

#### SECTOR IN-DEPTH

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# Pandemic accelerates shift from hospitalbased care, crimping revenue and margins

A shift in care delivery to lower-cost outpatient or in-home settings, underway for years but accelerated by the pandemic, will continue to constrain hospitals' revenue growth and margins. Changes in reimbursement models, new drugs, devices and growing investment in outpatient services, including ambulatory surgery centers (ASCs), will drive down inpatient care, the traditional measure of market share and presence. An aging population, higher acuity cases and strong population growth in some markets will lessen this shift.

- » Pandemic accelerates existing shift away from hospital-based care. The pandemic has fueled a shift in the way consumers access healthcare, with increasing use of telehealth and fewer emergency room visits. A number of providers are expanding home care services including in-home acute care admissions.
- » Reimbursement changes and risk-sharing models will reduce inpatient care. For decades, insurers have incentivized providers to offer quality care in the least costly setting. In recent years, the Centers for Medicare and Medicaid Services' (CMS) decision to remove certain orthopedic and cardiac procedures from its inpatient-only list will shift more treatment to hospital-based outpatient departments or ASCs. Hospitals will also continue to transition to risk-taking models of reimbursement, keeping patients out of more expensive, acute-care hospital settings.
- » Hospitals embrace investment in outpatient services including ASCs. Not-for-profit (NFP) hospitals will increase partnerships with leading industry players in telehealth and urgent care as well as with ASCs. Several for-profit chains continue to consolidate large numbers of ASCs, putting them ahead of NFPs in certain markets. Since most ASCs are owned or jointly owned by physicians, hospitals will often share revenue and income.
- » Advances in drugs and medical devices will help keep patients out of the hospital. In cardiology, new drugs and at-home heart monitors will reduce the risk of hospitalizations for heart failure, a key reason that patients over 65 are admitted. In orthopedics, new technologies that help reduce surgical time or create patient-specific implants will aid the shift to outpatient procedures.
- » Higher acuity and demographics will help offset these trends. Hospitals with a strong focus on quaternary and tertiary care – highly complex cases requiring greater levels of specialty care – will be better off than hospitals offering less complex, or secondary care. An aging population will also help offset the shift to less hospital-based care.

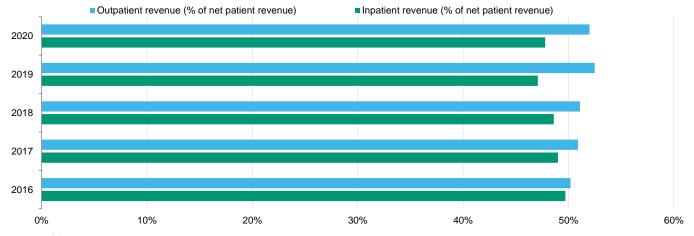
## Pandemic accelerates move away from hospital-based care

The pandemic has fueled a shift in healthcare delivery, with more patients unable or unwilling to seek care in hospital settings. Even as the pandemic ebbs, its effect on how consumers access healthcare will persist, with fewer emergency room visits, for example, and continued extensive use of telehealth. The move toward lower-cost outpatient or in-home settings will continue to constrain hospitals' revenue growth and margins.

The shift toward outpatient or in-home settings has been underway for several years, with very low or generally flat hospital admission rates in the pre-COVID period, according to Moody's medians data. Exhibit 1 shows how the median percentage of outpatient revenues compared with total revenues continues to increase, consistently exceeding inpatient revenues.

Exhibit 1

Outpatient revenue has exceeded inpatient revenue in the past few years



Source: Moody's Investors Service

#### Telehealth visits will remain an important access point

The pandemic initially resulted in skyrocketing telehealth visits and declining numbers of ER visits. Medicare telehealth visits increased 63-fold during 2020, according to the Department of Health and Human Services. Although hospitals are reporting that telehealth usage is receding as more patients return to in-person physician visits, it will likely remain higher than pre-COVID levels, especially for certain specialties.

Telehealth visits have gained wide acceptance, but they are only one part of virtual care, defined as delivery of care using communication technologies. This includes the use of virtual technology for remote emergency services, diagnostic services, or ICU monitoring. Last year's merger of Teladoc Health (a leader in virtual care visits) and Livongo (focused on platforms to manage chronic diseases) highlighted the intersection of virtual care and the use of smart devices and personalized services to manage chronic diseases.

#### Use of at-home acute care services will grow

While some hospitals and health systems were already using at-home acute care models before the pandemic, many more will look to provide acute care services at patients' homes, according to our discussions with senior management teams. Johns Hopkins University Schools of Medicine and Public Health developed The Hospital at Home model in the 1990s. It was found to reduce costs by 19%-30% for Medicare and other payers while improving clinical outcomes, including reduced mortality rates and lengths of stay and increased patient satisfaction.

In May 2021, Mayo Clinic (Aa2 stable) and Kaiser Permanente invested in Medically Home to help hospital and health systems reinvent their delivery systems by developing complex care at home models that would offer flexibility and scale. These models would allow some providers, such as critical-access hospitals, to reduce inpatient beds and costs but allow others, such as academic medical

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centers, to increase inpatient capacity where needed. In October 2021, these three founding members and 11 not-for-profit health systems launched the Advanced Care at Home Coalition (as highlighted in Exhibit 2).

Exhibit 2

Advanced Care at Home Coalition includes several key not-for-profit health systems

Mayo Clinic*	Michigan Medicine (University of Michigan)	
Medically Home*	Novant Health NC	
Kaiser Permanente*	ProMedica OH	
Adventist Health CA	Sharp Rees-Stealy Medical Group CA	
ChristianaCare DE	UNC Health NC	
Geisinger Health PA	UnityPoint Health IA	
Integris Health OK	Vanderbilt University Medical Center TN **	

<sup>\*</sup> Founding member; \*\* Joined coalition after initial Oct 2021 launch Source: Advanced at home coalition website (members as of March 10, 2022)

#### CMS Acute Hospital Care at Home Waiver program provides flexibility but set to expire

Addressing capacity and access issues amid the pandemic, CMS said in November 2020 that more than 60 acute conditions, including asthma, congestive heart failure, pneumonia and chronic obstructive pulmonary disease (COPD), could be treated appropriately and safely in home settings with proper monitoring and treatment protocols. Under this waiver program, CMS requires that patients eligible for home admissions have to either be transferred home from the ER or from an inpatient bed. However, the agency's Acute Hospital Care at Home program provides greater flexibility, for example, by allowing hospitals to request a waiver from 24-hour, 7-day-a-week nurse staffing regulations. The waiver also allows hospitals to receive the same Medicare payment as if the patient was admitted to the hospital. The waiver is set to expire on April 16, although a Senate bipartisan bill was introduced on March 10 to extend waiver flexibilities by two years.

While not yet focused on at-home admissions, some organizations are seeking to offer patients care at home to avoid a visit to the ER, as an alternative to moving ER patients to observation stay status, or to discharge patients sooner. For example, during 2021, <a href="AdventHealth">AdventHealth</a> (Aa2 stable) announced a partnership with DispatchHealth, a provider of acute care services at home, to expand at-home care in more of its markets. Also in 2021, <a href="Rush University Medical Center">Rush University Medical Center</a> (A1 stable) announced a partnership with DispatchHealth to provide acute at-home care in the Chicago-area market.

## Reimbursement changes and transition to risk-taking models will reduce use of in-hospital care

Governmental and commercial insurers will continue their efforts to incentivize providers to offer more cost-effective and quality care. Commercial insurers will typically adopt similar reimbursement guidelines as CMS. In some instances, these insurers will be even more aggressive than CMS or may further restrict hospital care via denials of coverage with an aim to move patients to lower-cost settings. As these incentives as well as coverage changes shift care away from more expensive inpatient settings – the traditional measure of market share and presence – revenues will decline.

#### **Excessive readmissions cut reimbursement**

For the past decade, hospitals have been penalized for excessive readmissions for certain conditions. As part of the 2010 Affordable Care Act, CMS introduced penalties for excessive readmissions. Under the Hospital Readmissions Reduction Program (HRRP), CMS will penalize hospitals if readmission rates for six key high-volume, high-cost admission types (shown in Exhibit 4 below) exceed national averages. CMS reports that on average, over 75% of hospitals receive an HRRP payment reduction, but most do not receive the maximum rate reduction of 3% per Medicare stay. Heart failure, one of these admission types, has among the highest readmission rates, which will continue to be better controlled by new drugs and devices. In analyzing HRRP data, the Medicare Payment Advisory Commission (MedPAC) found that risk adjusted readmission rates for heart failure declined by 14.3% between 2010 and 2017.

## Exhibit 3 Several high-volume, high-cost conditions are subject to the Hospital Readmissions Reduction Program

Acute myocardial infarction (AMI)	Pneumonia
Chronic obstructive pulmonary disease (COPD)	Coronary artery bypass graft (CABG) surgery
Heart failure (HF)	Elective primary total hip arthroplasty and/or total knee arthroplasty (THA/TKA)

Source: CMS

#### Observation stays reduce inpatient revenues

Under a "value-based care" umbrella, CMS has introduced a variety of reimbursement changes aimed at improving health outcomes relative to the cost of care. The introduction of observation stays, a designation that gives physicians time to evaluate if an inpatient admission is necessary, has reduced revenues for hospitals because these stays are considered outpatient services, which are reimbursed for at a lower rate. These stays are covered by Medicare Part B, under which the patient could have a 20% copay. MedPAC found that Medicare payments for observation services rose by 349% (from \$690 million to \$3.1 billion) between 2011 and 2017.

### Move to risk-taking models will result in less hospital-based care

As hospitals move more to risk-taking models, where hospitals share financial risk with payers, the incentive to provide care in the most cost-effective setting will increase. While most hospitals over the near term will primarily be exposed to positive financial incentives, this is likely to change as hospitals begin to accept more partial or full risk, largely through Medicare Advantage plans or Medicaid programs often administered by commercial insurers.

#### ASC usage will rise as insurers promote coverage in this setting

Use of ambulatory surgery centers (ASCs), which, unlike hospital outpatient surgery departments (HOPDs), are free-standing facilities and not on hospital campuses, will continue to grow, crimping hospital revenues and margins. Payers are promoting them as more cost-effective care settings: United HealthGroup, for example, has reported that the cost of performing common procedures in a HOPD during 2019 was 144% higher than in an ASC. Physicians often prefer the ASC setting because of the ability to more efficiently schedule operating room procedures. In addition, high levels of physician ownership of ASCs would potentially provide physicians with incentives to treat patients at their own ASC versus a hospital-based outpatient or inpatient surgery center. ASCs are exempt from Stark antitrust referral laws.

Orthopedics and invasive cardiology are among the top revenue-generating services for hospitals, according to a 2019 survey by Merritt Hawkins, a national physician search firm. Recent steps taken by CMS have contributed to more orthopedic and cardiac procedures being performed in HOPDs or ASCs rather than on an inpatient basis. While hospitals would generally receive lower revenue from performing a procedure in an HOPD than from admitting a patient, the shift to an ASC would typically be even more significant. As shown in Exhibit 5, over the past several years, CMS has removed total knee arthroplasty (TKA, also called knee replacement) and total hip arthroplasty (THA, or hip replacement) from the "inpatient only" list, subsequently adding them to the list of ASC-covered procedures. CMS also added 17 cardiac catheterization and most recently, six coronary intervention procedure codes to the ASC-covered list.

Jan: Total hip Jan: THA added arthroplasty (THA) to ASC list removed from inpatient-only list Jan: 267 Ian: TKA added Jan: Total knee musculoskeletal arthroplasty (TKA) to ASC list catheterizations codes added to removed from (17 codes) added ASC list inpatient-only list to ASC list 2018 2020 2021 2019 Jul: CMS halts Dec: CMS Jan: Coronary phase out of announces interventions (6 phase out of inpatient-only list codes) added to ASC list all inpatientonly procedures bv CY24: 298 to be removed in CY22

Exhibit 4
CMS has removed procedures from the inpatient-only list and added them to the ASC coverage list

Sources: CMS, Moody's Investors Service

## Hospitals embrace investment in outpatient services, including ASCs

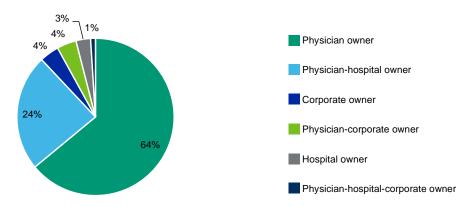
Prompted by the effects of the pandemic and consumer preference, along with ongoing reimbursement and coverage changes, hospitals nationally will accelerate investments in outpatient services. Many not-for-profit hospital systems have already partnered with leading players in outpatient care including telehealth, urgent care as well as ASCs. <u>Allina Health System</u> (Aa3 negative) partnered with Optum's Surgical Care Associates (owned by <u>UnitedHealth Group</u> (A3 stable) to develop ASCs while <u>Ascension Health</u> (Aa2 stable) is working with Regent Surgical Health to expand its ASC footprint. Some are developing their own ASCs. For example, as part of its outpatient expansion initiatives, <u>Mass General Brigham</u> (Aa3 stable) has plans to expand and build several ASCs in nearby towns outside of Boston.

Several for-profit providers, including <u>Tenet Healthcare Corp's</u> (B1 stable) United Surgical Partners International (USPI), <u>Envision Healthcare Corp.</u>'s (Caa2 stable) AmSurg, Surgical Care Affiliates, <u>HCA Inc.</u> (Baa3 stable) and <u>Surgical Center Holdings, Inc.</u> (B3 stable), are among the largest ASC consolidators, putting them ahead of not-for-profit systems in certain markets. Tenet acquired SurgCenter Development's (SCD) ownership interest in 86 ASCs in December 2021, further increasing its ASC footprint by about 40% (from 351 to 493 centers including its development pipeline). In its December 2020 acquisition of SCD's ownership in 40 ASCs, Tenet estimated that about 42% of its pro forma fiscal 2021 EBITDA would be derived from its ambulatory services including ASCs.

Involvement in ASCs will often mean sharing revenue and income with physician partners. Most of the nation's ASCs are owned or jointly owned by physicians due in part to better control and financial benefits. As shown in Exhibit 6, physicians own about 64% of ASCs and 24% are jointly owned with hospitals.

Exhibit 5

Most of the nation's ASCs are owned or jointly owned by physicians



Source: Frost & Sullivan: Growth Opportunities for MedTech in the Transformation of the US Healthcare Provider Ecosystem, June 2021

## Advances in technology including drugs and medical devices will help keep patients out of the hospital

New technological advances will continue to help reduce hospitalizations or hospital-based procedures, particularly in cardiology and orthopedics. Because these are high revenue-generating services, an ongoing shift would drive a more significant reduction in revenues and operating income for hospitals.

According to CMS, heart disease (not including stroke), which can lead to heart failure, accounted for about 43% of 2015 Medicare spend. Heart failure is one of the leading causes of hospitalization and readmission in people over 65. In cardiology, newly expanded Food and Drug Administration (FDA) approvals for certain drugs and devices will help reduce heart failure hospitalizations. Although a drug or device may initially be approved by the FDA for high-risk patients, subsequent approvals, as seen with the heart failure medication, Entresto, or heart failure monitoring device, CardioMEMS, will often be aimed at treating lower-risk or less acutely ill patients. This will help broaden the population base that can be treated, further reducing hospitalizations.

In orthopedics, new systems and techniques used to replace joints, which reduce surgical time and allow for more precision because of patient-specific technology, will continue to aid the shift to outpatient procedures.

Exhibit 6
Advances in drugs, devices and technology will help reduce need for hospital care

Type of drug, device or technology	Treatment use	Impact on hospitals	Select drugs/devices/technology and manufacturers	Year FDA approved
Cardiac				
Heart failure (HF) medications	Reduces risk of cardiac death or hospitalization	Fewer HF admissions	Farxiga (AstraZeneca) Jardiance (Eli Lilly) Entresto (Novartis)	2020 (HF) <sup>1</sup> 2021 (HF) <sup>1</sup> 2015/2021 (HF) <sup>2</sup>
Implantable heart monitor	Monitors pulmonary artery pressure for HF	Fewer HF admissions and readmissions	CardioMEMS (Abbott)	2014/2022 <sup>3</sup>
Transcatheter Mitral Valve Repair	Non-surgical treatment of mitral regurgitation (MR)	Fewer HF admissions	MitraClip (Abbott)	2019 (HF MR) <sup>4</sup>
Transcatheter Aortic Valve Replacement (TAVR)	Non-surgical treatment of severe aortic stenosis	Lower length of stay; potential for lower profits	Sapien (Edwards); CoreValve (Medtronic)	2012/2019 <sup>5</sup>
Orthopedic				
Arthroscopic/minimally invasive surgery (MIS)	Reduces pain, shortens recovery	Easier to be performed in HOPD or ASC	MIS quadriceps-sparing knee replacement; partial knee replacement	
Robotics/patient specific implants (PSI)	Knee, hip replacement; 3-D measurements with MAKO:CT imaging; ROSA: X-rays	Easier to be performed in HOPD or ASC; reduces operating room and recovery time; fewer complications and readmissions	MAKO SmartRobotics (Stryker); Rosa Robotic systems (Zimmer Biomet)	2015 2019/2021 <sup>6</sup>
Remote access app via smartphone	Patient connects via Apple watch; enables physical therapy (PT) at home	Fewer PT visits, ER visits or readmissions	Mymobility app (Zimmer Biomet)	FDA approval not required

<sup>1</sup> Farxiga 2020 and Jardiance 2021 approvals for HF patients regardless of whether they have type 2 diabetes; earlier approvals were for patients with type 2 diabetes

Source: Moody's Investors Service

## Higher acuity care and demographics will help offset these trends

Hospitals, such as academic medical centers, with a strong focus on quaternary and tertiary care – highly complex cases requiring greater levels of specialty care – will be better able to sustain demand for inpatient services than hospitals offering primarily less complex, or secondary care.

In the near term, many hospitals will see greater demand for inpatient services because of a rise in the number of higher-acuity patients who delayed care during the pandemic. Beyond the effects of the pandemic, an aging population will help drive the need for inpatient care. In addition, hospitals in markets or states with strong population growth, such as Florida, Texas, Arizona, Utah and Idaho, will, all else being equal, likely see stronger overall volume trends, including on the inpatient side.

<sup>2</sup> Entresto 2021 approval for HF patients with preserved ejection fraction; initial 2015 approval for patients with reduced ejection fraction

<sup>3</sup> CardioMEMS 2014 initial approval for Class III HF patients with prior year hospitalization; 2022 approval expands use to early stage, Class II HF patients

<sup>4</sup> MitraClip 2019 approval for patients with normal mitral valves but secondary MR due to heart failure; initial 2013 approval for primary MR in high risk surgical patients

<sup>5</sup> TAVR 2012 approval for patients at high-risk of death or complications from open heart surgery; 2019 approval for patients with low-risk

<sup>6</sup> Rosa 2019 approval for knee replacement; 2021 approval for hip replacement

## Moody's related publications

## **Healthcare Quarterly**

» Healthcare Quarterly – The year ahead: developments to watch in 2022, January 2022

#### Outlook

» US Not-for-profit and public healthcare: 2022 outlook negative as labor costs drive expense growth higher, December 2021

## **Endnotes**

 $1\ https://www.unitedhealthgroup.com/viewer.html?file=/content/dam/UHG/PDF/2021/Site-of-Service-Research-Brief.pdf$ 

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