The future of healthcare: Finding the opportunities that lie beneath the uncertainty

Shubham Singhal, Brian Latko, and Carlos Pardo Martin
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*Healthcare is a dynamic industry with significant opportunity, but cost concerns, uncertainty, and complexity can also make it an unnerving one. Substantial upside exists for players that can deliver value-creating solutions and thrive under uncertainty.*

The intrinsic demand for healthcare services continues to rise in the United States, given population aging, the increasing prevalence of chronic disease, and the search for a higher quality of life. In addition to increasing demand, three other major factors make healthcare a dynamic industry with significant opportunity:

- **Consumers, employers, and the government continue to see the financial burden of healthcare grow faster than their incomes or revenues—a long-standing gap unlikely to change soon. Furthermore, new challenges, such as the ongoing opioid crisis, continue to emerge. The result has been a continuing search for fresh solutions and reforms, which has kept—and will keep—the industry in a state of flux.**

- **Major tectonic shifts are occurring, not only in regulations but also in three other areas: technology (both medical science and technology and the onward march of big data, advanced analytics, machine learning, and digital), industry orientation (the move toward B2C and rapidly rising consumer expectations), and reallocation of risk across the value chain. These forces are fundamentally altering the structure of the industry and basis of competition.**

- **The available headroom for improvement in healthcare (by most estimates, over $500 billion within the $3 trillion US healthcare economy) provides significant opportunity for value creation.**

Industry growth, major changes, and strong value-creation potential make healthcare an exciting industry. At the same time, cost concerns, uncertainty, and complexity make it an unnerving one. Substantial upside exists for players that can deliver value-creating solutions and thrive under uncertainty. Indeed, our recent research into industry profit pools indicates that, on average, the industry is delivering value-creating solutions and consequently showing attractive profit growth. Between 2012 and 2016, total overall healthcare industry profit pools (earnings before interest, taxes, depreciation, and amortization, or EBITDA) grew at a faster rate than the combined EBITDA of the top 1,000 US companies (Exhibit 1).

However, profit pool growth varied widely across the healthcare industry, and both it and the factors driving it (e.g., revenue growth and margins) will continue to be uneven for at least the next several years, as shown in Exhibits 2 and 3. This paper outlines the underlying drivers of historic—and potential future—profit pool shifts among industry stakeholders (health insurers, healthcare delivery systems, service vendors, and pharmaceuticals), as well as the impact technology-driven disruption could have on them.

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Health insurers

Since the Affordable Care Act was enacted, a major shift in insurers’ profit pools has occurred. Between 2012 and 2016, enrollment in fully insured group plans decreased 16% as employers switched to self-insured arrangements, and the number of small employers offering health benefits dropped 24%; however, revenue from ancillary lines of business (e.g., dental, vision) grew by 25%. At the same time, enrollment in Medicare Advantage (MA) plans, with or without prescription drug benefits, rose 71%; enrollment in managed Medicaid plans increased 80%. Because of these forces—and the substantial losses many carriers have had to absorb in the individual market—the profit pool from commercial lines of business was less than half the size of the profit pool from government lines of business in 2016. (The two were roughly equal if the individual market losses are excluded.) The growth in profit pools from government lines of business reflects structural changes in these markets (e.g., Medicaid expansion) as well as continued recognition at the federal and state level of the potential of managed care to improve the performance and efficiency of these programs. Health insurers’ government lines of business are one of the four segments across the industry that experienced profit pool growth above 10% between 2012 and 2016.

An important change has also occurred within the government lines of business for health insurers. Medicaid profits have risen because of Medicaid expansion, the shift to managed Medicaid, and the increased value that has been unlocked through industry consolidation and capability building (e.g., care management for special needs individuals). MA profits also rose, but more slowly. The result: Medicaid and Medicare now contribute equally to government business profit pools. (In 2015, Medicaid overtook Medicare; their positions reversed again in 2016.) It is likely that both will be significant drivers of health insurer profit pools going forward.

Across all lines of business for health insurers, scale has become increasingly important. Our research shows that EBITDA margins rise significantly as scale increases, even though the decrease in per member per month G&A costs flattens at relatively modest size for payers. (As Exhibit 4 shows, the inflection point

EXHIBIT 1 US healthcare sector EBITDA and EBITDA growth

<table>
<thead>
<tr>
<th>US healthcare sector EBITDA</th>
<th>Compound annual EBITDA growth, 2012–16</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ billion</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>430</td>
</tr>
<tr>
<td>2016</td>
<td>516</td>
</tr>
<tr>
<td>2020 (est.)</td>
<td>620–670</td>
</tr>
<tr>
<td>Healthcare sector</td>
<td>+4.6%</td>
</tr>
<tr>
<td>1,000 US companies</td>
<td>+2.2%</td>
</tr>
</tbody>
</table>

EBITDA, earnings before interest, taxes, depreciation, and amortization.
Sources: Capital IQ industry estimates for top 1,000 US companies; see the detailed sources listed under Exhibits 2 and 3 for the US healthcare industry.

3Defined as employers with fewer than 50 full-time employees (including full-time equivalent employees).
5McKinsey analysis based on National Association of Dental Plans and IBISWorld data.
6McKinsey Payer Financial Database based on National Association of Insurance Commissioners filings.
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depends on the line of business.) Scale is especially important for specialized insurers (Exhibit 5). Among Medicaid carriers, for example, pretax margins are more than twice as high for those with more than 10 million covered lives than for those with between 2.5 and 5 million lives. In our experience, capability investments are driving value from continual improvements in total cost of care (e.g., through care management, utilization management, consumer engagement) and revenues (e.g., through improved product design, distribution, quality-based revenue such as Medicare Star ratings, and better capture of risk-adjustment revenue leakage). Scale enables the development of superior capabilities through greater aggregate capacity to invest and leveraging of the investment over a broader base of covered lives.

EXHIBIT 2 Changes in EBITDA across US healthcare industry, 2012–16

<table>
<thead>
<tr>
<th>Health insurers</th>
<th>Delivery systems</th>
<th>Service vendors</th>
<th>Manufacturers and distributors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>Hospitals</td>
<td>Clinical</td>
<td>Pharma and biotech</td>
</tr>
<tr>
<td>Government</td>
<td>Physicians</td>
<td>Financial</td>
<td></td>
</tr>
<tr>
<td>Ancillary</td>
<td>Other professionals</td>
<td>B2B</td>
<td></td>
</tr>
<tr>
<td>FB/S</td>
<td>Outpatient</td>
<td>Brokers</td>
<td>Medical devices</td>
</tr>
<tr>
<td>PBM</td>
<td>Post-acute care</td>
<td></td>
<td>Distributors</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The width of each column reflects the percentage of the healthcare industry’s total 2016 EBITDA ($516B) accounted for by each sector. (Payers had 9%; delivery systems, 54%; service vendors, 4%; and manufacturers and distributors, 33%.) The height of each rectangle reflects the percentage of a given sector’s EBITDA earned by each of the various stakeholders that year.

B2B, business to business (e.g., human resources outsourcing, group purchasing organizations); EBITDA, earnings before interest, taxes, depreciation, and amortization; FB/S, fixed benefits and supplemental (e.g., long-term care insurance, accidental death and dismemberment insurance, critical illness insurance); PBM, pharmacy benefit manager.

1 Includes the individual market.

2 PBM 2012–16 EBITDA growth rate reflects uncharacteristically low margin performance in 2012 among key stakeholders in this segment.

Sources: The data underlying this analysis came from a wide range of sources, including regulatory filings (e.g., SEC reports, NAIC filings), US Bureau of Labor Statistics, external surveys (e.g., American Hospital Association, Kaiser Family Foundation, US National Health Expenditures), publicly available information from CMS (e.g., Medicare cost reports), and external industry financial reports.
Scale also offers additional benefits such as broader data sets, ability to build skill-based capabilities in data, and advanced analytics. Scale-enabled operating efficiency is increasingly a less relevant differentiator.

Ongoing disruption to health insurer profit pools is likely because several forces are working to unbundle the commercial payer value proposition. Direct-to-employer business models that leverage technology to construct high-efficiency networks (e.g., advanced value analytics), combined with changes in provider market structure that make the creation of local networks easier, are one major factor. More than half of Americans live in metropolitan areas where the largest providers gained more market share than did the largest payers between 2012 and 2016. Over 125 million Americans

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**EXHIBIT 3**  Projected changes in EBITDA across US healthcare industry, 2020

The width of each column reflects the percentage of the healthcare industry’s projected total 2020 EBITDA ($620B–$670B) accounted for by each sector. (We estimate that payers could have 10%; delivery systems, 50%; service vendors, 5%; and manufacturers and distributors, 35%.) The height of each rectangle reflects the percentage of a given sector’s EBITDA likely to be earned by each of the various stakeholders in 2020.

B2B, business to business; EBITDA, earnings before interest, taxes, depreciation, and amortization; FB/S, fixed benefits and supplemental; PBM, pharmacy benefit manager.

1Includes the individual market.

Sources: The data underlying this analysis came from a wide range of sources, including regulatory filings (e.g., SEC reports, NAIC filings), US Bureau of Labor Statistics, external surveys (e.g., American Hospital Association, Kaiser Family Foundation, US National Health Expenditures), publicly available information from CMS (e.g., Medicare cost reports), MedPAC reports, McKinsey Center for US Health System Reform, and external industry financial reports.

7Although provider concentration has been growing more rapidly than payer concentration, on an absolute basis payer concentration continues to be higher than provider concentration in most markets.
In this environment, organized purchasing by active employers is becoming more feasible. Employers in several markets are already collaborating to pursue new models of care delivery for their workers. These forces will require commercial health insurers to continue to innovate and drive efficiency to maintain and grow their share of industry profit pools.

**EXHIBIT 4** Payer SG&A cost scale curves, by number of lives in each line of business, 2014

**Commercial**

SG&A costs (not mix-adjusted), $ PMPM

- 700,000 to 1 million covered lives

**Medicare Advantage**

- 400,000 to 600,000 covered lives

**ASO**

- 1 million to 1.2 million covered lives

**Medicaid**

- 700,000 to 850,000 covered lives

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ASO, administrative services only; PMPM, per member per month; SG&A, sales, general, and administrative.

1All graphs are based on 2014 data.

2Flattening of curves is defined as the range where marginal expense savings decrease less than 0.05% per 200,000 lives.

3There is no standard way that payers allocate costs shared across lines of business; as a result, some report having almost no costs for Medicare, while others allocate a bigger share of costs to Medicare than commercial.

4Medicare Advantage statutory filings reflect health entities only; line of best fit calculated after excluding provider-based plans and plans covering less than 1,000 lives.

Source: McKinsey Advanced Healthcare Analytics Payer Performance Index
Delivery systems

The provider market continues to experience a significant move away from inpatient care and toward distributed settings of care. After comparing the mix of revenue across provider segments between 2012 and 2016, we estimate that the shift to distributed settings resulted in about $36 billion in foregone revenue growth for hospital-based inpatient care during 2016. In that same year, shifts in settings of care led to about $29 billion in additional revenue for hospital-based outpatient care and $7 billion for other more convenient sites of care (e.g., urgent care clinics, free-standing emergency departments, retail clinics). While much of the shift has remained within hospital systems so far, the return on invested capital (ROIC) is often much higher for the new settings (e.g., ROIC can be more than three times higher for ambulatory surgery centers than for hospital systems), which suggests that the switch to lower-cost, less-capital-intensive care delivery systems will not abate.

Scale is also becoming increasingly important for providers. Our research shows that 2016 margins were, on average, 17% higher at the top 40 US health systems than at other health systems—and 33% higher than at independent hospitals. Scale within local markets is also important. In 2016, facilities owned by health systems with a market share above 50% in a given metropolitan area had margins that were 30% higher than those of either facilities owned by health systems with less than 25% market share or independent hospitals with a similarly small market share (Exhibit 7). These realities are likely to put even more pressure on health systems to consolidate.

The strategic choices health systems make are becoming increasingly important because...
of the confluence of forces facing healthcare delivery, including the shift to distributed settings of care and rapidly rising consumer expectations. We evaluated the M&A activity of the top 50 US health systems to classify their strategies into four types:

- Growth in distributed settings of care
- Growth through payer/provider integration
- Growth in core hospital business
- No significant M&A activity

The providers pursuing growth in distributed settings of care were the only group of health systems that experienced both revenue growth and margin improvement between 2012 and 2015 (Exhibit 8). The groups of systems that focused on either payer/provider integration or core hospital business growth experienced revenue growth during that time, but it was accompanied by margin erosion.

The increased efficiency of non-inpatient settings and consumers’ mounting demand for convenience are powerful realities. Health systems need to carefully consider their capital and resource deployment as this structural shift continues.

### Service vendors

As shown in Exhibit 2, two of the four segments within healthcare that experienced profit pool growth above 10% between 2012 and 2016 were service vendors. Annual EBITDA growth was 17% for companies that deliver clinical services (e.g., population health management, clinical information systems) and just above 10% for those offering financial services (e.g., revenue cycle management, payment integrity). The growth in these two segments—largely enabled by advanced analytics and digital transformation—has been so strong that the combined profit pool from all service vendors eclipsed the commercial health insurance profit pool in 2016 (if individual market losses are included). Although

### EXHIBIT 6 Growth of provider influence in local markets

<table>
<thead>
<tr>
<th>Population of CBSAs where providers have gained more share than payers</th>
<th>In 2016...</th>
</tr>
</thead>
<tbody>
<tr>
<td>209M</td>
<td>125 million people lived in CBSAs where a provider has &gt;35% of market share</td>
</tr>
<tr>
<td>72M</td>
<td>33% of US physicians were either hospital-employed or worked in a practice with hospital ownership</td>
</tr>
<tr>
<td>79</td>
<td>79 health systems held direct-to-employer contracts</td>
</tr>
</tbody>
</table>

CBSA, core-based statistical area.

1 Provider market share is based on admissions; payer market share is based on total covered lives. Although provider concentration has been growing more rapidly than payer concentration, on an absolute basis payer concentration continues to be higher than provider concentration in most markets.

Sources: American Hospital Association hospital survey; Decision Resources Group Managed Market Surveyor; American Medical Association.
increased by an average of 30% annually since 2009.\textsuperscript{11} In 2015 and 2016, venture capital activity in the healthcare industry largely focused on solutions that create value in one of three ways: by delivering productivity improvements, enabling improved care quality and outcomes, or supporting member-centric care (Exhibit 9). Strong EBITDA growth is projected for many of these solutions in the coming years.

Companies given first-round funding in recent years are more likely than their predecessors were to have received multiple rounds of funding from both financial investors and strategic buyers; as a result, they are more likely to have moved beyond the start-up phase and scale significantly. Of the healthcare technology companies that received their first round of venture capital funding between 2010 and 2012, 41% went on to receive additional rounds of funding and 31% were later acquired, often through strategic purchases by other health-

### EXHIBIT 7 Average facility EBITDA by system market share in that facility’s CBSA, 2016

<table>
<thead>
<tr>
<th>Market Share</th>
<th>EBITDA (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;50 (371 facilities)</td>
<td>13.2</td>
</tr>
<tr>
<td>25–50 (696 facilities)</td>
<td>12.9</td>
</tr>
<tr>
<td>12.5–25 (487 facilities)</td>
<td>11.4</td>
</tr>
<tr>
<td>&lt;12.5 (1,972 facilities)</td>
<td>10.1</td>
</tr>
</tbody>
</table>

CBSA, core-based statistical area; EBITDA, earnings before interest, taxes, depreciation, and administration.
\textsuperscript{1}Excludes rural hospitals, hospitals without reported revenue (e.g., government-owned psychiatric facilities), and hospitals with margins above 50% and below –50%.
\textsuperscript{2}Industry EBITDA margin is 10.6%. Market share is based on admissions.
Sources: American Hospital Association hospital survey; Medicare cost report data.

\textsuperscript{11} McKinsey analysis based on Capital IQ and Pitchbook data.
EXHIBIT 8  Evolution of financial results for 50 largest US health systems, grouped by type of inorganic growth strategy pursued

![Diagram](image)

M&A, mergers and acquisitions.
1Based on 2012 revenues reported by systems; includes large acute care systems and acute long-term care systems.
2Health system M&A activity is classified by type based on the frequency of mergers and acquisitions of each type of organization. “Distributed sites of care” includes health IT companies and non-acute, outpatient, post-acute centers, etc. “Core hospital business growth” includes acute care hospitals and physician groups. “Payer/provider integration” includes health plans.) The classification is based on M&A activity only and does not include organic new business development, joint ventures, partnerships, or other affiliations.
Sources: McKinsey Hospital System Financial Database 2012–15 based on aggregation of audited financial filings; Levin Associates; Dealogic; McKinsey analysis

Pharmaceutical value chain

Growth has been strong in the pharmaceutical and biotech profit pool in recent years, driven largely by growth in specialty pharmaceuticals. Growth has also been strong in the profit pools for many other actors in the pharmaceutical value chain, including wholesalers and distributors, pharmacy benefit managers (PBMs), and retail pharmacies. Not all have benefited, though.

PBMs and retail pharmacies captured a greater share of total profits from the pharmaceutical value chain in 2016 than in 2012 (Exhibit 10). This increase came almost entirely at the expense of hospital systems’ share of profits from drugs; manufacturers were largely able to maintain their share. During this time, hospitals saw their margins from drug sales decline by almost 30%. Hospital spending on drugs grew by 7% to 11% per year, far outstripping growth in reimbursements from both commercial and government payers (estimated at 3.5% to 5% and 1% to 1.5%, respectively).
Our research suggests that the manufacturers’ profit pool is likely to continue to grow. Meanwhile, downward pressure on generic prices could challenge future profits for wholesalers and retailers.\(^\text{14}\)

The threat of technology-driven disruption of the pharmaceutical value chain is also becoming real. This threat made headlines with Amazon’s apparent intention to enter the market, as reflected in its hiring of pharmacy professionals in May 2017 and its acquisition of wholesale drug, medical device, and supply licenses in at least 12 states by October 2017.\(^\text{15}\) Retail pharmacies are already acutely aware of the potential of technology-driven disruption, as front-of-store pharmacy revenues have been virtually flat since 2012 due to the digital transformation of the retail industry. (The pharmacies have experienced revenue growth below 1% for general merchandise and 2% for over-the-counter medications; the comparable numbers in the overall US market are about 2% and 4%, respectively.\(^\text{16}\) Although the opportunities for Amazon or a similar technology entrant are significant, so are the challenges.

Several primary arguments underlie the belief that such a company could successfully disrupt the pharmaceutical value chain. First, the

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EXHIBIT 9  **Venture capital activity and projected EBITDA growth rates by healthcare technology segment**

<table>
<thead>
<tr>
<th>Revenue cycle management</th>
<th>Clinical information systems</th>
<th>Population health management</th>
<th>Clinical decision support</th>
<th>Telemedicine</th>
<th>Patient engagement</th>
</tr>
</thead>
</table>

| New VC-backed companies 2015–16 | 31 | 84 | 43 | 40 | 49 |

Tools that deliver productivity improvements | Tools that enable improved care and outcomes | Tools that support member-centric care

CAGR, compound annual growth rate; EBITDA, earnings before interest, taxes, depreciation, and amortization; VC, venture capital.

Sources: Capital IQ; IDC; MarketsAndMarkets; Gartner; McKinsey analysis


\(^{16}\) The data underlying this analysis came from a wide range of sources, including annual financial filings (10-K) for CVS, Walgreens, and Rite Aid; Euromonitor; The 2017 Economic Report on US Pharmacies and Pharmacy Benefit Managers, Pembroke Consulting, Inc., and Drug Channels Institute.
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The challenges facing a potential technology entrant to the pharmaceutical value chain are meaningful. An online vendor would need to overcome operational and regulatory challenges. In addition, it would need to find and partner with willing stakeholders in other parts of the healthcare industry, including (but not limited to) payers and pharmaceutical companies. Nevertheless, if an online vendor is able to overcome these challenges to gain a foothold in the pharmacy market, the potential disruption to the pharmaceutical value chain and industry profit pools could be significant.

EXHIBIT 10 Evolution of pharmaceutical value chain profit pools, 2012–16

Approximate distribution of profits from drugs, by actor in the value chain, %

<table>
<thead>
<tr>
<th>Actor in the Value Chain</th>
<th>2012 Distribution</th>
<th>2016 Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBM2</td>
<td>7 billion</td>
<td>9 billion</td>
</tr>
<tr>
<td>Pharmacies</td>
<td>9 billion</td>
<td>10 billion</td>
</tr>
<tr>
<td>Hospital systems</td>
<td>12 billion</td>
<td>9 billion</td>
</tr>
<tr>
<td>Wholesalers and distributors</td>
<td>5 billion</td>
<td>5 billion</td>
</tr>
<tr>
<td>Drug manufacturers</td>
<td>68 billion</td>
<td>68 billion</td>
</tr>
</tbody>
</table>

Annual growth in profits from drugs, by actor in the value chain, 2012–16, %

<table>
<thead>
<tr>
<th>Actor in the Value Chain</th>
<th>2012–16 Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBM2</td>
<td>14%</td>
</tr>
<tr>
<td>Pharmacies</td>
<td>11%</td>
</tr>
<tr>
<td>Hospital systems</td>
<td>~3%</td>
</tr>
<tr>
<td>Wholesalers and distributors</td>
<td>7%</td>
</tr>
<tr>
<td>Drug manufacturers</td>
<td>6%</td>
</tr>
</tbody>
</table>

PBM2, pharmacy benefit managers.

1 Figures may not sum to 100%, because of rounding.

2 Includes profits from mail-order pharmacy. Due to uncharacteristically low margin performance for PBM2 in 2012, 2012 PBM share of profits has been adjusted to reflect median margins for 2011–13 among the top three PBMs.

Sources: Wells Fargo and IbisWorld industry reports for PBM; IMS Health—Medicines use and spending in the US 2017; 10-K annual filings; Office of Statewide Health Planning and Development, State of California

Capturing the opportunities

A company that wants to win in a healthcare market that is growing yet variable, uncertain, and prone to disruption must do the following:

• Innovate to create unambiguous value for the stakeholders who consume and pay for healthcare—consumers, employers, and governments.

• Understand the evolution of the industry’s profit pools at a granular level, including the underlying source of the company’s profit pool and its sustainability. Profit pools generated in certain ways—for example, by increasing productivity to lower costs, improving healthcare delivery and healthcare outcomes, or offering better consumer engagement—are likely to be sustainable over time, given the large scope for improvement and the value placed on those elements by stakeholders.

• Reinvent the business by aggressively reallocating capital and resources toward future business models, either through investments in technology (including medical science and technology, machine learning/artificial intelligence, advanced analytics, or digital), care delivery models (i.e., distributed sites of care), managed care models, or all three. Investment in the creation of new clinical pathways that improve care delivery and outcomes, new business models with significantly lower costs, and a reorientation from delivery-centric models to consumer-centric ones should receive priority over traditional approaches.

• Become active managers of your portfolio of assets. Divestitures, M&A, and partnerships will be important to align with the greatest sources of value creation.

• Build an agile organization, one that has both a robust, stable axis of core functions that deliver—efficiently, effectively, and repeatedly—in a manner fully compliant with all regulations, and a dynamic axis capable of rapid innovation and business model change. Leadership and talent capable of operating in this bifocal world will be essential.

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