DRIVERS OF CHANGE

Top drivers of change in the cardiovascular market

Four key drivers reshaping the delivery of care for patients with cardiovascular diseases

COVID-19 has exposed several gaps in what was once considered the “norm” of cardiovascular care. While the pandemic has accelerated out-of-hospital shift, exacerbated workforce competition and slowed the launch of new federal, risk-based programs, it has also increased cross-industry interest in retail care models, value-based payment, virtual and home-based care, and equity initiatives that are both mission- and business-driven. These shifting dynamics introduce not only new challenges but also new opportunities for CV leaders.

Published – February 2023

Read time – 10-min read

Audience

- All healthcare organizations

Advisory Board

Introduction

Even prior to the COVID-19 pandemic, there was growing demand for cardiovascular services given high rates of risk factors and disease in the U.S. This is due, in part, to an increase in older and medically complex individuals. The high prevalence of cardiovascular disease and related co-morbidities shows no signs of slowing down.

Heart disease death rates and prevalence are on the rise.

1 in 5

Deaths in the United States were attributable to heart disease in 2020.

20.1M

Adults aged 20 and older have CAD[1] based on 2015-2018 data.

Healthcare stakeholders should also be prepared to face increased costs for patient care.

$30K

Estimated annual cost of caring for a patient with HF[2] in the United States.

$229B

Total cost of heart disease in the United States each year from 2017 to 2018.

Increased disease prevalence and costs will have outsized impacts on marginalized communities, given stark cardiovascular health disparities.

1.21

Higher adjusted odds of developing cardiovascular diseases in black patients compared with white patients.

526 per 100k

Cardiovascular mortality in black men in 2019, and 396 per 100K in white men.

Sources: Tsao C.W., et al. "Heart Disease and Stroke Statistics – 2022 Update." AHA.; Vecchione "Annual heart failure costs in the US could surpass $70B by 2030." Cardiovascular Business; Acosta J.N., et al. "Cardiovascular Health Disparities in Raical and Other Underrepresented Groups: Initial Results From the All of Us Research Program." AHA; Kyalwazi A.N., et al. "Disparities in Cardiovascular Mortality Between Black and White Adults in the United States, 1999 to 2019." AHA.; "Heart Disease Facts." CDC; Advisory Board interviews and analysis.

1. Coronary artery disease
2. Heart failure.

Drivers of change

SECTION	DRIVER	CHANGE
01	**Lasting impacts of COVID-19**	CV volumes are rebounding after the pandemic, but CV-related impacts from long COVID and the toll the pandemic took on staff will continue to impact CV strategic planning and operations long after the federal emergency ends.
02	**Shift of core CV services off-campus**	The pace of key CV services shifting off-campus will vary across markets, based on a growing range of market drivers and site-of-care options.
03	**Primary care disruptors alter referrals**	Non-traditional providers threaten referral pattern norms as they re-define primary care today and show potential to compete for downstream volumes in the future.
04	**Renewed focus on health equity**	COVID-19 called attention to longstanding inequities in CV disease prevalence, clinical trial participation, care access, and health outcomes, jumpstarting industry-wide efforts to make health equity a business imperative across service lines and within CV care.

More resources on cardiovascular

Accessible on **advisory.com**

WEBINAR
2022 Cardiovascular State of the Union

READY-TO-USE SLIDES
Cardiovascular market trends for 2022

01 Lasting impacts of COVID-19

What's happening?

Volumes are returning to pre-pandemic levels—but that doesn't mean that we're in the clear. The main impacts of the pandemic are now centered on higher cardiovascular utilization driven by long COVID. In fact, one third of people who had COVID-19 reported symptoms up to nine months after the initial illness—and COVID-19 patients are 55% more likely to experience a major cardiovascular event within the first year of infection. Additionally, the pandemic is continuing to impact staffing across the board and cardiovascular programs are not immune. Amongst CV professionals surveyed by the American College of Cardiology, burnout rates increased significantly during the pandemic. While CV still ranks lower than many other specialties in terms of burnout rates, one survey suggests that the pandemic has already had significant impact on CV staffing, prompting professionals to reduce their clinical work hours, leave their practice, and retire early.

How CV professionals were influenced by the COVID-19 pandemic

n= 1,288 survey respondents

12%	17%	11%
Left the practice	Reduced clinical hours	Retired early

Why does this matter today?

Demand driven by long COVID will impact planning for diagnostic tests, which need to be available for patients experiencing cardiac symptoms—and so providers should have protocols to identify new patients for screening. There may also be an increase in complex patients who require ICU admission or new multidisciplinary care management protocols. The challenge of accommodating increased demand for CV services is only exacerbated by workforce burnout and staffing concerns.

Sources: Satterfield, B.A., et al. "Cardiac involvement in the long-term implications of COVID-19," Nature Reviews Cardiology; Wood, S. "More Burnout in Cardiology as COVID-19 Fans the Flames," tctMD; Advisory Board interviews and analysis.

Potential impacts of industry actions

Impact to stakeholder expected to be: + *Positive* − *Negative* ? *Too soon to tell*

− **Consumers** with long COVID potentially face harmful cardiovascular health outcomes.

\+ **Device and diagnostics companies** have an ongoing opportunity to support long COVID diagnosis and monitoring, particularly with highly-demanded at-home testing.

\+ **Digital health** will see increased demand as patients continue to use telehealth and other digital options.

− **Health plans** face a challenging outlook for medical spend as some patients require increased CV care utilization.

? **Pharmaceutical companies'** success with COVID therapeutics will vary. For those with treatments that make it through the development and approval pipelines, success will partially hinge on clearly communicating the requirements for treatment, including parameters on time from infection to treatment.

− **Provider organizations** may face outsized CV patient need that will outpace provider supply.

Expected stakeholder actions

- **Digital health** will race to build new RPM[1] devices, apps, and other ways to meet the needs of complex and comorbid CV patients affected by COVID-19. The increasingly competitive market will heighten pressure to prove cost-effectiveness and expand care access.
- **Health plans** will focus on managing medical spend by continuing to influence care shifts to lower-cost sites and encourage improved care coordination. Health plans can further control the steerage of patients and total revenue through integration at the point of care delivery.
- **Health systems** will increasingly offer dedicated disease management services for patients with long COVID through initiatives such as a dedicated care team/center or provider training. Furthermore, they will face mounting pressure to manage physician and staff burnout, which they may address through expanded benefits or more appealing job offerings (ex. Increasing employment opportunities in ASC settings).
- **Physicians** will need to rethink care team design to adequately meet the high demand of cardiac patients while managing high clinical support staff turnover.

1. Remote patient monitoring

Source: Advisory Board interviews and analysis.

02 Shift of core CV services off-campus

What's happening?

Today, cardiovascular services are no longer shifting simply from inpatient to hospital outpatient departments—these services can be found at a variety of settings. Procedural care is shifting to ambulatory surgery centers (ASCs) and physician offices and non-procedural care is shifting to the home, to virtual visits, and to convenient care clinics. But these shifts are not happening everywhere, all at once, and they are not driven by one factor alone. Markets will experience this shift at different speeds depending on the presence of various drivers such as policies and regulations, purchaser activation of consumers and referrers to favor lower-cost sites of care, clinical and technological innovation, and local provider competition. But regardless of where individual markets fall on the adoption spectrum, there is an undeniable nation-wide interest in off-campus investment for cardiovascular services.

> We're looking at expansions into higher-acuity interventions to include PCI, as those procedures were approved by CMS for ASCs.
>
> ERIC EVANS
> CEO, Surgery Partners

Why does this matter today?

As healthcare stakeholders push toward value, access, and lower costs, this shift will only intensify, making investment in an off-campus strategy more important than ever. Depending on the level of adoption in a given market, investing in an off-campus strategy can differentiate an organization or be used to defend market share from competitors.

31 of 258

ASCs opened in 2021 specialized in cardiovascular procedures

Sources: Robertson, M. "Specialty breakdown of all 258 ASCs opened in 2021," *Becker's ASC Review;* Newitt, P."8 executive insights from USPI, Surgery Partners, HCA," *Becker's ASC Review;* Advisory Board interviews and analysis.

Potential impacts of industry actions

Impact to stakeholder expected to be: + *Positive* − *Negative* ? *Too soon to tell*

+ **Consumers** will have better access to lower-cost options for care.
? **Device and diagnostic companies** will face a more fragmented customer market as CV procedures move to new sites of care.
+ **Health plans** face favorable medical spend at lower-cost sites of care.
? **Pharmaceutical companies** will face increasing need to use real-world evidence and existing data to market products that can help patients manage their CV conditions across sites of care.
? **Suppliers** will need to tailor their market strategy and adjust supply chain processes to effectively meet the needs of new and more fragmented customer segments.

Expected stakeholder actions

- **Consumers** may now seek and evaluate varied care options to suit their schedules and needs. They can now take advantage of at-home care or hybrid virtual and onsite service models.
- **Life sciences companies** will stay abreast of outpatient shift trends to support growing freestanding, virtual, and at-home environments. This means creating a market-tailored strategy that includes product design, services, marketing, and supply chain process adjustment.
- **Health systems** will more proactively develop an off-campus strategy to meet the demand and competition in their market for out-of-hospital care, and they will evaluate how to backfill hospital-based procedural volumes as care shifts from the hospital.
- **Physician leaders** will need to recruit physicians that prefer and embrace flexibility in their work environments and want to champion growth of non-hospital sites of care. Furthermore, as devices like wearables increase in use, physicians will need to develop habits of reviewing collected data with patients and use it to inform clinical decision making, while remembering technological limitations prevent this information from illustrating the complete picture.
- **Health plans** will continue to incentivize out-of-hospital procedural shift to lower cost sites, such as ASCs. Payers will largely determine the rate at which non-procedural care shifts online and into the home and will share in shouldering the impacts of care fragmentation if they don't help improve care coordination across a diversifying network of CV care sites.
- **Digital health** will expand to offer a more holistic telehealth approach to keep up with virtual visit demand and combat care fragmentation. This calls for continued product innovation for patient-centered, multimodality telehealth solutions. To retain current users and expand capabilities while controlling cost, digital health companies should strategically offer services and features that add value to the common telehealth visit.

Source: Advisory Board interviews and analysis.

03 Primary care disruptors alter referrals

What's happening?

Non-hospital competitors are continuing to strengthen their hold in the primary care and disease management spaces. They have been well-suited to the challenges of the pandemic and have demonstrated steady financial success over the last 2-3 years. Further, these groups are significantly expanding their reach by adding more practices and entering new partnerships to grow service offerings or reach more patients. These actors are positioned to compete with health systems and traditional provider groups, especially as they provide accessibility and convenience for patients.

Three types of non-traditional disruptors

Familiar retailers

Companies like Walmart, CVS, Amazon, and Dollar General continue to stake a larger claim in healthcare.

Digital health providers

Telehealth providers offer episodic, primary care virtual visits as well as ongoing chronic disease management.

Accountable PCP groups

Accountable PCP groups manage the full continuum of care and assume greater risk for managed lives. This includes companies like ChenMed, Iora, and Privia.

Why does this matter today?

Non-traditional players are permanently altering CV referral pathways and patient management in many ways. They create new referral sources, but ones with strict criteria for specialty referrals: CV programs must be competitive on quality and cost metrics to earn referrals from these groups. Select groups are also managing more chronic conditions internally, and even employing cardiologists in select cases to help reduce the overall cost of care. This has the potential to limit how often these programs are referring to CV programs, or at what stage in disease progression patients are referred out.

Source: Advisory Board interviews and analysis.

Potential impacts of industry actions

Impact to stakeholder expected to be: + *Positive* − *Negative* ? *Too soon to tell*

+ **Consumers** will have more access to innovative, patient-centric care.
+ **Device and diagnostics companies** will face a diversifying customer market, and an opportunity to partner with new players on chronic disease management, particularly for CVD and diabetes.
? **Digital health** will see new growth and partnership opportunities as both non-traditional and innovative traditional players prioritize virtual-first offerings. However, there will be increasing competition as new players enter the digital health market.
+ **Health plans** will have a growing number of partnership options as new, innovative provider groups and digital health vendors continue to emerge.
− **Health systems** face increased competition due to altered referral patterns, and they could see a higher share of complex cases and even direct competition if primary care disruptors successfully manage chronic CV conditions and expand to specialty care.
? **Pharmaceutical companies** will face heightened expectations to prove not just the clinical efficacy of drugs, but also their impact on the total cost of care.

Expected stakeholder actions

- **Digital health companies** will explore ways to differentiate themselves from fierce competition among a growing number of digital health companies as disruptive care delivery groups and progressive providers continue to prioritize virtual-first care.
- **Health plans** will increasingly view primary care disruptors as “coopetition”—they have the potential to be cooperative in a partnership, but also to be competitors. Plans will likely prioritize innovative provider group and digital health vendor partnerships to offer comprehensive services that follow CV patients throughout the care continuum (e.g., virtual primary care and a referral to an in-house cardiologist), rather than a single solution (e.g., only urgent virtual visits).
- **Health systems** will try to demonstrate their value to non-traditional referring groups on metrics such as total cost, quality, and access preferences. They also will evaluate whether to work more closely or better compete with primary care disruptors, local systems, and other providers to weather referral disruption.
- **Physicians** will be confronted with the option to work more closely with primary care disruptors to capture referrals or align more closely with other organizations to help minimize the impact of the disruption.

Source: Advisory Board interviews and analysis.

04 Renewed focus on health equity

What's happening?

COVID-19 shed new light on longstanding disparities in CV disease prevalence, research, and care. These inequities impact the CV landscape in many ways, including that underrepresented groups often present with higher complexity CV conditions, require a longer length of stay, are more likely to be readmitted, and incur higher patient costs. Recognizing the impact this has on individuals and the industry, more CV stakeholders have started to align their incentives to meeting health equity targets, making CV health equity a business imperative.

CV disparities begin outside the hospital…

4x Individuals with a college degree were 4x more likely to have ideal CV health relative to those who did not graduate high school

Rural patients have a higher age-adjusted mortality from CV conditions (e.g., heart failure, stroke, and myocardial infarction)

…and perpetuated in care and research:

50% Less likelihood of Asians to be referred to cardiac rehab programs compared to white patients

0.16 Additional length of stay days before discharge for poorer patients compared to wealthier patients[2]

11% Lower frequency of being viewed by a CV specialist for women compared to men

43% Of cardiovascular trials[1] reported racial representation among participants

Why does this matter today?

From CMS starting to tie some reimbursement to health equity metrics, to health plans incorporating equity metrics into provider quality scorecards, to providers rethinking how to incorporate health equity in their workforce, patient outcomes, and community engagement strategies, there is more attention on health equity in CV care than ever. But despite progress, inequitable access and health outcomes remain a challenge. There is still significant opportunity for cross-industry CV stakeholders to partner to drive health equity initiatives to solve these challenges.

1. Included trials for CABG, heart valve disease, aortic aneurysm, VAD, and heart transplantation.
2. Of the study population, poorer patients were in the lowest socioeconomic status quartile, while wealthier patients were in the highest socioeconomic status quartile.

Sources: "A Review of Disparities in Cardiac Rehabilitation EVIDENCE, DRIVERS, AND SOLUTIONS," Journal of Cardiopulmonary Rehabilitation and Prevention, November 2021; "Sex, Racial, and Ethnic Disparities in U.S. Cardiovascular Trials in More than 230,000 Patients," The Annals of Thoracic Surgery, January 2020; "Racial Disparities Impact Heart Health Despite Access to Education," *Patient Engagement HIT,* Jan. 2022; "Rural-Urban Disparities in Cardiovascular Outcomes: Getting to the Root of the Problem," *JACC Journals,* Jan. 2022; "Women found to be at higher risk for heart failure and heart attack death than men," *AHA,* 2020; "Racial/ethnic and socioeconomic variations in hospital length of stay," *Medicine,* 2021.

Potential impacts of industry actions

Impact to stakeholder expected to be: + *Positive* − *Negative* ? *Too soon to tell*

+ **Consumers** may experience improved outcomes from health equity solutions, if they are intentionally designed.
? **Governments** will have the opportunity to score political points but will also experience high demand for social assistance services.
? **Health plans** will likely see pressure for further action as the industry continues to center health equity work but may see cost savings down the line depending on the success of various initiatives.
? **Pharmaceutical companies** will face pressure to democratize clinical trials and reduce clinical and non-clinical barriers to diverse participation.

Expected stakeholder actions

- **Device and diagnostics companies** will seize opportunities to partner with health systems to support access to CV screening and care and help design real-world evidence generation related to equity.
- **Digital health companies** will increasingly support health equity initiatives through the collection and analysis of data, such as race, ethnicity, gender, and clinical outcomes. They will also face a growing need to provide technology to enable decentralized clinical trials to have a more diverse population reach outside of the traditional hospital and freestanding settings.
- **Health systems** that are more advanced will prioritize health equity initiatives as a part of service line planning. All health systems should expect continued momentum to screen for and address health inequities, particularly related to chronic CVD. To be successful, systems need to become more effective at collecting and using data to understand patient outcomes and demographic information.
- **Payers** will track metrics for improving health equity and should align with provider organizations on the most appropriate metrics for CV services. Commercial payers may look to Medicaid plans, who have historically prioritized health equity initiatives, for inspiration and learning.
- **Physician groups** will see an opportunity to partner with community organizations to address disparities in patient populations by targeting specific causes of illness that permeate their community.
- **Suppliers** will incorporate patient mapping to inform planning and ensure equitable access to patients.

Source: Advisory Board interviews and analysis.

ABOUT OUR RESEARCH

Change has always defined healthcare, but today's leaders face unprecedented challenges and market shifts. Developing successful strategies and advancing make-or-break objectives has never been more challenging due to mounting complexity, intensifying competition, and a growing roster of stakeholders.

HOW WE HELP

The knowledge you need to stay current, plus the strategic guidance, data and tools you need to take action.

WHO WE SERVE

Hospitals • Health systems • Medical groups • Post-acute care providers • Life sciences firms • Digital health companies • Health plans • Healthcare professional services firms

To learn more visit advisory.com/memberships or contact programinquiries@advisory.com.

The Advisory Board advantage

Our team of 200+ experts harnesses a time-tested research process and the collective wisdom of our 4,500+ member network to develop provocative insights, actionable strategies, and practical tools to support execution.

Project director

Emily Heuser

HeuserE@advisory.com

Senior research analysts

Yemi Zewdu Yimer

Lindsey Paul

655 New York Avenue NW, Washington DC 20001
202-266-5600 | **advisory.com**