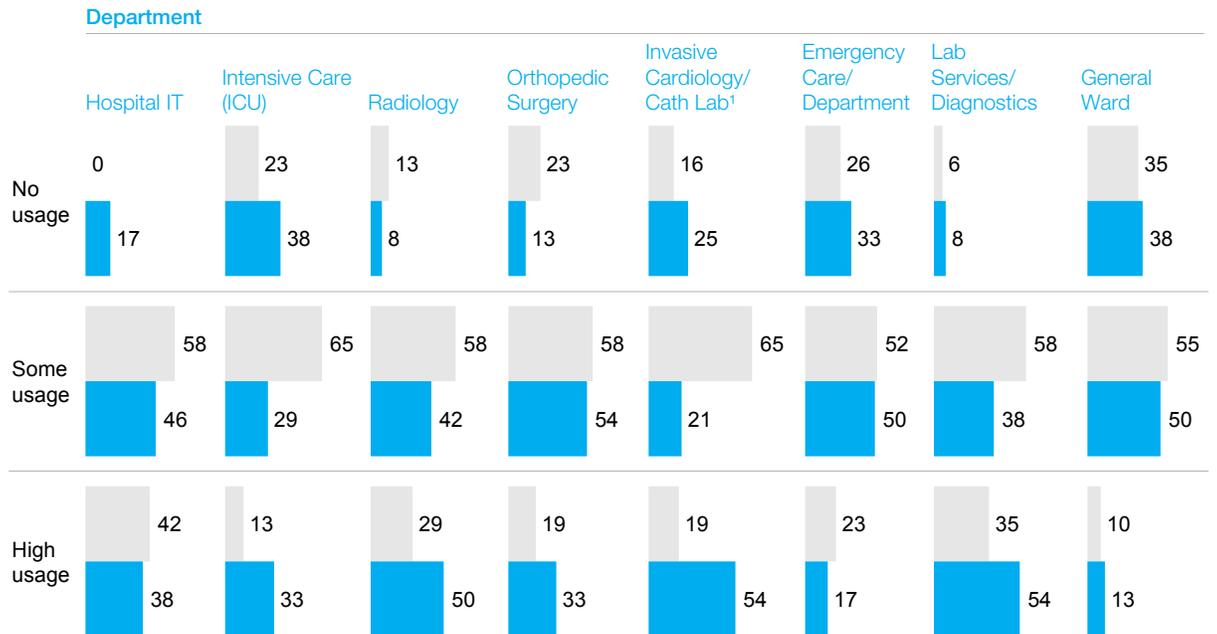
Exhibit 2

Assessment of current or near future usage of service offerings

Percent of C-level responses

■ U.S.; n = 34

■ EU ; n = 24



¹Catheterization Laboratory

Source: 2014 McKinsey Beyond the Product Survey; n = 55

² Respondents who are a CEO, CFO, CIO, COO or the Head of Purchasing at a hospital

partners to set up and manage their catheterization laboratories, for example, because they want to shift capital expenditure to operational expenditure. US hospitals, which arguably have fewer financial constraints, prefer to keep hold of what are strong revenue generators.

General wards and emergency rooms have been relatively slow to partner with medtech companies. But there are signs of growing interest, particularly in critical care solutions that would reduce hospital-acquired infections or provide remote monitoring services so that patients could be discharged but still kept under careful supervision. Due to advanced analytics and technology, solutions are emerging that address problems that were previously hard to tackle. For example, in general wards, advanced analytics can now track and combine measurements of a range of vital signs to give early warnings of changes in a patient's condition. New sensor and visualization technologies, such as Google Glass, can enable surgeons to see a patient's vital signs without turning away from the patient to look at a monitor. Both developments, when used appropriately, might give rise to new ways to optimize workflows, bring down readmission rates, and reduce mortality.

Usage by solution

Exhibits 3 and 4 show the range of solutions currently being used and those likely to be considered for use in the near future by our C-level respondents. Financial, managed equipment, and data services are those most commonly used at present. Our survey suggests that these services are a priority for radiology departments and catheterization laboratories. Orthopedic departments are more interested in buying managed inventory services for devices and consumables, while intensive-care-unit heads expressed interest in integrated solutions outside the hospital, probably driven by the benefits of remote monitoring. Patients at risk of heart failure, for example, can

have their weight checked remotely to help prevent heart attacks.

Although financial management remains an area of opportunity for solution providers, many of the executives and department heads we surveyed reported having already found the right tools and partners, especially in radiology and other capital-intensive departments.

Implications for medtech companies

The survey indicates the current level of use of medtech solutions, as well as providers' willingness to adopt them more widely given the imperative to curb costs while also improving patient care. So how can medtech companies build on that interest and capture the \$44 billion opportunity in the US alone? Our results reveal four important challenges that many companies will need to overcome. Doing so will require them to transform their business models.

Building credibility

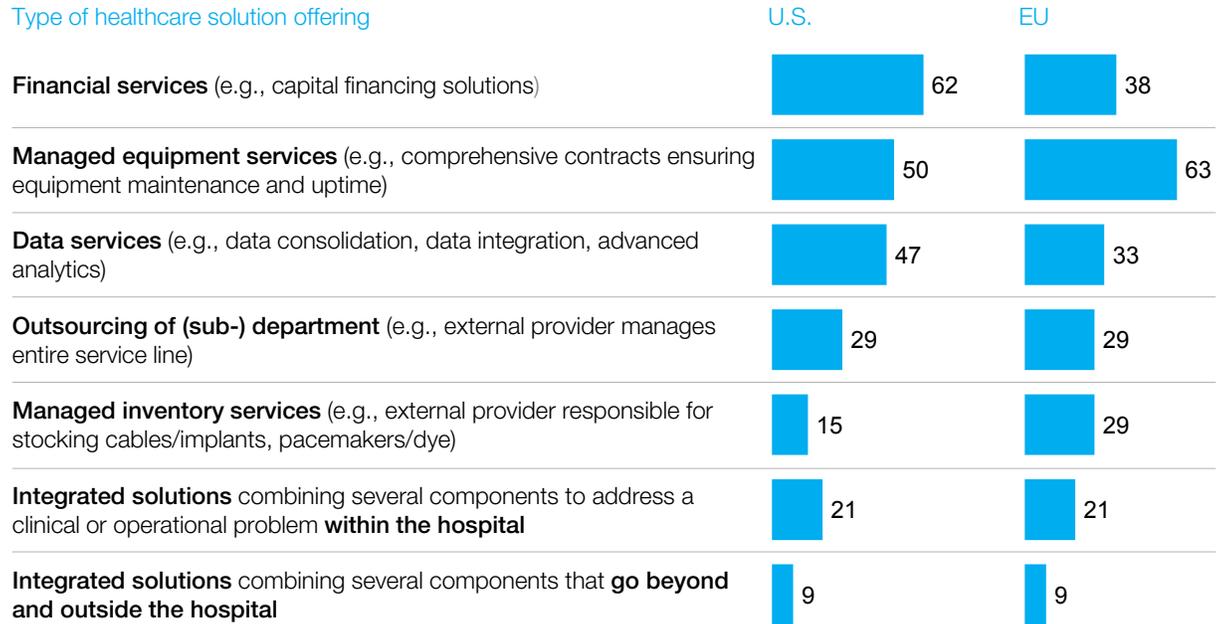
Successful providers of solutions build valued relationships with the hospitals they serve and leave them in no doubt about the benefits. The survey uncovered three areas where there is opportunity for companies to build credibility: knowledge of customers' business, sales processes, and risk sharing.

Knowledge of customers' business

To become credible partners, medtech companies need to know their customers' operations inside and out and demonstrate that knowledge. Some have a thorough understanding of their customers' clinical requirements and market themselves on that as well as on their technical expertise. However, not all spend enough time learning about their customers' operations. They could, for example, observe nurses in order to understand how they interact with monitoring devices, how they process the information provided by a device to make clinical decisions, how they choose between two products when they are in a stressful

Exhibit 3

Healthcare solutions use among C-level respondents



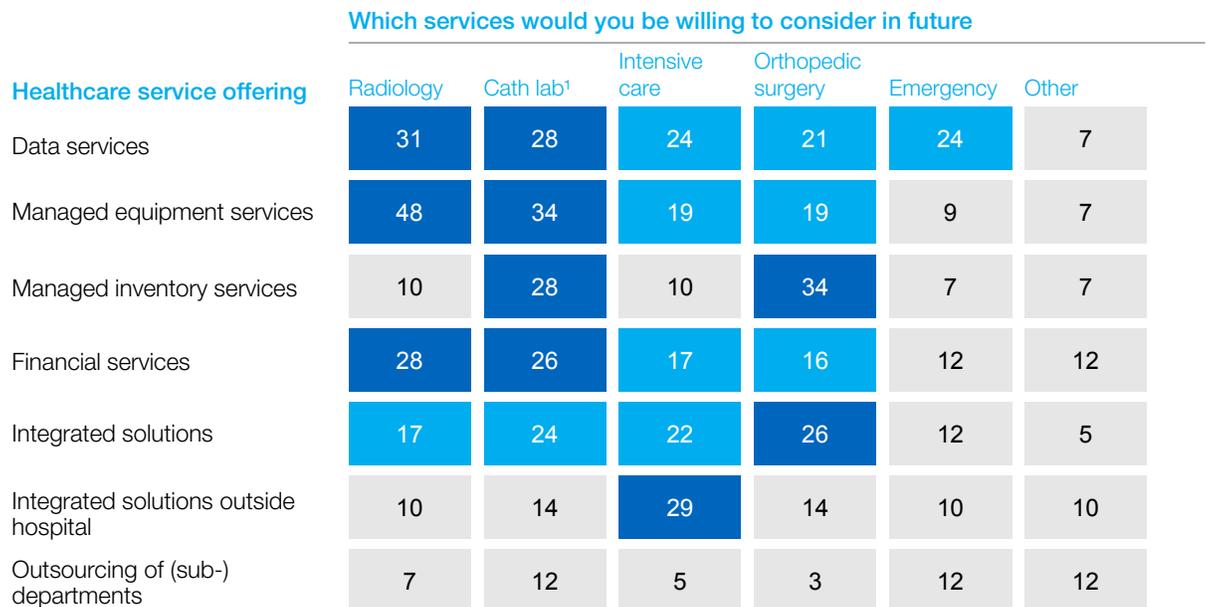
Source: 2014 McKinsey Beyond the Product Survey; n = 58

Exhibit 4

Healthcare solutions considered

Percent of C-level responses

■ High (>25%) ■ Medium (>15%, <25%) ■ Low (<15%)



¹Catheterization Laboratory

Source: 2014 McKinsey Beyond the Product Survey; n = 58

situation, and the type of stressful situations they face.

The survey shows that about 44-50% of those respondents that were sufficiently exposed to medtech solutions ranked the clinical and technical expertise of manufacturers of large equipment as excellent; that figure was 37 percent for suppliers of devices and consumables. However, fewer than 20% said either type of manufacturer understood their hospital’s business and around 30% argued that they did not understand the organizational culture, which is important to drive the transformation of processes in hospitals (Exhibit 5). To dispel these damaging perceptions, manufacturers need to invest in educating their sales representatives. The sales force needs to understand who the decision makers are in a hospital and what is important to

them when they make decisions. They also need to spend more time with the final users of their products.

The sales process

Also noteworthy is the room for improvement in selling procedures that the survey reveals. Few C-suite executives are dissatisfied with the quality and performance of the service provided by medtech companies, but levels of dissatisfaction are noticeably high (and satisfaction low) in relation to the selling process. This is particularly true in Europe, where 29% of respondents stated they were dissatisfied (Exhibit 6). Many respondents were less than satisfied with the typical sales model. It is still common for solutions providers to send a different sales representative for each component of a solution to speak to clinicians in the relevant service line.

Exhibit 5
Ranking of medtech companies’ capabilities

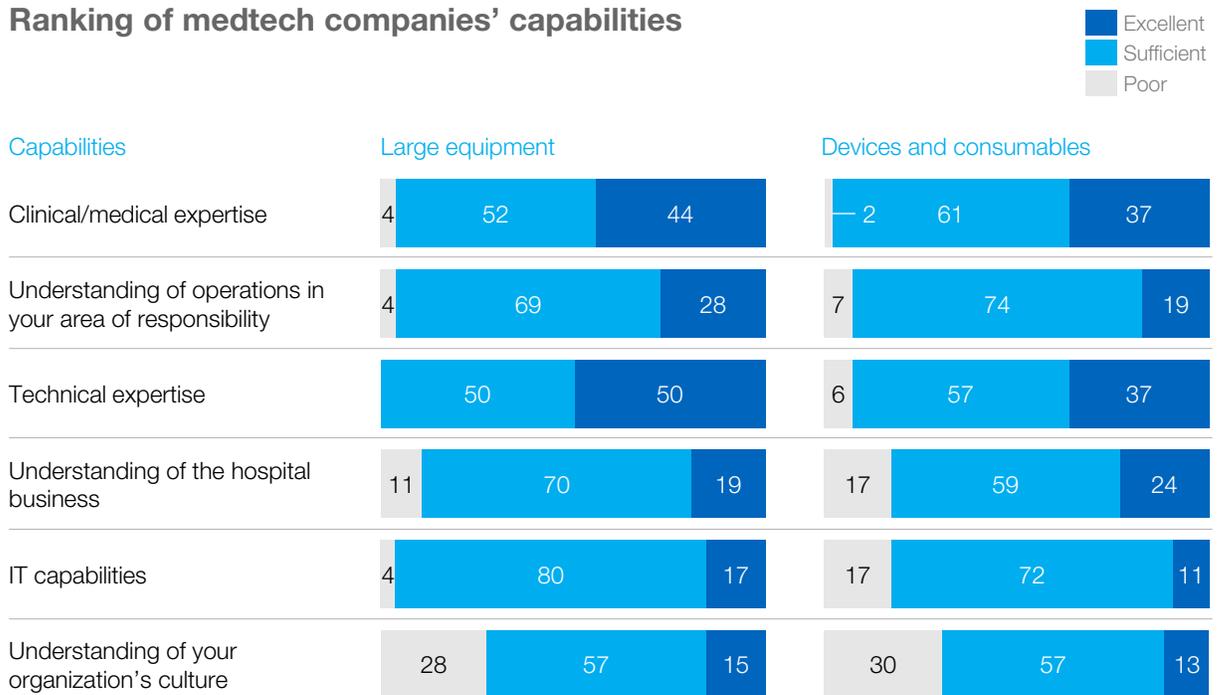


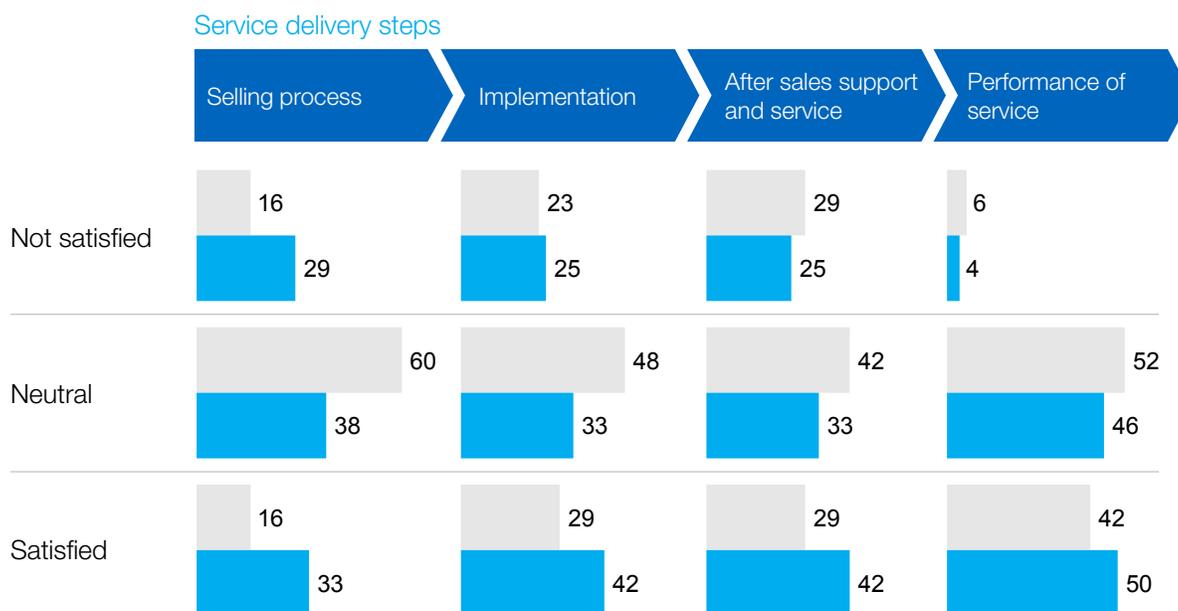
Exhibit 6

Satisfaction with service and solution delivery

Percent of C-level responses

■ U.S.; n = 31

■ EU; n = 24



Note: Similar responses observed from non-C-level respondents (n = ~100)
 Source: 2014 McKinsey Beyond the Product Survey; n = 55

For example, one person might discuss surgery supplies and another talk about disposable supplies. Companies need to abandon this silo model and adopt key account management, where they take an integrated view of a hospital’s needs and send one person who understands its overall goals—not least because hospitals themselves are consolidating decision-making in an effort to control costs and the number of relationships with suppliers.

Risk sharing

Contractual arrangements are another important factor for medtech companies that are building their credibility with healthcare providers. With few exceptions, companies do not offer to share risk with customers. They focus on marketing the technical features of their products and price

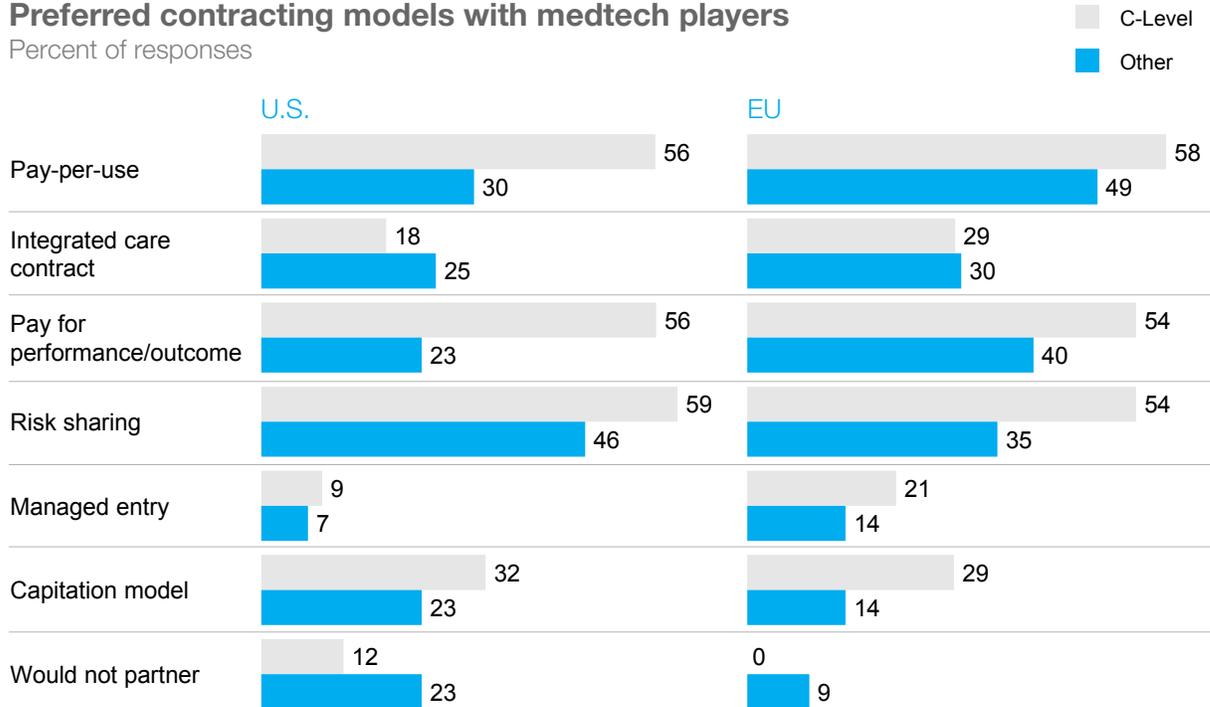
accordingly. Yet our survey shows that providers may be more willing to work with medtech partners if they know these companies will share the risks as well as the benefits of the arrangement. Exhibit 7, with all respondents’ answers, shows that US administrators have a strong preference for risk sharing and a pay-per-use or pay-for-performance contractual model. These types of contracts have been used in the pharma industry for some years, but are only now being explored by medical device manufacturers.

A sustainable, risk-sharing contractual model depends upon a clear understanding of the economics so that both parties gain. It is also likely to call for closer cooperation than either party is accustomed to, particularly when they are

Exhibit 7

Preferred contracting models with medtech players

Percent of responses



Source: 2014 McKinsey Beyond the Product Survey; n = 157

setting payments that will be based on outcomes. A baseline needs to be measured and agreed to so that improvements can be properly gauged. How will they arrive at the baseline, decide exactly who is responsible for which improvements, and who will track those improvements? Can these processes be automated or does one or other party have to spend administrative time on this?

Getting in the front door

It is no surprise that healthcare providers look for a proven track record when choosing a partner. Some 65% of executives in the United States and 54% in Europe regard this as important. Among service line leaders the figures are higher (71 percent and 63 percent), an important difference given that they

make most purchasing decisions, or at least strongly influence them. Exhibit 8 shows these results for all survey respondents.

Existing relationships matter too. While executives do not feel it is important to have a preexisting relationship with a medtech company before entering a partnership with it, service line leaders—especially in the United States—do. Half of the US service line leaders in our survey whose companies have partnerships with medtech companies had worked with these companies beforehand.

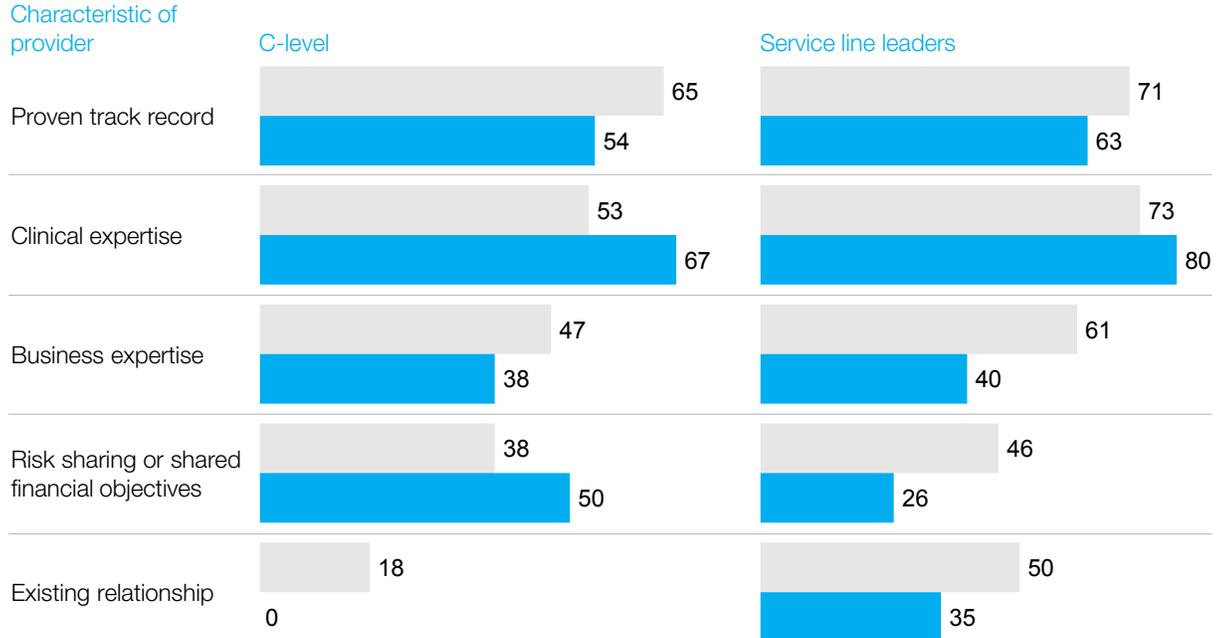
Providers are also influenced by what competitors are doing, particularly in the case of more integrated solutions. As many as 78% of C-level executives and

Exhibit 8

Importance of criteria in choosing a partner

Percent of responses

■ U.S.; n = 90
■ EU; n = 67



Source: 2014 McKinsey Beyond the Product Survey; n = 157

82% of service line leaders say they would be more likely to consider an integrated solution if a competitor had already purchased one.

These results highlight the importance for medtech companies of establishing themselves in the solutions market as quickly as possible, and indicate that they might be in a stronger position to build credibility with existing customers than new ones. They should therefore consider running pilots to build a catalogue of reference cases that demonstrate a solution’s benefits. Companies in other high-tech industries that have made the transition to selling solutions have found it to be an iterative process that involves testing a number of offerings to establish common needs, standardizing

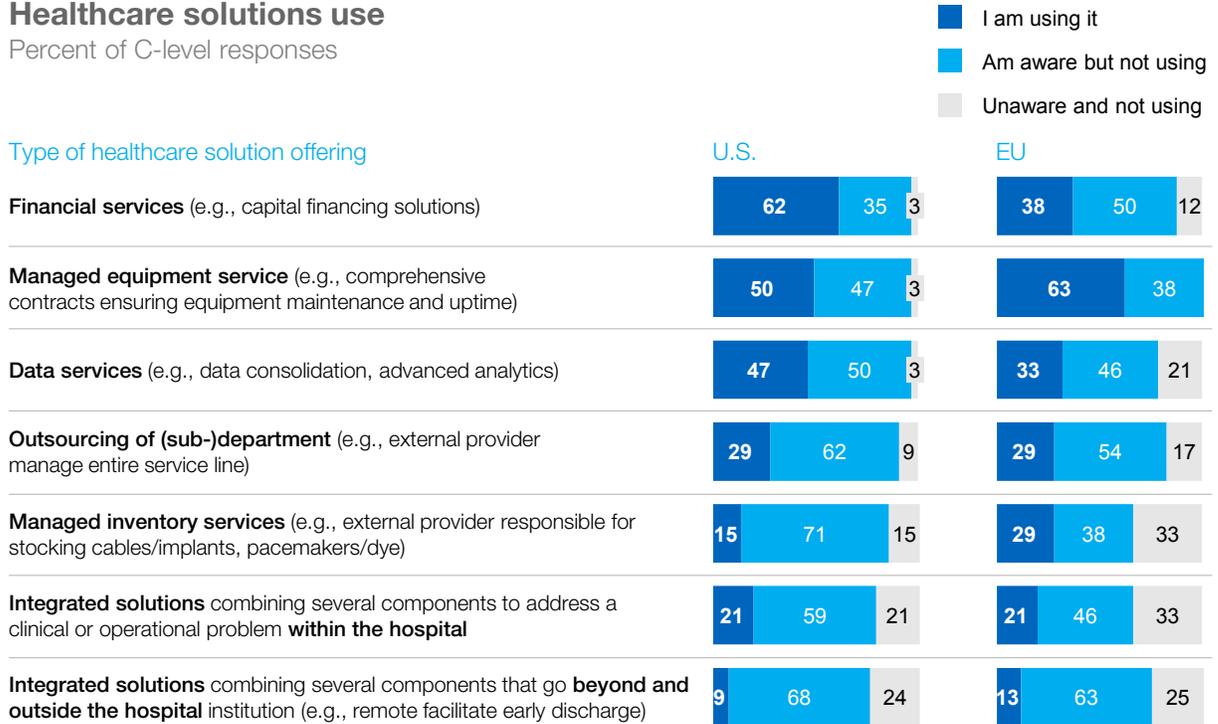
a set of basic frameworks, and only then customizing them according to demand. Margins improve during this process.

Many companies will need to build new skills quickly in order to establish themselves, either through partnerships or acquisitions. Medtronic, for example, partnered with NGC to gain capabilities in lean operations and position itself to help healthcare providers maximize cost savings in their catheterization laboratories. It eventually acquired the company. Several medtech companies have partnered with data analytics companies and IT consultants to boost their data management and data mining skills.

Exhibit 9

Healthcare solutions use

Percent of C-level responses



Source: 2014 McKinsey Beyond the Product Survey; n = 58

Turning awareness into usage

We have shown the current level of interest in solutions and the extent to which US and European hospitals use them. There is clearly room to increase awareness. However, awareness does not necessarily translate into usage. Our results show that while many healthcare providers may be aware of the existence of solutions, they are not convinced they need them. This is particularly true of integrated solutions. Take those that combine several components to address clinical and operational needs within a hospital. In the United States, 59 percent of C-level survey respondents said they were aware of such solutions and in Europe 46 percent. Yet in either geography only 21% of respondents use them (Exhibit 9).

This indicates the potential value to be gained by medtech companies learning to position their products and services in ways that emphasize the benefits and value they deliver. Marketing could focus on outcomes and messages that matter to decision makers. Similarly, an imaging solution could be described as offering “better image resolution and a friendly user interface,” or as allowing a radiologist “to read images 20 percent more quickly and with 30% improved accuracy.” More sophisticated ways of interacting with customers are already being tested, from using tablet computers to offer quick illustrations, to mapping the processes involved in certain types of solutions, to developing key account managers who are able to present broad solutions to hospitals’ strategic decision makers.

Size matters

When asked whether they would be interested in partnering with larger or smaller medtech companies in the future, all respondents expressed a clear preference for the former. Mergers and acquisitions are an obvious way for smaller companies to gain scale rapidly. Building an ecosystem of partners is another option. Very small companies could consider creating platforms to which various partners can connect. These could be used, for example, to develop algorithms that will help to identify patients whose health is deteriorating.

We have also seen that manufacturers of large medical equipment have an advantage over manufacturers of smaller devices in terms of how they are perceived by healthcare providers: they are seen as having more clinical-medical and technical expertise. The survey indicates the extent to which this influences healthcare providers' choice of partner.

It may be true that makers of large equipment can bring together a wider range of capabilities—they may have a consulting division and a healthcare IT group, for example. It can also be argued that small device manufacturers can be more agile and integrate their capabilities more easily. Larger companies often face internal resistance when trying to break down the silos embedded in corporate processes and P&L structures.



There is a significant opportunity for medtech companies to meet healthcare providers' growing requirements to improve costs while concurrently raising the quality of care. Our survey highlights where providers currently use solutions, where

they believe they will use them in the future, and the factors that influence their thinking and decisions when choosing a solution supplier. It also highlights what companies must do to capture an expanding market.

For many medtech companies, this amounts to nothing less than changing their business model. They will need to rethink the design of their sales force and the way it operates. In addition, many will have to devise new ways of contracting risk and work closely with providers to measure success and set rewards accordingly. Their model will shift from one that depends on huge clinical trials to test a standard product to one that identifies the needs of different customer segments and pilots very many different products. To cap it all off, they will have to build these new capabilities quickly—whether through M&A or through new kinds of partnerships. It is a tall order, but one that promises high rewards for both parties. ■

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About the survey

This paper is based on a survey of 157 hospital executives in the US and five European countries.

- Ninety participants were based in the United States and 67 in Europe: 28 in Germany, 14 in the United Kingdom, nine in Italy, eight in France, and eight in Spain.
- Fifty-eight participants held a C-level position at the time of the survey. The remainder were department heads in one of five service lines: emergency department, orthopedic unit, intensive care unit, catheterization laboratory, and radiology.
- Most participants were affiliated with large hospital systems. Ninety-eight worked

in multihospital systems and 91 worked in organizations that had annual revenues of more than \$200 million or €150 million. With one exception, all executives surveyed were involved in the purchasing/ procurement process: 75 reported being the main decision maker, 52 reported being influencers, and 25 reported being consulted before decisions were made.

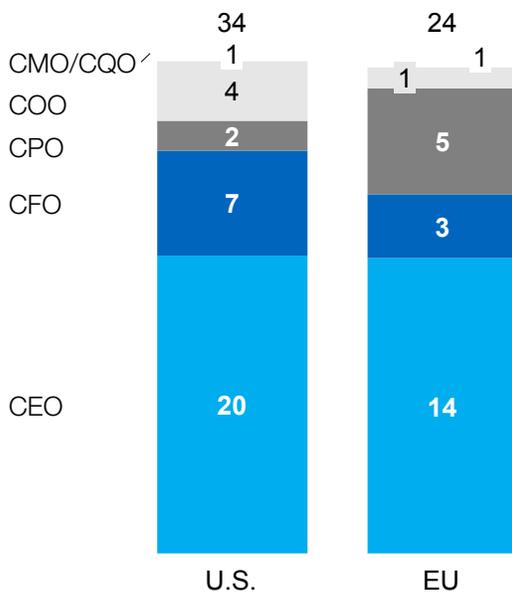
We conducted the survey in collaboration with Gerson Lehrman Group (GLG) and all participants were recruited through GLG. It was targeted at C-suite and service line heads who had been in their current roles for at least two years and were highly influential in purchasing decisions for their area of responsibility. In total, some 1,500 experts fulfilling the criteria were contacted to complete the survey, resulting in a response rate of more than 10%.

Exhibit 10

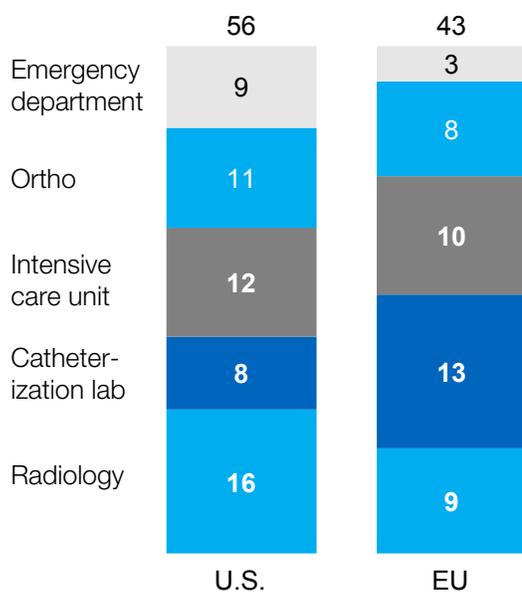
Number of respondents by geography and role

Number of respondents (n=157)

C-level



C-level



Source: 2014 McKinsey Beyond the Device Survey; N=157