



Two Medical Technology Trends to Watch

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RECOMMENDED FOR

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READING TIME

15 min.

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Providers' approach to market challenges will have ripple effects on supplier business

Health care providers confront a range of challenges to their existing business models. Over the coming year, leaders will be pushed to answer questions that range from “should our organization participate in the new accountable care organization (ACO) model?” to “what will be the impact of precision medicine on care delivery?”.

Providers' answers to these and other questions will impact how they perceive and evaluate medical technologies. However, the key challenge for medical technology companies will be separating signal from noise: which market trends have the greatest potential to disrupt suppliers' businesses? How quickly will those disruptions come to bear? What response will they merit?

Rather than a comprehensive list of trends impacting medical device companies, this report distills two of the most important trends reshaping providers' investment priorities and product evaluation processes. By disentangling their potential side effects, medical technology companies can get ahead of commercial challenges and work to differentiate themselves in an increasingly competitive market.

Two trends for medical technology companies to watch in 2019 and beyond:

- 1 Focus on real world data to make decisions:** Providers are using real world data to drive operational, clinical, and financial decision-making.
- 2 Changing perceptions of a medical device:** The digitization of health care will challenge conventional notions of a “medical device.”

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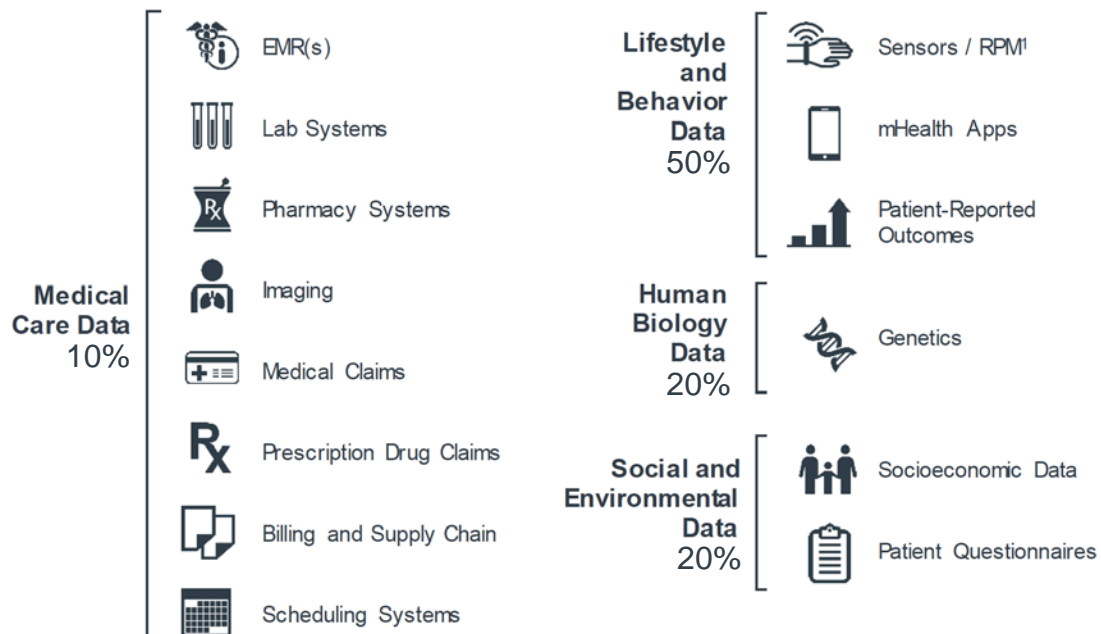
IN FULL RESEARCH REPORT	Pronounced case mix and site of care shifts
	Disrupted referral networks
INCLUDED IN THIS EXCERPT	Focus on real world data to make decisions
	Changing perceptions of a medical device
	Takeaways and next steps
	Related resources with membership

Providers leverage more datasets to make decisions

Systems have access to range of data sources

System leaders have access to incredible amounts of data from sources like electronic health records, demographic analyses, patient satisfaction surveys, and clinical trials. Still, that does not guarantee a 360-degree view of the patient journey as these datasets may be inaccurate, incomplete, unable to be aggregated across sites, or non-reflective of the organization’s specific population. Therefore, many providers are supplementing traditional datasets with clinical and non-clinical real world data (RWD) including lifestyle and behavior data (e.g., wearables), human biology data, and social and environmental data (e.g., socioeconomic outcomes).

Non-traditional data sources have outsized influence on health outcomes



Providers must leverage data to make meaningful decisions

Acquiring the data is an important step, but simply having that data is not enough to improve outcomes. Providers’ next frontier will be leveraging this data to make meaningful operational, clinical, and financial decisions. One successful example: Lafayette General Hospital leveraged patient -reported outcomes data from GetWell Loop’s patient engagement platform to root out the cause of constipation post-bariatric surgery. After mining the data, leaders determined that the clinical protocol was flawed; leaders updated the protocol and saw constipation alerts drop from 40% to 18%.

1. Remote patient monitoring.

Source: Nash DB, "Population Health: Why It Matters," Essentials in Population Health, Children's Hospital Association, Thomas Jefferson University, October 2016; Doucet, Brooke, "Learning From Our Patients: How Patient Engagement Data Can Inform Clinical Practice Guidelines," GetWell Loop, September 26, 2018, available at <http://blog.healthloop.com/learning1> Remote patient monitoring, from-our-patients-how-patient-engagement-data-can-inform-clinical-practice-guidelines; Advisory Board research and analysis.

With more risk, real world data will drive product evaluation

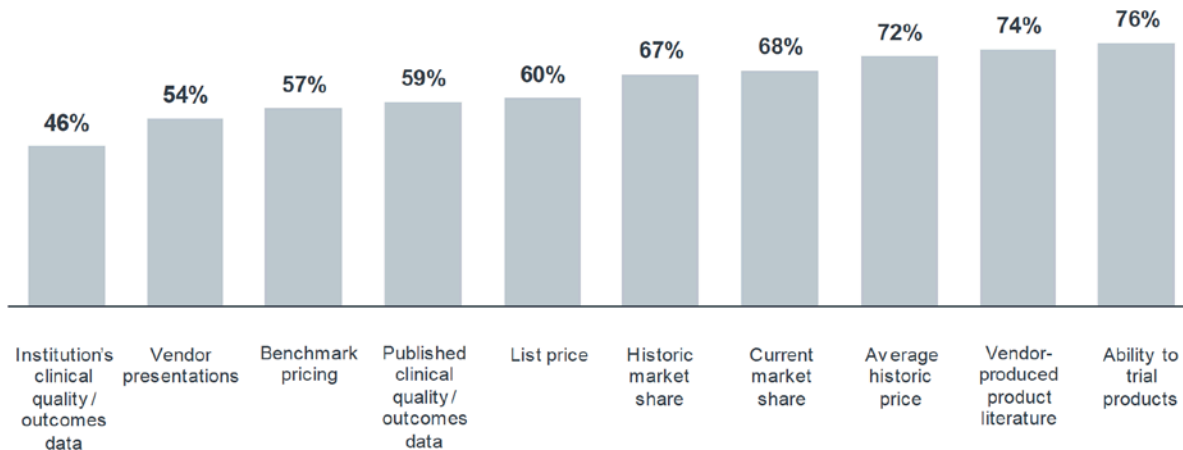
Some providers still lack access to desired data

As provider margins continue to compress and payers up the ante on downside risk, providers will try to use more real world data to guide the medical technology evaluation process. In both the Bundled Payment for Care Improvement Advanced and new Pathways to Success ACO Program, providers must take on greater financial accountability for cost and quality outcomes for at least 90 days post-discharge. As a result, they must be able to evaluate the effectiveness of a given intervention on those relevant outcomes.

In a 2017 survey, just 59% of supply chain leaders reported that clinical quality or outcomes data was generally, frequently, or always available to their value analysis committee (VAC) when evaluating products. Even fewer respondents has consistent access to their own institutions' clinical quality and outcomes data.

Availability of product-specific information when evaluating products

N=54; percent of respondents indicating information is always, frequently, or generally available



Organizations may leverage third parties for objective data

In cases where providers are unable to gather sufficient data internally, they may turn to third party analytics and software tools that offer objective analysis on factors ranging from comparative effectiveness to appropriate use. Though the organizations and use cases are diverse, the overall shift from leveraging vendor-supplied data to third party data makes it imperative for medical technology companies demonstrate real world outcomes and find new ways to build trust and stickiness with the provider organization.

As the year progresses, we will continue to investigate the health tech assessment (HTA) market and the impact of these services on product sourcing.

Digital health brings new opportunities, challenges

Medical technology companies can leverage interest in digital health to evolve solution offering

The growth of digital health promises multifold benefits to the health care ecosystem. Providers can shift from being treatment focused to prevention focused and patients can more easily engage with their health in an ongoing manner, both of these shifts may ultimately improve outcomes and reduce costs. The value of digital health is also underscored by regulators' commitment to digital health expansion. In 2018, the Food and Drug Administration (FDA) released a "Digital Health Innovation Action Plan," which outlines government efforts to ensure greater access to high-quality, safe and effective digital health products.

That said, digitization also brings a wave of new challenges. First, it's a driving factor behind the influx of new data that organizations must collect, aggregate, and analyze. Second, it's pushing providers to focus on system-wide interoperability beyond the HER. For example, remote patient monitoring data offers providers visibility into experiences not typically captured in claims data, but that insight is only valuable insofar as it's able to be integrated with existing datasets and incorporating into broader treatment plans.

Over the last few years, many medical device companies have looked to evolve from being product-oriented to solutions-oriented, offering wraparound services that enhance the value of the product and demonstrate commitment to their provider partners' success. The digitization of health may create more opportunities for suppliers to step in as partners in disease prevention, diagnosis, and treatment. For example, suppliers may collect and analyze data from select devices and share that data with clinicians—in real-time—to inform treatment plans and improve care management.

Early case studies of connected devices

Though the market is still in an early phase, there are example of how connected devices and the broader convergence of device and IT may reshape the care delivery landscape.

CASE EXAMPLE

AliveCor KardiaMobile

- Portable, consumer-grade single-lead EKG,¹ retails for \$100
- Intended for self-capture of intermittent cardiac events such as atrial fibrillation (AFIB)
- Smartphone-based machine learning validates quality of trace, assesses possibility of AFIB, classifies normal/abnormal sinus rhythm
- EKGs can be sent to a board-certified cardiologist for interpretation for \$19

CASE EXAMPLE

Medtronic MiniMed 670G System: Hybrid Closed Loop and Smart, Integrated Insulin Pumps

- SMARTGUARD technology mimics some functions of a healthy pancreas; leveraged smart CGM and algorithms to automatically adjust basal insulin delivery
- Trials showed a 44% reduction in hypoglycemia, improvement in Time in Range, and reduced A1c
- Real world data continues to demonstrate Time in Range exceeding 70% and significant quality of life benefits

Source: alivecor.com; "SmartGuard Technology," Medtronic, available at <https://professional.medtronicdiabetes.com/para/smartguard-technology>; "Medtronic MiniMed 670G Trial Results: 44% Reduction in Hypoglycemia, 0.5% A1c Improvement," DiaTribe Learn, June 2016, available at <https://diatribe.org/medtronic-inimed-670g-trial-results-44-reduction-hypoglycemia-05-a1c-improvement>; Advisory Board research and analysis.

1. Electrocardiogram

Convergence of device and IT raises bar for proving ROI¹

Innovation will impact product evaluation moving forward

The growth of connected devices has the potential to evolve the supplier-patient relationship, notable for those manufacturers that have not historically sold or marketed direct to consumer. In addition, the convergence of device and technology will expose providers and suppliers to new challenges, including appropriate use considerations, workflow integration, and reimbursement.

Though providers have always sought to balance innovation and value, they may start to look more closely at real world clinical and economic data in to validate the effectiveness of an intervention with uncertain reimbursement. Not only are connected devices providing real world data, providers may expect suppliers to leverage that data as a means of justifying investment.

Organizations have already started to address this growing need for real world evidence to validate an investment. Earlier this year, Johnson & Johnson and Apple Inc. announced a multi-year partnership to determine whether the Apple Watch in conjunction with a patient engagement app developed by Janssen Pharmaceuticals could improve cardiovascular outcomes and prevent strokes. This approach, a joint supplier-administered real world clinical trial, may be one, though not the only way, to prove value to the health care system.

1. Return on investment.

Source: Hale, Conor, "Apple, J&J to put the Apple Watch's ECG through large-scale clinical testing," *Fierce Biotech*, January 2019, available at <https://www.fiercebiotech.com/medtech/apple-jj-to-put-apple-watch-s-ecg-through-large-scale-clinical-testing>; Advisory Board research and analysis.

Takeaways and next steps

Medical technology companies must prepare for short- and long-term impact of industry trends

The near-term result impact of exacerbated pressure on provider revenue is continued cost scrutiny across the medical technology procurement process. In the longer-term, medical technology companies can differentiate themselves by breaking down traditional product silos and upping the ante on developing and sharing real world data.

Four imperatives for medical technology companies moving forward

- 1** To gain buy-in from multi-disciplinary and centralized purchasing bodies, focus on how a product or solution can drive system-wide savings. Suppliers must be able to tie a given solution to clinical and financial metrics and position that solution in the context of a broader patient journey, versus a facility-specific encounter.
- 2** At the same time, suppliers must be prepared to sell to independent physician buyers who, while focused on patient and clinical outcomes, are more cost-conscious than the traditional independent physician. Further, suppliers must consider how physician consolidation influences suppliers' call points and contracting processes.
- 3** To deliver patient-centric solutions, suppliers may need to rethink their product and portfolio development. Whereas portfolios have historically centered on providing products to treat a range of specific procedures, providers focus on disease prevention and ongoing care management will alter demand for those procedure-specific product lines. Suppliers' whose offerings can support ongoing disease management and address cross-continuum care needs may be able to stand out as a partner in care delivery and cost management.
- 4** While new technologies offer promise of improved clinical, operational, and financial outcomes, many organizations remain fairly risk averse, particularly in the face of uncertain reimbursement. As a result, suppliers will likely need to meet higher bar for proving product or service value. Consider how partnering with provider, supplier, or other third party organizations can help evolve ROI from theoretical to actual.

Preview resources available with membership

Virtual care



Implementation resource: [Telehealth Industry Trends](#)

Download ready-to-present slides covering telehealth technology, adoption, and best practices to help frame your next strategy meeting and build a strong foundation for your presentation.

Concierge medicine



Research report: [The Consumer-Oriented Ambulatory Network](#)

Learn how concierge care can fit in your larger ambulatory network strategy by appealing to key demographic groups.



Expert insight: [What is concierge care?](#)

This cheat sheets provides a quick orientation to concierge care models, trends, and best practices.

Urgent care clinics



Implementation resource : [Urgent Care Center Pro Forma](#)

This tools has the data you need to determine if there's urgent care demand in your market and if an urgent care investment would be profitable.



Research report: [Key Considerations for Investing in Orthopedic Urgent Care](#)

Download the strategic planner's guide to establishing and operating successful orthopedic urgent care services.

Retail care



Research report: [The Consumer-Oriented Ambulatory Care Network](#)

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