The Healthcare Supply Chain Top 25 for 2021

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By Analyst(s): Eric O'Daffer

Initiatives: CSCO Strategic Leadership

Gartner’s 13th annual Healthcare Supply Chain Top 25 has changed to focus solely on U.S.-based health systems. Supply chain leaders at health systems can use the lessons from this research to build stronger supply chains, align to improve patient outcomes and optimize costs.

Overview

Key Findings

- After 12 years of an end-to-end Healthcare Supply Chain Top 25 including manufacturers, distributors, retailers and health systems, Gartner moved to a solely U.S.-based health system ranking for 2021 to reflect growing supply chain maturity across the healthcare industry.

- Mayo Clinic and Intermountain Health are in the Masters Group for the fourth year in a row. The Cleveland Clinic attains the No. 1 supply chain in our ranking.

- Eight healthcare providers make their debut in the 2021 ranking: Bon Secours Mercy Health, AdventHealth, HCA Healthcare, Novant Health, Parkview Health, HonorHealth, Sentara Healthcare and BayCare.

Recommendations

Healthcare chief supply chain officers (CSCOs) and supply chains leaders can learn from the strategy and leadership of the top U.S. supply chains by taking these steps:

- Use The Healthcare Supply Chain Top 25 program and process to learn from leaders, improve performance and highlight your health system’s maturity advancements to attract and retain talent.
Leverage supply chain capabilities at your health system to align to our quality of patient care metric, make an impact on bond rating, and demonstrate leadership in the healthcare supply chain to your health system, industry leaders and trading partner peers.

Develop your supply chain strategy for the next three to five years. Target specific environmental, social and governance (ESG) initiatives for diversity, equity and inclusion (DEI) spend and align to social determinants of health, along with digital supply chain advancements.

Analysis

For the 13th consecutive year, the Gartner healthcare supply chain research team presents its annual ranking of the 25 leading supply chains. While this ranking has some similarities in methodology to Gartner's cross-industry global Supply Chain Top 25, The Healthcare Supply Chain Top 25 is a stand-alone program that seeks to highlight the leading U.S.-based health systems. This is a departure from previous Gartner Healthcare Supply Chain Top 25 rankings, which highlighted leading healthcare life science supply chains across manufacturers, distributors, retailers and health systems.

There are three primary reasons why we are moving to an all-healthcare-provider ranking for 2021. First, the healthcare supply chain has made progress in size, scope and capabilities, versus when we started the ranking in 2009. Following suit, we also expanded, providing the opportunity for more health systems to be included in our ranking. Second, there is greater recognition of maturing life science manufacturers in our global Supply Chain Top 25 ranking, with four making that list this year. Third, we want to draw clear lines between The Healthcare Supply Chain Top 25 and the global Supply Chain Top 25, in terms of companies included and the methodology used to rank them in each study.  

As part of our formal ranking, we included the opportunity for peers and analysts to recognize healthcare trading partner collaborators in the U.S. Highlighting the interconnected, interdependent nature of the healthcare supply chain is still a primary focus of our efforts. While these manufacturers, distributors and retailers are no longer formally ranked, we are more directly highlighting those organizations that collaboratively support the mission of improving human life while lowering the total cost of care.
With the change to an all-U.S.-health-system ranking, our perspective on the quantitative metrics has evolved as well. As the impact on the quality of patient care has never been stronger, we are including more health systems this year and weighting the quality of care metric at 20% — up from 15% in past years. The bond rating allocation, at 15%, remains the same.

For the fourth year in a row, we are recognizing sustained supply chain leadership in healthcare, this time only for U.S.-based health systems, via the Masters category. This prestigious recognition is difficult to achieve — it is awarded only to supply chains that have achieved a top five composite score, at least seven times, in the past 10 years. Further details can be found in The Healthcare Supply Chain Top 25 Methodology section.

Our ranking this year has three major trends: Improving Risk and Resilience Capabilities, Expanding ESG Efforts, and Collaboration 2.0 (see Figure 1). To attain a ranking as a top health system supply chain is a formidable task, yet an aspirational feat for many. Health systems that make this list have a certain level of baseline maturity in sourcing, logistics, clinical alignment and analytics. Our purpose of the Top 25 research report below is not to definitively list all the great things each health system does, but to highlight some standout areas and share what makes them unique. In previous years, we viewed the ranking as a way to elevate the profession, spark the debate, discuss lessons from leaders, cross-pollinate ideas and raise the bar. This year is no different.

**Figure 1. 2021 Healthcare Supply Chain Leadership Trends**

**2021 Healthcare Supply Chain Leadership Trends**

<table>
<thead>
<tr>
<th>Risk and Resiliency</th>
<th>ESG in Healthcare</th>
<th>Collaboration 2.0</th>
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</table>

Source: Gartner
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**Risk and Resiliency Capabilities Are Proving Valuable Already**

In 2020, we reflected the fact that organizations amid the emergence of the COVID-19 pandemic were in a “response” mode, as risk management and resiliency, in the short term, accelerated organizations’ innovation across a number of different categories. This extended to better demand planning in the short term.
Fast-forward to 2021. During the rise of the COVID-19 Delta variant, healthcare providers struggled to attract clinical nursing talent and, in some cases, supply chain talent. For the most part, however, it was a nursing shortage issue and a capacity issue versus access to personal protective equipment (PPE) that drove challenges at health systems. While the supply chain isn’t perfectly resilient, leading organizations built in resiliency in a variety of ways. This included building their own redundant stockpiles, sourcing products in new ways and partnering with other organizations — mostly on the manufacturing front.

As organizations progressed through the COVID-19 Delta variant, they witnessed the fruits of their labors. It has caused supply chains to be elevated at many organizations, enhancing their role within the C-suite. There’s a new understanding of the impact that supply chains have on operational ability in health systems, which extends to investment in supply chains. As a result, we’ve witnessed organizations hiring staff to lead resiliency efforts — the staff that were sought comprised people who considered the risk and resiliency mandates for health systems, and were able to align the supply chain response accordingly.

Organizations are becoming more focused on what’s happening with their manufacturing partners. In the past, such partners could sometimes be taken for granted or only considered for price. There’s now a realization that we must better understand partner organizations in order to maximize effectiveness and resiliency. Gartner published research earlier this year on unfamiliar risks, along with a framework for mitigating them in a changing environment. Comparing organizations that shape disruptive risk and those that just respond, we saw risk shapers experiencing seven fewer high-impact disruptions per year. ²

**ESG Efforts Expand**

Organizations have also started to increase their knowledge about the ESG aspects that the C-suite and other stakeholders may be demanding of the supply chain. They’re asking questions such as, “Is there a way for us to enhance the economic vibrancy of the most underserved members in our local communities?” and, “How can we impact the social determinants of health through supply chain?” The leading-edge health systems are going further to address questions such as, “What’s the chemical composition of this product?” and, “What are the labor practices of the organizations that we buy manufactured products from?”
This evolving view, coupled with the maturing of resilience and risk management, is leading to an understanding that health systems need to be better contributing participants as major employers — sometimes the biggest employers — in many of our markets.

Health systems are also asking themselves how they can leverage their economic strengths and abilities to expand DEI initiatives to support both the missions of the organizations and best help their respective communities via supply chains. For example, this even includes focusing more on where products are sourced and identifying chemicals of concern that may impact the environment and/or staff safety in the workplace. Other examples include labor issues, such as strikes, poor child labor policies, unsafe work practices and unfair wages.

Health equity issues in local communities could be impacted by the right investments in service and/or distribution manufacturing capabilities that add jobs in a market. We have long advocated for improved supply chain alignment to home care, to enhance patient care. Many health equity issues are tied to economic conditions and access to care in disadvantaged areas. Using home care investments along with new partnerships with community, government and religious organizations could make an impact here. We see examples brewing at many health systems. Being strategic about supply chain leadership on this front, is an opportunity for most.

Collaboration Coming of Age in Version 2.0

Collaboration is increasingly important in the healthcare supply chain. This year, as we changed The Healthcare Supply Chain Top 25, we want to highlight collaboration more than ever, as it evolves to Version 2.0, including more alignment to care pathways, as well as operational initiatives. We didn’t want to lose the interconnected, interdependent focus on the healthcare supply chain, especially in the U.S. market.

The pandemic showed just how important collaboration is in the case of PPE and the manufacturing of capital equipment, such as ventilators. This ties to resiliency, to providing patients with the best possible clinical outcomes and with having a clinically-aligned supply chain.
Many organizations, including manufacturers, are realizing that they can’t fulfill their mission without more collaboration with health systems. In turn, health systems are recognizing that they need an efficient supply chain that has the right product, at the right place and at the right time, including products that meet clinical specifications. Health systems also recognize that they need the resources of the manufacturers that have developed these capabilities in order to better understand and help them serve their patients.

All of this spurs more questions, such as, “How can we think about this from a disease state or a care pathway that allows us to map and consider both the procedure and an efficient supply chain that supports that patient, but that goes beyond that, extending from preadmission to postdischarge?” “How do we align a supply chain in collaboration with our partners in order to reduce 30-day readmits, decrease the average length of stay and minimize the risk for hospital-acquired infections?”

Thinking about the state of collaboration in healthcare, the one thing that hasn't changed is that it's hard work, requiring dedicated resources and a certain level of maturity to be able to do it.

As we changed our ranking to an all-health-system focus, we created a “collaborative trading partner” designation for manufacturers, distributors and wholesalers. This is a reflection that signifies that these supply chains are still interconnected, interdependent and support patients. We don’t want to lose the concept of what represents a collaborative trading partner in today’s world. The process for capturing this information includes a one-page request of peer voters to designate three to five collaborative trading partners to directly rank The Healthcare Supply Chain Top 25.

The reasons for designating companies as top collaborators from our peer voters were varied and interesting. The main concepts were integrity, flexibility, transparency, responsiveness, proactive, customer-focused and strategic when describing these companies, and others that were recognized.

We will write a separate research note on what we learned from this collaborative trading partner portion of the ranking. In total, we were encouraged that 73 collaborative companies were mentioned by our peer voters. Ten companies received seven or more mentions, with the top company being referenced 22 times. For now, congratulations to the top 10 mentioned manufacturers and distributors (listed in alphabetical order): 3M, AmerisourceBergen, BD, Cardinal, Cook Medical, Johnson & Johnson, Medline, Medtronic, Owens & Minor, and Stryker.
2021 Health System Supply Chain Rankings

Table 1 lists the 25 leading U.S.-based health systems. Congratulations to these supply chains for the impressive accomplishment of being part of the Gartner Healthcare Supply Chain Top 25 for 2021. Intermountain Health and Mayo Clinic aren’t included in the following table because they have landed in the Masters category. Their write-ups can be found following Table 1.

Table 1: The Healthcare Supply Chain Top 25 for 2021
(Enlarged table in Appendix)

<table>
<thead>
<tr>
<th>2021 Rank</th>
<th>Health System</th>
<th>Benchmarking</th>
<th>IBM Institute</th>
<th>Peer Opinion</th>
<th>Gartner Opinion</th>
<th>Composite Score</th>
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<tbody>
<tr>
<td>1</td>
<td>Cleveland Clinic</td>
<td>AA</td>
<td>2nd Quartile</td>
<td>95%</td>
<td>52%</td>
<td>76%</td>
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<td>2</td>
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<td>3</td>
<td>Ochsner Health System</td>
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<td>59%</td>
<td>72%</td>
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<td>4</td>
<td>Baptist Scott &amp; White Health</td>
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<td>56%</td>
<td>71%</td>
</tr>
<tr>
<td>5</td>
<td>Mercy</td>
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<td>82%</td>
<td>53%</td>
<td>70%</td>
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<td>69%</td>
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<tr>
<td>7</td>
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<td>58%</td>
<td>68%</td>
</tr>
<tr>
<td>8</td>
<td>CPIC</td>
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<td>49%</td>
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<tr>
<td>10</td>
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<tr>
<td>20</td>
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<td>AA</td>
<td>Top Quartile</td>
<td>93%</td>
<td>61%</td>
<td>79%</td>
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<td>21</td>
<td>Health hottest</td>
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<td>56%</td>
<td>71%</td>
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<tr>
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<td>75%</td>
</tr>
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<td>23</td>
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<td>66%</td>
<td>75%</td>
</tr>
<tr>
<td>24</td>
<td>Indiana University Health</td>
<td>AA</td>
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<td>84%</td>
<td>54%</td>
<td>66%</td>
</tr>
<tr>
<td>25</td>
<td>BayCare</td>
<td>AA</td>
<td>Top Quartile</td>
<td>91%</td>
<td>64%</td>
<td>76%</td>
</tr>
</tbody>
</table>

Inside the Numbers

To introduce the organizations that comprise our Top 25 ranking and Masters category, we have used a similar format to previous years. We discuss each supply chain, describing its scoring highlights as well as insight into how it demonstrates supply chain leadership.
We will review the supply chains in this order:

- Healthcare Supply Chain Masters
- The Top 5
- Movers and Shakers: Numbers 6 to 15
- Rounding Out the Ranking: Numbers 16 to 25

**Healthcare Supply Chain Masters: Two Lead the Way**

Since 2018, we have highlighted the accomplishments and capabilities of long-term leaders by designating a group of companies as consistent leaders. We refer to these companies as Supply Chain “Masters,” defining them as having attained top-five composite scores for at least seven of the last 10 years. This category is separate from the overall Supply Chain Top 25 list, but it is not a retirement from being evaluated as part of our annual research.

**Mayo Clinic** demonstrates supply chain leadership every year, and 2021 is not an exception. It seems that the foundational capabilities exhibited by Mayo supply chain set it up for further expansion as a value enabler on multiple fronts for the health system. Major expansions in Arizona and Florida are in the works, with the supply chain team on the front lines of that and the COVID-19 pandemic. Mayo continues to make an impact and provide needed industry leadership in resiliency, both internally and externally, as the Healthcare Industry Resilience Collaborative (HIRC) it founded with Spectrum Health gains new members in health systems, manufacturers and industry partners.

Mayo, a leader in strategic planning as noted in our ranking for the past decade, continues to evolve. Expanding its commercialization efforts and focus, moving aggressively to align to home care and retail — with supply chain at the table — and continuing to evolve its digital supply chain efforts are all part of the equation for success. Watch Mayo's Medically Home initiative and the alignment of the supply chain in 30-day bundles of product, and how alignment to pharmaceutical adherence impacts the quality of patient care in terms of metrics, such as 30-day readmits. ⁴
Mayo broke new ground in partnering with clinicians and the pharmacy on new product introduction and end-of-life planning in biosimilars this year, as well as driving compliance to formulary increases, from 5% to 75%, in this complex and changing product area. Its International Advisory Services (IAS) capability — focused on procedure costing, supply variation and executive-level dashboards without the use of spreadsheets — is one to watch. Knowledge about, and aligning to, analytics and information technology continues to increase at Mayo, so watch this space for further evolutions.

Collaboration with partners has also been a hallmark for Mayo Clinic, especially on the services front. Collaborating directly with other health systems through Captis, its committed group purchasing organization (GPO) offering, HIRC and other platforms seems to hold interest, and we expect more of it in the future.

**Intermountain Health** continues its long run of supply chain excellence in 2021, showing resilience and perseverance in a year of transition. Intermountain not only weathered the COVID-19 pandemic, it also completed the sale of Intalere to Vizient and ramped up growth through the announced merger of SCL Health in Denver to form an $11-billion health system, with 33 hospitals and almost 500 clinics.  

While weathering disruptive transition alone does not equate to excellence, Intermountain has a foundation of supply chain capabilities from its 151,000 square foot fulfillment center, to a central laundry operation, to its one-of-a-kind home health distribution center. These capabilities could be even more strategic for Intermountain as it expands the push for “hospital at home” with the co-founding of Moving Health Home with Ascension and others. From this solid operational core, Intermountain uses strategic sourcing, with a new pod model connecting sourcing, procurement and analytics together to align these operational components. Historically, Intermountain has been bold in investing in both physical assets and talent for its supply chain. A new expansion across three additional states will provide new challenges for standardization and services in alignment with Intermountain's strong core.

Intermountain is also advancing in core areas, such as robotic process optimization (RPA) for bill-only purchase orders, adding a 20,000-square-foot cold chain operation at the SCO and building out a comprehensive third-party supplier risk strategy. It is also expanding beyond demand planning and business continuity to other areas of risk, such as quality assurance, labor practices and sustainability.

Congratulations to our 2021 Masters!
The Top 5

Every health system in this group was on our ranking last year. In many cases, these supply chains were built over decades of focus. They are not immune to changes, internally and externally, but all have a commitment to the supply chain in their organizational fabric that is highlighted through the quantitative and qualitative metrics in our ranking.

**Cleveland Clinic** (No. 1) attains the top spot, with the highest peer and analyst opinion scores outside of the Masters. Cleveland Clinic reached the pinnacle due to its sustained leadership in the clinical supply chain, across a wide span of control over products and services, including new construction, pharmaceuticals and purchased services. RFID-based, point-of-use technology spans across most procedural areas, increasing patient safety, capturing revenue, and reducing loss and expiration.

Cleveland Clinic also collaborated effectively this year for standardizing and improving $53 million in food service expenses and embarking on an upgraded technology across 81 automated guided vehicles on the main campus that provide the backbone of service across the large campus network. Cleveland Clinic invests locally, and with diverse suppliers as part of OneTen and the Healthcare Anchor Network, committed to double its DEI spend from $80 million in 2020, to $160 million in 2025. Cleveland Clinic supply chain is also working on home care initiatives across the board, from orchestrating a new hospital-at-home distribution model to providing medically-tailored meals to help diabetes patients. In 2022, Cleveland Clinic will open its London Hospital and expand its global footprint, with an aligned supply chain response.

**Banner Health** takes the No. 2 spot in our ranking on strong performance across the four ranking criteria. Banner demonstrates supply chain maturity and the willingness to show leadership by sharing what it does each year. In 2021, Banner was recognized as an HPN Supply Chain Department of the Year, among other accolades.
Banner puts the word “system” in the health system supply chain. It is organized, intentional and methodical in its approach to supply chain excellence. As Banner has grown ten times in size over the past 22 years, its supply chain is a much larger business than the entire enterprise was in 2000. With physical assets, such as its distribution center and investments in talent, and an alignment to the growth and patient care quality goals of the organization, Banner continues to shine. This year, Banner expanded its digital supply chain capabilities, focusing on clinical research, and true cost and quality of patient care measured by admissions to the emergency department, average length of stay and procedure costs. Banner was also recognized in 2021 Gartner’s Power of the Profession Awards — in the social impact category — for its switch to reusable isolation gowns.  

A key learning: Healthcare is the second largest industry producer of waste, and its supply chain is tackling that project.

Ochsner Health System ranks No. 3. In a year that tested every supply chain, the Louisiana-based health system endured Hurricane Ida and still showed its mettle, receiving strong peer and analyst scores and improving on quality of care performance. Ochsner has long had a mature supply chain, but the past 18 months have led to some enhancements. Ochsner likes to say that supply chain is a “facilitator of solutions,” and brings energy and willpower to the health system.

Like many health systems, Ochsner invested in resiliency in the form of collaboration with key suppliers and the creation of a supply chain depot. Ochsner went a step further as well, by investing in the ability to manufacture products at its own plant. Ochsner has a history of collaboration that paved the way. It partnered with Cardinal on the Ochsner Center for Molecular Imaging, which was designed to mitigate risk and lower costs in the supply chain for radioisotopes in the mid-2010s. This year, in response to the COVID-19 pandemic shortages, Ochsner is investing in manufacturing capabilities for PPE in two SafeSource Direct factories, employing 2,200 people. This initiative blurs the lines between health system and independent manufacturer, and at scale. It provides Ochsner the opportunity to help serve other customers down the line, while keeping ESG tenets in place for sustainability and DEI goals. Through the pandemic and the hurricane, Ochsner supply chain rose to the challenge, supporting the community through the development of a resource to provide staples, such as diapers, food and other items to people in need.
Baylor Scott & White Health jumped into the No. 4 spot in our ranking. A $12-billion, 27-hospital system, Baylor has been on a multiyear upswing in maturity by doing great things in supply chain efficiently. Much of this increase in supply chain capability is due to investment and talent, showcasing maturity across logistics, sourcing and data analytics. Baylor demonstrated its capabilities in many Power of the Profession submissions, as well as other industry recognitions around its distribution center development, master data management, spend analytics dashboards, revised organizational design and reporting structure improvements. Linking supply chain to specific patient care improvement metrics through a platform-based reporting tool made progress in the past few years as well. 13

Like many health systems, Baylor Scott and White supply chain was called upon to help in vaccine distribution and administration. The scale here was impressive. According to its Power of the Profession submission, “As COVID-19 vaccines were made available in Texas, Baylor Scott and White Health, the largest not-for-profit healthcare system, played an integral role in rapid vaccine deployment. Baylor's supply chain services organization was called upon to play a critical part in standing up the capabilities in eight hub locations across the Dallas and Austin metro-regions — each capable of providing 10,000 vaccines per day. With 48 hours’ notice, the team needed to engage, prepare and equip a brand new site. This was a very new way of responding that had never been done before. All equipment, supplies and service related to these operations were the responsibility of supply chain to provide. From vaccine kits, syringes, bandages and sharps containers to tables, chairs, valet parking and coffee services, the supply chain organization quickly defined standard supplies and services, and planned ahead to quickly support and forecast enough material, equipment and supplies to support over 250,000 vaccines to be deployed in under a month’s time.”
Mercy (No. 5) rounds out the top five health systems in our ranking. This St. Louis-based system has been in the top 10 of our traditional, all-healthcare ranking every year since 2009. Although Mercy sold its operational supply chain division, ROI, to HealthTrust in 2019, it continues to benefit in our ranking from high peer and analyst opinion. Still reaping the benefit of the supply chain cost and service model it now orchestrates as an outsourced service provider, the leadership team seems to have focused more on patient care alignment capabilities. Specifically, Mercy continues to put a value on service and standardization in the basics of getting preference cards right and having a predictable service rate in the operating room (OR). Its integrated work with nursing to increase preference card accuracy seeks to improve nurse satisfaction, lower costs, decrease inventory and reduce the add-on items that cause staff to leave the OR suite in search of the product.  

Foundational improvements in GS1 compliance made many of these next-step advances possible. In one study, Mercy indicated that GS1 compliance helped it improve inventory utilization by $4.6 million and charge capture by $13 million.

We rarely call out individuals in our ranking, but it is also rare that the CEO of a health system has deep supply chain roots. Lynn Britton, arguably the founder of ROI, attributed $1 billion in savings to supply chain over his history with the organization. Britton retired this year as Mercy’s CEO, leaving a legacy many followed on their path to maturity and developing many leaders in supply chain who still operate in the industry.

Movers and Shakers: Numbers 6 to 15

This next group represents a fascinating mix of health systems from across the U.S. of all sizes, shapes and with some different capabilities. These entities represent two health systems that made last year’s ranking, two health systems that are new to the ranking and six health systems that didn’t make the 2020 ranking but have been in our ranking at some point in the past 12 years.

Coming in at No. 6, Spectrum Health continues to grow in size with the announced merger with Beaumont Health creating a $13 billion system, with a large health plan attached. In 2012, Spectrum was a $4.6-billion company. Supply chain maturity has had to keep pace with its expansion plans.
Spectrum is a great example of what Gartner calls a bimodal supply chain — maturing sequentially in supply chain through improved governance under a single instance of enterprise resource planning (ERP), expanding through acquisition and refining its distribution and logistics capabilities. At the same time, Spectrum's supply chain leaders drove innovation on multiple fronts. Just in the past year, it inked an outcomes-based savings program that aligns technology, cost and patient outcomes into a collaborative and strategic agreement with Medtronic. They also continue to lead — along with Mayo Clinic — as founders of HIRC, working to bring a voice of many in risk management, resiliency and business continuity in partnership with other health systems and manufacturers. Lastly, Spectrum was ahead of the labor shortage impact that hit most health systems with the COVID-19 Delta variant. Spectrum implemented its Service Team Ambassador Robots (S.T.A.R.) Program — deploying autonomous mobile robots in four hospitals to do the last-mile logistics functions across a variety of product categories within the facilities it serves. Early returns show an improvement in service and cost.

At No. 7 in our ranking is the top-ranked newcomer to our list, Bon Secours Mercy Health. Although making its debut on our ranking, Bon Secours Mercy Health (BSMH) is not an overnight success in our eyes. It hovered just outside the Top 25 for the past five years, significantly developing in size and maturity during that time to become a seven-state health system with over $10 billion of revenue. It even expanded globally in 2019 by acquiring the largest private health system in Ireland.

Supply chain capabilities at BSMH show a commitment to sustained leadership, the impact of good governance — especially in a merger of like-sized systems — and the ability to choose partners in core areas such as distribution, laboratory supplies, clinical engineering and global sourcing that have served the organization well in the merger (target of $87 million in supply chain savings achieved during the pandemic and beyond). BSMH is charting a new course for the organization, forming Advantus Health Partners earlier this year. It is early, but this GPO looks to leverage what has worked at BSMH and share it with others. Like other mature supply chains, sharing with others is the next step. The goal is to go beyond contracting to more advanced operations and clinical solutions for internal and external members.

We welcome UPMC back to our ranking at No. 8, after being off the list for five years. The changing qualifications in the all-health-system ranking around IBM Watson Health brought UPMC back into the universe of health systems considered, and strong peer and analyst opinion pushed it up to this spot.
UPMC has a long and impressive history in supply chain that is well documented in our early reports. It is foundationally strong, with sustained leadership and terrific development of supply chain leaders, many of whom are making an impact at other organizations as well. UPMC pioneered managing the end-to-end supply chain for pharmaceuticals, developed and spun off successful technology platforms, and set a bar for compliance and governance across a large organization early in its development of capabilities. In addition, alignment to the quality of patient care and analytics positioned it as a valuable asset to the delivery of care.

UPMC states, “Our vision is healthcare transformation through supply chain elevation.” In recent years, UPMC built on its pharmaceutical capabilities through the co-development of CognitiveRx with Premier. “CognitiveRx predicts, manages and solves for challenges related to drug shortages, inflation, declining reimbursement and other factors,” according to the company. In addition, UPMC has accelerated its DEI initiatives in recent years. It developed UPMC Essentials for Success, partnering with the University of Pittsburgh Small Business Development Center to locate diverse suppliers ready to work with the organization from across the state.

Coming in at No. 9 is Advocate Aurora Health. This $13-billion, 26-hospital system in Wisconsin and Northern Illinois is back on our ranking for the ninth time in the list’s history. Advocate Aurora Health’s supply chain strategy is aligned to the organization’s Destination 2025 three main tenets:

- Transform the core to improve patient care and lower costs
- Consumer first, meeting the patient wherever they are
- Destination Health highlighting health equity with a focus on wellness versus sick care
Beyond Advocate Aurora’s foundational capabilities and alignment to its leading “LiveWell” app that connects the health system to consumers, two initiatives in 2021 arose to the forefront. Advocate Aurora joined the Healthcare Anchor Network Community Investment Commitment, setting a goal to deploy $50 million by 2025, to provide access to capital for critical needs, such as affordable housing, small business development and food centers in low-income neighborhoods. In addition, it joined the Impact Purchasing Commitment, which is designed to spend $1 billion annually with minority and women-owned businesses by 2025, identifying targets for spend and how to sustain and grow the effort. On the operational front, Advocate Aurora implemented a single-scan technology in its ERP and electronic health records (EHRs) system for medical devices, leveraging data standards and electronic bar code technology to improve charge capture by 20%, enhance service and ensure better patient safety in clinical areas.

Rounding out the top 10 is AdventHealth (No. 10) on strong peer recognition and top-quintile performance in IBM Watson Health. This marks AdventHealth’s first time on our ranking — a tribute to leadership in improved governance and supply chain capability building at this $12-billion, 50-hospital system.

AdventHealth improved its governance over the past few years by moving to a centralized structure with a CSCO and became one of a few leading systems to also bring in a chief of staff to support the senior leader. AdventHealth focuses on having a clear organization design that supports the strategy of supply chain centered around the patient. Collaborating with clinicians and suppliers alike, in varied supply chains across the enterprise, has been key. Like many health systems in the pandemic, lab supplies had unique needs that could benefit from a systematic supply chain approach. Supply chain leaned into this and other challenges across other service areas, such as with new construction, imaging and respiratory therapy to improve service response and lower costs. AdventHealth, as one of many strategies to improve home care, is partnering with DispatchHealth to expand the connection of patient care into the home in a more strategic way.
At No. 11 in our ranking is Ascension. Ascension is one of the largest health systems in our ranking, with $24 billion in net patient revenue across more than 20 states. Ascension operates supply chain primarily through The Resource Group, its GPO, with an operations element to provide alignment to product and service decisions through to compliance rates in the 90% range. Ascension pioneered approaches in the operational supply chain with its “Listen First” mantra, analytics measurement and scale of operations. Built on a foundational consulting framework, Ascension's approach has been to standardize across diverse geographies through central sourcing with a voice, along with a consistent implementation approach in operations and logistics management, strategic sourcing, and change management. The concept of user-directed, integrated solutions or strategic sourcing is one Ascension educates internally with clinicians and externally with suppliers.

This process has developed sequentially since the inception of the Resource Group in 2009. In 2018, Ascension went global, partnering with Australia’s Ramsey Health in a 50/50 joint supply chain venture for sourcing and operations excellence. While we have little insight into the results of the venture to date, the scale of the initiative demonstrates an innovative approach to lowering costs across the globe.

Back in the ranking this year at No. 12 is Northwestern Medicine. Northwestern holds the distinction, in our ranking, of having the longest tenured supply chain senior leader at one health system — more than three decades. In that time, the health system has grown substantially, from one academic medical center to a true network of 11 hospitals with $6 billion in patient revenue. The supply chain has risen to meet the challenge — integrating the Palos Health system in 2021.

Northwestern is another foundationally strong system in supply chain, garnering consistent scores across the four categories in our ranking. Northwestern has long been strong on the sourcing front, staying ahead of the pandemic with reserve stock, and bolstering its logistics and clinical alignment capabilities in the procedural areas through investments in people and technology. Northwestern has been intentional and methodical here, showing leadership and innovation in bringing in new technology on point of use, expanding the areas supply chain influences through the pandemic and seeking new ways of approaching challenges across the board to improve service.
Supply chain rose to many challenges in the past 18 months, expanding its influence to additional areas of spend. Northwestern pioneered some physician alignment and investment models around value analysis, challenging clinicians wanting to introduce new technology to make the case with peers for additional investment. While this area of product life cycle management is a challenge for many systems, Northwestern has made good progress.

Back in the ranking this year at No. 13 is BJC HealthCare. In the ranking for the seventh time in the 13 years of the ranking, this $6-billion, 15-hospital system shows resiliency in supply chain leadership. Years of supply chain leadership and investment in capabilities elevates BJC, with the fifth-highest peer opinion score this year.

Collaboration, demand planning and clinical alignment are core to BJC's success. Gartner has documented BJC's historical collaboration with suppliers and distribution partners, along with its focus on the use of data standards. Improving governance across all the points of care and tying to the end-to-end supply chain seems to be front and center now. BJC is investing in demand planning capabilities at scale, and sharing with others its success in driving better service and lower costs through data standardization and collaboration with clinicians.  

Trinity Health is back in The Healthcare Top 25 ranking at No. 14. Trinity is a complex, 21-state IDN with revenue topping $20 billion this year. Trinity's supply chain capabilities were recognized and elevated during the pandemic, with the organization relying heavily on its central distribution capabilities and supply chain leading one of the Federal Emergency Management Agency (FEMA) command centers. In 2020, Trinity invested $26 million with a partner to develop a four-warehouse, hub-and-spoke system anchored on its existing Indiana-based center, aiming to improve service and save $20 million annually.

Advancements at Trinity include its collaborative partnerships with organizations, such as Medtronic in the centralization and efficiency improvements in the medical device supply chain. In addition, Trinity has been working hard on organization design to improve governance at all its ministries. These efforts included Trinity's Supply Quality Performance Management framework and improved end-to-end management of supplies used in clinical areas to improve charge capture and get a better line of procedural costs. The complexity of doing this in an organization across multiple states should not be underestimated. Trinity has approached this with vigor from value analysis, through workflows in "formulary sourcing" for medical-surgical and medical device categories through logistics and service.
Trinity has also made progress in the pharmaceutical supply chain, looking to leverage its distribution capabilities in new ways and also being part of CivicaRX, seeking risk management and cost control in some core pharmaceutical products.

San Diego-based **Scripps** comes in at No. 15 in our ranking, making it into the Top 25 four out of the last five years. Scripps is the smallest health system in our ranking, but has solid quality-of-care scores, and peer and analyst recognition for a regional system.

Scripps has a solid history of listening to clinical end users, aligning a supply chain response to better serve those end users and sharing lessons so others can learn as well. **35** Scripps has collaborated with partners primarily to get the best cost and service for its market, being relatively fearless in collaborating with distribution, group purchasing and selected manufacturing partners over the past five years. Scripps also garnered recognition recently from Global Healthcare Exchange (GHX) as a one of this year’s “Best” 50 health systems that is focused on transactional excellence, primarily in electronic ordering, which aligns with some best-practice work in procure-to-pay connections across the enterprise, led by supply chain. **36**

HealthTrust also recognized Scripps for its work in the pharmaceutical supply chain for “early adoption of a medication central prior authorization initiative and ... working to improve biosimilar conversions and other key therapeutic areas.” **37**

**Rounding Out the Ranking: Numbers 16 to 25**

These health systems are mainly new to our ranking. This group is exciting and diverse in their capabilities, size and the path they took to the ranking. Each has its own story of supply chain maturity and the role it plays at each health system. The common denominator is excellence in some specific areas.

Coming back to our ranking at No. 16 after a seven-year hiatus is **Geisinger**. Geisinger, which garnered solid peer and analyst support, is a leader in supply chain innovation and a patient-centered supply chain. With strong supply chain leadership historically, Geisinger was recognized as a Healthcare Supply Chain Innovator by Gartner for its Fresh Food Pharmacy program in 2019. **38** This initiative aligns access to fresh produce and new eating habits to patients with diabetes, leading to healthier patients and lower costs overall. Before that, it was recognized for innovating in new construction capital equipment. **39** Geisinger relies heavily on its payer model for revenue, so many supply chain initiatives are “woven into the fabric of patient care” by design. To manage chronic illness, Geisinger invested in ConnectedCare365 to monitor weight, blood pressure, glucose and other metrics, using a smartphone app to better align care for those patients. **40**
Geisinger also has a 3D printing lab that helped during the pandemic with many innovations. The lab printed 70,000 face shields, ear savers for loop masks and replacement straps for reprocessed N95 masks.  

Like many of the health systems in our ranking, Geisinger mixes innovation on projects with strong foundational supply capabilities. Orchestrating supplier and service partners, advancing data standard compliance and utilization, and measuring the impact on service and patient care from supply chain, are all part of Geisinger's DNA.

Coming in at No. 17 is Novant Health. Novant is a first-timer on our ranking, based on the strength of peer and analyst recognition of its sustained leadership and deep supply chain capabilities. Intentional leadership and the ability to execute a strategy is Novant's hallmark. Sustaining a supply chain focus, over more than a decade of leadership, brings it recognition this year.

Novant leads on multiple fronts, including matching data-driven category management with logistics and service depth across the board. Novant has an intentionally-built supply chain organization designed to fit its current and future needs as proven through the recent acquisition of New Hanover Regional Medical Center, creating a third hub in North Carolina. A strong digital supply chain framework supports the trade-offs with cost, patient care and service that Novant makes over time, led by its Clinical Variation Reduction Team (CVRT) and a robust dashboard that helps enable data-driven decisions with transparency.

This CVRT is foundational. Through it, the supply chain team worked with clinical end users to define “workhorse” medical devices as a concept. In certain categories, these medical devices can represent 70% to 80% of the volume so the team can create a low-cost, efficient supply chain for those procedures, with the ability to allow variation in certain cases. Novant goes further on the digital supply chain continuum as well, innovating in 3D printing and even drone delivery in the past few years.

Attaining the No. 18 spot in the list is Duke Health. This makes it seven straight years for Duke in our ranking. A change in leadership means building on some foundational areas, such as data standards, clinical alignment and analytics, along with a change from Duke's historical self-contracting position to becoming a member of a national GPO.
Duke’s strong foundation in supply chain looks to the future. One of its successful initiatives this year was driving more transactional efficiency on the e-commerce front, reducing $3 million in expenses in the process of efficiency, early-pay incentive capture and improved cash management. This initiative and others on the path to a more digital supply chain are in the works. Duke is recognized nationally for its work in integrating supply chain with clinical outcomes and the cost of care using its work on data standards and having clinicians on the supply chain team to support the integrity of the program.

Duke’s overall strategy provides the supply chain with many areas to add value: Lead in Clinical Excellence, Forge Our Digital Future, Build an Indispensable Network, Advance Health Equity and Foster Joy in Work. These are large goals, but the supply chain indicates it is ready.

In our ranking for the first time ever, landing at No. 19, is HCA Healthcare. HCA’s stronger IBM Watson Health score and peer recognition pushed it into the Top 25. HCA has helped develop a number of supply chain leaders. It focuses on standardization and commitment at scale as the largest health system in our ranking at $51 billion in net patient revenue across 21 states (and the United Kingdom), 186 hospitals, 2,000 total care locations. HCA’s commercialization strategy through its GPO, HealthTrust, has a significant impact.

HCA is operationally strong on all these fronts and others. In recent years, the organization has acquired new capabilities for itself and members of its GPO on the purchased services and supply chain operations front through the acquisition of ROI from Mercy. HCA’s standardized approach regionally, with alignment to committed agreements with suppliers, the common way storerooms are set up on site and methodical leverage of its own logistics infrastructure, are the products of supply chain strategy and execution over decades.

HCA has also invested in the digital supply chain. Through the COVID-19 pandemic, investments in analytics helped match supply and demand of PPE across the network, manage ventilators, and tracking and tracing vaccine distribution through a proprietary tool.

Coming in at No. 20 on our ranking is Parkview Health. Parkview is the smallest health system by patient revenue, but mighty in supply chain. The challenges differ for more compact regional health systems to see the value in supply chain, but the decade-plus leadership journey has demonstrated a connected series of strong developments that have led to national recognition by the Bellwether League, HPN and the Journal of Healthcare Contracting. Doing good things and sharing broadly with others has been a hallmark of Parkview’s rise into the Top 25.
Parkview has a strong span of control of supply chain over most areas of spend, including new construction. It is one of those places where success begets success and supply chain is invited to do more. Parkview supply chain is connected intentionally in organization design, from clinical alignment, to sourcing, to logistics in supply chain. It has long had a self-distribution model with a growing cadre of ancillary services that it provides. Today, Parkview also manages pharmacy inventory using new digital supply chain techniques backed by systems investment. Parkview’s approach has been centered around Lean Six Sigma, looking to take waste out of the system with end-to-end measurement across the network, leading to 0.5% obsolescence rate and decreased inventory as the outcome of point of use, transportation optimization and improved alignment to clinicians.

Debuting at No. 21 in the ranking is Rush Health. For aspiring health systems looking to make their way into the Top 25, look no further than Rush. On the back of strong leadership, Rush is elevating a number of things in supply chain — namely some leading practices on the ESG front and innovations led by collaboration with distributors and manufacturers. These helped propel Rush into our ranking.

Rush has been a leader in sharing practical, servant-led innovations in supply chain internally and with partners externally. Its collaboration with a distribution partner to re-envision what the distribution center is, led to an initiative that was recognized in our Power of the Profession Awards innovations category in 2020. In that case, the distributor partner invested in an underserved area of Chicago, resulting in 30-plus jobs, with room for expansion to other services.

Point-of-use technology investment and alignment with clinicians internally, helped make the distribution center more efficient as well. Rush’s collaboration with Johnson & Johnson in the challenging suture supply chain is also a model for other health systems. They methodically worked to understand the clinical needs for suture, together reducing the SKUs by 13%, reducing the amount of inventory by 26%, and loss and/or expired products by 70%. Rush’s work on health equity in Chicago is also a leading practice. Watch this space for more developments, as supply chain is at the table and helping make progress in this critical area.

Coming in at No. 22 is HonorHealth. While HonorHealth is new to the ranking, it is a prime example of another health system showing how interconnected and interdependent the industry is. HonorHealth is carving out its own supply chain capabilities story with a strong connection to its quality-of-care metric and building an ability to cultivate leaders of the future through its fellowship program that highlights supply chain.
HonorHealth's supply chain has developed relatively rapidly, focusing on savings from sourcing, but with a strong connection to clinical leadership that clearly values supply chain as a partner. Through the pandemic, HonorHealth was one of the supply chains across the country that helped locally source and administer vaccines, with supply chain as a partner in getting this accomplished for more than 100,000 people. 55

HonorHealth is connected in analytics for improved supply chain and patient outcome decisions as well, leading to some improved clinical alignment decisions that removed cost in high-value procedural areas. 56 HonorHealth's approach to supply chain excellence is less flashy than some, but effective as a shared service group, bringing improved governance over the past several years and having some unique capabilities, such as centralized biomedical services and facilities management in the mix. 57

**Sentara Healthcare** debuts in our ranking at No. 23. The section of our ranking for numbers 23 through 30 were separated by less than one-tenth of a point in composite score, with Sentara leading the way in this tight group.

Sentara has many good things happening in supply chain. It hired a new leader in early 2021, to lead a program that has already shown supply chain leadership. 58 Senior executives indicate the need for a more strategic view of supply chain and are already making investments to get there, especially on the sourcing side. Among other areas of focus, Sentara is working hard on ESG initiatives, especially around DEI spend. 59 With senior leadership support, Sentara is seeking to use more of its $3-billion spend to support local minority- and women-owned businesses, helping provide their product and services needs. It is leaning into education through quarterly workshops and advocacy groups to create more welcoming opportunities.

Sentara has CEO support behind these ESG initiatives as well, including health equity initiatives through a $40-million investment in the Sentara Healthier Communities Fund. Howard P. Kern, president and CEO of Sentara Healthcare, says it best, “In order to drive lasting change, we must forge new partnerships, strengthen long-standing relationships and marshal resources to build stronger, healthier, more equitable communities together. Based on the overwhelming response to the Sentara Healthier Communities Fund, Sentara is proud to be able to provide additional support to tackle these pressing issues.” 60
Landing at No. 24 on our ranking is Indiana University Health. The $6-billion, 16-hospital IU system makes the list for the second consecutive year. Six years ago, IU embarked on a plan to invest in improved and automated distribution capabilities. It developed and built a 300,000-square-foot Integrated Service Center (ISC) with a robotic storage picking solution totaling 7,632 bins to serve acute and non-acute points of care. IU Health is one of the most automated central service centers in the country, built for expansion of the system and the solutions provided. 61

IU Health has also made progress in governance, standardization and analytics, moving earlier this year to a cloud-based single ERP solution across the health system. Early benefits include connectivity to the ISC, improved visibility and control of spend across all points of care, tracking by service line, category management and alignment to clinical end users to make supply chain more predictable. 62

IU Health is looking to the future, postpandemic, with a closer eye to leveraging its logistics capabilities by improving collaboration with distributors and suppliers through some early demand planning efforts. IU is positioned to show leadership in using physical and digital assets to elevate supply chain responsiveness.

BayCare is No. 25. Something of a hidden gem, BayCare is a $4.4-billion, 15-hospital health system with solid supply chain capabilities built systematically. BayCare has many of the foundational building blocks of advanced supply chains in healthcare. It operates a 250,000-square-foot central service center, has a mature clinical value analysis team with an eye on patient outcomes and manages its own GPO with dual goals of savings in total cost, along with diversity and inclusion in its supplier base. 63 BayCare centralized its pharmaceutical supply chain across all its hospitals in 2020 to better manage inventory, standardize on products and improve overall communication. 64

BayCare is also leveraging digital business capabilities to better serve the senior population in Florida. Specifically, BayCare is working to increase access to care and improve the health status of its patients, supported by a combination of solutions from three healthcare technology providers. Clinicians are using population health strategies and additional capabilities to extend care beyond the exam room and improve patient-specific health outcomes, especially with its large senior population. 65 This kind of effort aligns with BayCare's top-quintile performance in our quality-of-care metric.
The Healthcare Supply Chain Top 25 Methodology

Consistent with Gartner's cross-industry Supply Chain Top 25 research methodologies, the Healthcare Supply Chain Top 25 ranking is derived from two main analyses: quantitative measures and opinion components. Quantitative measures provide a view into how companies have performed in the past and establish proxy connections between financial health, performance and supply chain excellence. The opinion components offer a qualitative assessment of value chain leadership and demonstrated supply chain performance — crucial characteristics of our Top 25. These two components are combined into a total composite score.

The centerpiece of the qualitative opinion component of our methodology is the Healthcare Supply Chain Top 25 Capabilities Model. It is used to guide both peer and analyst voters as they consider companies to select for the Healthcare Supply Chain Top 25. The model highlights activities in the healthcare value chain that help improve human life, driven by the core set of capabilities depicted in Figure 2. We updated this model in July 2021 to reflect a U.S.-only health system Healthcare Supply Chain Top 25, making 16 changes to the model. The goal to “improve human life at sustainable costs” stayed consistent.

Figure 2. Healthcare Supply Chain Top 25 Capabilities Model

### Healthcare Supply Chain Top 25 Capabilities Model

<table>
<thead>
<tr>
<th>Patient Focus</th>
<th>Collaboration</th>
<th>Network Visibility</th>
<th>Cost to Serve</th>
<th>Change Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>• CQO Alignment</td>
<td>• Sustainable End-to-End Relationships</td>
<td>• Demand</td>
<td>• Variation Reduction</td>
<td>• Alignment to Strategy</td>
</tr>
<tr>
<td>• Clinical Integration</td>
<td>• Joint-Value Creation</td>
<td>• Risk and Resiliency</td>
<td>• Sourcing Excellence</td>
<td>• Leadership</td>
</tr>
<tr>
<td>• Home Care and/or Virtual Care</td>
<td>• Environmental, Social and Governance</td>
<td>• Inventory</td>
<td>• Utilization Analytics</td>
<td>• Span of Control</td>
</tr>
<tr>
<td>• Industry Leadership</td>
<td>• Industry Leadership</td>
<td>• Service Measurement</td>
<td>• Alignment to Revenue</td>
<td>• Guiding Metrics</td>
</tr>
</tbody>
</table>

**Foundational Capabilities**

- • Effective Governance
- • Organizational Design and Talent
- • Business Process Optimization
- • Innovation Culture
- • Digital Supply Chain
- • Enabling Technologies

Source: Gartner

Note: CQO = Cost, quality and outcomes
Organizations receiving the most recognition have combined strong foundational capabilities with targeted progress in all the areas we outlined above. Although success in execution requires more than developing supply chain capabilities contained in our model, the industry recognizes that the path to improving human lives can benefit from the principles captured in our model. Despite a health system’s supply chain maturity, this model can be used to frame and set parameters for strategic goals.

**Supply Chain Masters**

For the fourth year, we use a separate category to highlight the accomplishments and capabilities of long-term supply chain leaders. We refer to these health systems as supply chain Masters and define them as having attained a top five composite score in any seven of the last 10 years. This category is separate from the overall Healthcare Supply Chain Top 25 list, but it is not a retirement from being evaluated as part of our annual research. If a Masters company fails to meet the criteria in the current year, it would lose its designation. However, this company would be considered as part of the Healthcare Supply Chain Top 25 ranking in the same way as any other company in our study. Our two Masters this year were in our inaugural class and kept their status in the transition to an all health system ranking.

**Health Systems**

This Top 25 ranking is now focused on U.S. health systems, so manufacturers, distributors and retail pharmacies are no longer included. We have also made changes to the methodology used to select and rank the 171 health systems this year. As in previous years, we partnered with IBM Watson Health for a key component of our methodology. IBM Watson Health has evaluated hospitals and health systems using publicly available data for the past 28 years. The research is based on clinical, operational, financial, and patient perception-of-care measures that form a balanced scorecard.

It is comprised of key measures of hospital performance: risk-adjusted mortality, risk-adjusted complications, 30-day patient readmits, 30-day mortality, average length of stay (ALOS), emergency department (ED) throughput, expense, operating profit margin, and Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS).

The composite score derived from these measures reflects excellence in hospital care, quality and leadership.

Health systems do not apply for IBM Watson Health’s 15 Top Health Systems selection process, and winners do not pay to market their honor.
We use IBM Watson Health’s data for the following two components of the process:

- Selecting a meaningful group of health systems to include in our ranking.
- Determining a quantifiable proxy for health systems’ quality of care.

We value our partnership with IBM Watson Health; our ranking wouldn’t be as meaningful without its willingness to share its data.

Quantitative Measures

As mentioned above, we used the percentile score from the 15 Top Health Systems Study to develop a force-ranked score for the quality of patient care for each health system to be used in our quantitative analysis. While we use IBM Watson Health’s actual quantitative assessment from the study for our ranking calculation, we only show the tier of performance for each health system in our final annual report.

The four tiers are:

- **15 Top Award Winners**
- **Top Quintile (Top 20%, Excluding 15 Top Award Winners)**
- **Second Quintile (61% to 80% Performance)**
- **Third Quintile or lower (0% to 60% Performance)**

The second quantifiable metric used to assess health systems is bond rating. As we did in previous rankings, we use bond rating as a proxy for operational efficiency of health systems. Although bond rating is not the ideal gauge of operational efficiency, it does reflect the financial discipline and management effectiveness of a health system. We used ratings from Standard & Poor’s (S&P), Moody’s and Fitch to develop an aggregate bond-rating composite score. For consistency, we mapped bond ratings from all services to the S&P scale, which is reflected in Table 1.

Opinion Component

We changed the face of the peer voters. Historically, we had 49% manufacturers and distributors, 36% health systems, and 15% experts and/or academics. Reflecting our health system focus this year, we changed the composition to 58% healthcare providers, 21% manufacturers and distributors, and 21% experts and/or academics (see Figures 3 and 4).
Opinions are gathered from two groups: Gartner analysts who have significant interaction with the healthcare industry and professionals who have direct experience with the organizations being ranked. Any supply chain leader from a manufacturer, distributor, retail pharmacy or health system is eligible to vote. However, only one vote is accepted per company.

This year, we received peer votes from 62 supply chain leaders in August and September. Voters were from the most senior levels of the supply chain at organizations across the healthcare value chain, including academia, GPOs, associations, as well as a handful of consultants (see Figures 3 and 4). In fact, this year our level of senior VPs increased significantly over prior years.

Relative Weighting

The last step in our health system ranking methodology is to balance the quantitative measures and opinion scores. To maintain consistency with the methodology used in past years, we applied a 35% weighting to the quantitative measures (20% for IBM Watson Health score and 15% for bond rating). We applied a 65% weighting (32.5% for peers and 32.5% for Gartner analysts) to the opinion score. The choice of this methodology demonstrates our belief that the wisdom of the collective healthcare crowd provides the best overall assessment.
Figure 3. Peer Opinion Panel Composition: Supply Chain Segments

Peer Opinion Panel Composition
Supply Chain Segments

- 58% Health Systems
- 21% Experts
- 15% Manufacturers
- 6% Distributors

n = 62

Source: 2021 Gartner Healthcare Top 25 Peer Vote Survey
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Polling Procedure

Peer panel polling was conducted during August and September 2021, via a web-based, structured voting process. Voters were taken through a system to identify their final selection of leaders.

The breakdown of the system is as follows:

The first page provided instructions and a description of our Healthcare Supply Chain Top 25 capabilities model. Specifically, the peer voters were asked to consider the following:

- Which organizations are developing and implementing strategies to support improving human health at sustainable costs?
- Which organizations are building and implementing supply chain capabilities in the areas depicted in Gartner’s Healthcare Supply Chain Top 25 capabilities model?
After the subset of leaders were chosen, the panelists were then asked to force-rank the companies from No. 1 to No. 25.

Individual votes were tallied across the entire panel, with 25 points earned for a No. 1 ranking, 24 points for a No. 2 ranking and so on. The analyst panel and the peer panel used the exact same polling procedure.

By definition, each person's expertise is deep in some areas and limited in others. Despite that, voters weren't expected to conduct external research to place their votes. The polling system is designed to accommodate differences in knowledge. It relies on what author James Surowiecki calls "The Wisdom of Crowds" to provide the mechanism that taps into each person's core kernel of knowledge and aggregates it into a larger whole.

**Composite Score**

All of the information — the quantitative measures and opinion votes — is normalized to a 10-point scale and then aggregated into a total composite score. The composite scores are then sorted in descending order and the organizations with the 25 highest scores make it into our final ranking.

**Collaborators**

We added a section for peer voters to recognize their most collaborative partners. In order to submit their vote, they had to enter three collaborators; leaving comments was optional. While we didn't use this information as part of the ranking, we did use it to support one of the main trends we observed.

**Evidence**

1. Methodology Changes for the 2021 Gartner Healthcare Supply Chain Top 25

2. Shaping Disruption: A New Strategy for Supply Chain Risk Management

Mayo Building Home Hospital Model One Region, and Supply Chain, at a Time, Diagnostics World.

Vizient Completes Acquisition of Intalere, Expands Its Supply Chain Capabilities, Vizient.

Intermountain Inks Merger Deal With SCL Health to Create $11-Billion System, Healthcare Dive.

Amazon Care, Intermountain Form Coalition to Push for CMS Home Care Reimbursement Changes, Fierce Healthcare.

Cleveland Clinic Commits to Expanding Supplier Diversity, Building Community Wealth, Cleveland Clinic.

First Cleveland Clinic London Outpatient Centre Opens at 24 Portland Place, Cleveland Clinic.


Video: Power of the Profession Leaders Series: Banner Health’s Pivot to Reusable Isolation Gowns

Ochsner Health to Open Two Plants Making PPE in Louisiana, Becker’s Hospital Review.

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**Recommended by the Author**

Some documents may not be available as part of your current Gartner subscription.

- The Healthcare Supply Chain Top 25 for 2020
- 2021 Gartner Supply Chain Top 25: Life Sciences
- The Gartner Supply Chain Top 25 for 2021: Masters, Top 25 and Industry Leaders
- Supply Chain Executive Report: Power of the Profession Awards
- Create a Resilient Healthcare Provider Supply Chain Ready for the Future
- Methodology Changes for the 2021 Gartner Healthcare Supply Chain Top 25

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# Table 1: The Healthcare Supply Chain Top 25 for 2021

<table>
<thead>
<tr>
<th>2021 Rank</th>
<th>Health System</th>
<th>Bond Rating</th>
<th>IBM Watson Health 15 Top Health Systems Study</th>
<th>Peer Opinion</th>
<th>Gartner Opinion</th>
<th>Composite Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cleveland Clinic</td>
<td>AA</td>
<td>2nd Quintile</td>
<td>785</td>
<td>255</td>
<td>7.64</td>
</tr>
<tr>
<td>2</td>
<td>Banner Health</td>
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<td>2nd Quintile</td>
<td>571</td>
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<td>6.84</td>
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<tr>
<td>3</td>
<td>Ochsner Health System</td>
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<tr>
<td>4</td>
<td>Baylor Scott &amp; White Health</td>
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<td>5.80</td>
</tr>
<tr>
<td>5</td>
<td>Mercy</td>
<td>A+</td>
<td>Top Quintile</td>
<td>492</td>
<td>154</td>
<td>5.79</td>
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<tr>
<td>6</td>
<td>Spectrum Health</td>
<td>AA</td>
<td>2nd Quintile</td>
<td>406</td>
<td>150</td>
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<tr>
<td>7</td>
<td>Bon Secours Mercy Health</td>
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<td>175</td>
<td>5.46</td>
</tr>
<tr>
<td>8</td>
<td>UPMC</td>
<td>A</td>
<td>3rd Quintile or Lower</td>
<td>608</td>
<td>210</td>
<td>5.35</td>
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<tr>
<td>9</td>
<td>Advocate Aurora Health</td>
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<td>2nd Quintile</td>
<td>413</td>
<td>145</td>
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<tr>
<td>10</td>
<td>AdventHealth</td>
<td>AA</td>
<td>Top Quintile</td>
<td>445</td>
<td>91</td>
<td>5.26</td>
</tr>
<tr>
<td>11</td>
<td>Ascension</td>
<td>AA+</td>
<td>3rd Quintile or Lower</td>
<td>375</td>
<td>165</td>
<td>5.26</td>
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<tr>
<td></td>
<td>Hospital Name</td>
<td>Bond Rating</td>
<td>Quintile</td>
<td>Score</td>
<td>Medicaid</td>
<td>125</td>
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<tr>
<td>12</td>
<td>Northwestern Medicine</td>
<td>AA+</td>
<td>2nd Quintile</td>
<td>339</td>
<td>117</td>
<td>5.24</td>
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<tr>
<td>13</td>
<td>BJC HealthCare</td>
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<td>3rd Quintile or Lower</td>
<td>496</td>
<td>107</td>
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<td>Trinity Health</td>
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<td>347</td>
<td>127</td>
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<td>15</td>
<td>Scripps</td>
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<td>Top Quintile</td>
<td>208</td>
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<td>16</td>
<td>Geisinger</td>
<td>AA-</td>
<td>3rd Quintile or Lower</td>
<td>490</td>
<td>131</td>
<td>4.97</td>
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<tr>
<td>17</td>
<td>Novant Health</td>
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<td>3rd Quintile or Lower</td>
<td>340</td>
<td>176</td>
<td>4.80</td>
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<tr>
<td>18</td>
<td>Duke Health</td>
<td>AA</td>
<td>3rd Quintile or Lower</td>
<td>419</td>
<td>151</td>
<td>4.54</td>
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<td>19</td>
<td>HCA Healthcare</td>
<td>BB+</td>
<td>2nd Quintile</td>
<td>491</td>
<td>117</td>
<td>4.45</td>
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<td>20</td>
<td>Parkview Health</td>
<td>AA-</td>
<td>Top Quintile</td>
<td>115</td>
<td>105</td>
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<td>21</td>
<td>Rush Health</td>
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<td>Top Quintile</td>
<td>152</td>
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<td>22</td>
<td>HonorHealth</td>
<td>A+</td>
<td>Top Quintile</td>
<td>172</td>
<td>83</td>
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<tr>
<td>23</td>
<td>Sentara Healthcare</td>
<td>AA</td>
<td>15 Top</td>
<td>89</td>
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<td>4.14</td>
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<tr>
<td>24</td>
<td>Indiana University Health</td>
<td>AA</td>
<td>3rd Quintile or Lower</td>
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<td>89</td>
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<tr>
<td>25</td>
<td>BayCare</td>
<td>AA</td>
<td>Top Quintile</td>
<td>85</td>
<td>73</td>
<td>4.08</td>
</tr>
</tbody>
</table>

1 Bond Rating:
All ratings were mapped to the S&P rating system using an industry-standard mapping system.

2 IBM Watson Health 15 Top Health Systems Study:
Based on score in IBM Watson Health's 2021 15 Top Health Systems Study.
3 Peer Opinion and Gartner Opinion:
Based on each group’s forced-rank ordering of performance to Gartner’s Healthcare Supply Chain Capabilities Model.

4 Composite Score:
(Peer Opinion × 32.5%) + (Gartner Opinion × 32.5%) + (Bond Rating × 15%) + (IBM Watson Health Score × 20%)
2020 data used where available. Where unavailable, latest available full-year data used.
All raw data normalized to a 10-point scale prior to composite score calculation.
Composite scores are rounded two decimal places. Rank order is based on detailed scoring.

Source: Gartner (November 2021)