



# HEALTH CARE DELIVERY

## Research Brief

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Research Briefing Prepared by the  
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# HEALTH CARE DELIVERY

## Research Brief

SASB's industry brief provides a summary of the material sustainability issues that are likely to impact shareholder value. The issues identified within are industry specific, and reflect how the associated companies rely on environmental, social, and human capital. Further, the brief identifies material sustainability issues that pertain to business model and innovation, and governance. SASB adheres to the U.S. Supreme Court definition of materiality, defined as "presenting a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the 'total mix' of information made available." To identify material sustainability issues, SASB's research team examines three types of evidence; evidence of interest, evidence of financial impact, and forward looking impact. The research reflected within this document was conducted by SASB and an initial version of the document served as an input for the Industry Working Groups to evaluate the materiality of industry issues and potential accounting metrics. The industry brief is not the disclosure standard, but rather is intended to provide background context and evidence for the material sustainability issues that SASB identified for the given industry. SASB takes sole responsibility for errors and omissions.

### Related Documents

- [Health Care Sustainability Accounting Standards](#)
- [Industry Working Group Participants](#)
- [SASB Conceptual Framework](#)
- [Example of Integrated Disclosure in Form 10-K](#)

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## MATERIAL SUSTAINABILITY ISSUES

### Environmental Capital

- Energy and Waste Efficiency
- Climate Change Impacts on Human Health and Infrastructure

### Social Capital

- Quality of Care and Patient Satisfaction
- Access for Low Income Patients
- Patient Privacy and Electronic Health Records

### Human Capital

- Employee Recruitment, Development, and Retention

### Business Model and Innovation

### Governance

- Fraud and Unnecessary Procedures
- Pricing and Billing Transparency

## INDUSTRY SUMMARY

The health care delivery industry owns and manages hospitals clinics, and other related facilities. The industry is primarily engaged in inpatient and outpatient care, anatomical pathology services, and clinical laboratory services. Health care services are increasingly fragmented into specialized facilities providing a range of care including surgery, mental health, hospice, and homes for the elderly.<sup>1</sup>

The health care delivery industry, which generated \$815 billion in revenue in 2011, is driven by an increased prevalence of disease associated with unhealthy lifestyles and an aging population.<sup>1</sup> Industry growth has traditionally been linked to employment rates; however the increased number of insured individuals provided for under the Patient Protection and Affordable Care Act is expected to reduce this correlation. A current and predicted shortage of physicians and high fixed labor and facilities costs will continue to present challenges to the industry. Increased enrollment in government insurance programs and a regulatory emphasis

<sup>1</sup> A list of the top five companies by revenue appears in Appendix I

on reduced costs will create downward pricing pressure and continue to drive consolidation in the health care industry. In particular, federal policy seeks to address over-utilization of health care delivery services through the implementation of Accountable Care Organizations that will operate on a capitated model and incentivize patient outcomes and decreased utilization costs. In general, the industry will be required to produce better outcomes and manage costs, while facing a need to expand capacity in light of the increasing number of insured individuals. The industry also faces significant competition for patients and resources from private, non-profit, and religious health systems.

The health care delivery industry provides an essential public good. However, companies in this industry must manage a rapidly evolving legislative and regulatory environment. Recent trends suggest a further alignment between the interests of society and those of long-term investors. These trends will also amplify how non-financial forms of capital contribute to market value. More specifically, the management of environmental, social, and human capital will increasingly affect traditional valuation by impacting revenue, assets, liabilities, and cost of capital. The ability of companies to manage these issues while also addressing the associated risks and opportunities through leadership and governance will be strong indicators of management quality and long-term value.

To ensure that shareholders are able to evaluate these factors, health care delivery compa-

nies should report on the material sustainability risks and opportunities that may affect value in the near and long term. Enhanced reporting will provide stakeholders with a more holistic (and comparable) view of performance that includes both positive and negative externalities, and the non-financial forms of capital that health care delivery companies rely on to create long-term value.

- Implementing energy and waste management strategies
- Addressing the risks associated with climate change and natural disasters
- Providing quality care designed to improve patient outcomes and satisfaction, and to reduce costs
- Ensuring access to services
- Ensuring patient privacy and efficiencies in care through the implementation of electronic health records
- Recruiting and retaining physicians and nurses to maintain competitiveness
- Improving pricing and billing procedures to ensure transparency and eliminate fraud

The extent to which these sustainability issues impact value will become increasingly apparent as the regulatory environment continues to evolve and emphasis is placed on increased access, greater efficiency, reduced costs, and improved patient outcomes.

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## LEGISLATIVE AND REGULATORY TRENDS IN HEALTH CARE DELIVERY

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The legislative and regulatory environment that governs the health care delivery sector continues to evolve. Although the financial impacts of these changes are yet to be determined, the following section provides a brief summary of key legislative efforts and associated industry trends that are likely to affect shareholder value and sustainability performance.

The Patient Protection and Affordable Care Act (PPACA) is expected to benefit the industry by expanding health insurance to 26 million people who were previously uninsured.<sup>2,iii</sup> In addition to increased utilization of services, the PPACA is likely to decrease debt and delinquency held by hospitals. The Act will be funded by a combination of cuts in Medicare and Medicaid reimbursement, increased taxes on individuals, corporations, and the health industry, as well as provisions to reduce fraud and increase efficiency in care. These elements of the plan may negatively impact companies in this industry. A subsequent shift in payer mix and consolidation in managed care is expected to result in increased merger activity in the health care delivery sector, as companies seek to reduce costs and achieve efficiencies of scale. In addition, the increase in insurance coverage may require health care providers to expand capacity.

In March of 2013, the Health Care Price Transparency Promotion Act of 2013 was introduced with bi-partisan support to the House of Representatives. The bill would require hospitals to disclose information on charges for specific inpatient and outpatient services. With health care expenditures rising at 3.9 percent and representing 17.9 percent of Gross Domestic Product in 2010, the Act is intended to allow consumers to make more informed decisions based on pricing and to reduce costs through increased transparency.<sup>iii</sup> This bill, or similar legislation, could result in lost revenue for companies that have relied on inflated prices to protect profits.

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## SUSTAINABILITY RISKS AND OPPORTUNITIES

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Recent legislation in the U.S. indicates an effort to increase health insurance coverage, improve the quality of care, and reduce costs. Health care delivery companies will therefore not be able to maximize financial capital unless they address material sustainability issues as well. Firms that are able to negotiate new regulations while addressing all forms of capital and limiting negative externalities will be better positioned to protect shareholder value.

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<sup>2</sup> Estimates range between 26 and 30 million for the number of people will become insured under the PPACA.

The following section provides a brief description of how the health care delivery industry depends on each form of capital and the specific sustainability issues that will drive performance including: evidence of materiality, value impact, and timing. Tables indicating the type of evidence gathered to demonstrate materiality for each issue, and the recommended disclosure framework appear in Appendix II and III. An analysis of the current state of reporting on material sustainability issues in the health care delivery industry appears in Appendix IV.

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## ENVIRONMENTAL CAPITAL

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Health care delivery companies operate energy intensive facilities. As pricing structures increasingly account for limited resources, and legislation seeks to address negative environmental externalities such as energy use and hospital waste, investors must understand how individual companies within this industry manage these risks, and the associated opportunities for cost savings. In addition, health care delivery firms must address climate change related risks to human health and physical infrastructure.

## Energy and Waste Efficiency

The health care delivery industry faces significant costs associated with energy use and waste disposal due to facilities that operate on a continuous basis and provide for strict sterility standards for medical equipment and supplies. The Environmental Protection Agency's Energy Star Program estimates that hospitals spend \$8.8 billion on energy, accounting for roughly one to three percent of each facility's operating budget.<sup>iv</sup> Improved energy management and effective waste reduction strategies can lower costs, hedge against future price increases, and protect shareholder value.

### Evidence

According to a 2012 Commonwealth Study, energy and waste reductions and operating room supply efficiencies could save hospitals across the U.S. \$5.4 billion over five years and \$15 billion over 10 years.<sup>v</sup> Several companies in this industry are participating in national initiatives designed to assist facilities in developing and implementing sustainability strategies. In addition, standards are guiding the development of new 'green' health care facilities, which provide resource efficiency improvements while affording patients the associated environmental health benefits.

Tenet Healthcare reports that "although we are not engaged in manufacturing or other activities that produce meaningful levels of green-

house gas emissions, our operating expenses could be adversely affected if legal and regulatory developments related to climate change or other initiatives results in increased energy or other costs.”

HCA Holdings reports that new waste management strategies will result in annual savings of more than \$6 million. In addition, efforts to optimize heating, venting, and cooling systems have saved the company over \$12 million.<sup>vi</sup>

### Value Impact and Timing

Strategies to effectively manage resources and waste streams will impact operating costs and subsequently profits. Improved performance in this area can improve the value of underlying assets (i.e., energy efficient buildings) and will help companies hedge against future increases in energy costs.

## Climate Change Impacts on Human Health and Infrastructure

An increase in extreme weather events associated with climate change could present physical threats to health care delivery facilities and operations. In addition, these events coupled with the potential spread of infectious diseases, and food and water scarcity are likely to present material implications for the health care delivery industry. Companies should subsequently disclose strategies to protect value in light of these challenges.

### Evidence

A 2011 study in Health Affairs found that future health care costs attributed to climate change will be significant. Specifically, the study estimated that the health care costs associated with six climate related events between 2000 and 2009 were \$740 million. This estimate reflects more than 760,000 encounters with the health care system.<sup>vii</sup>

In addition to the potential for a significant increase in patient volume due to climate change, health care delivery companies face significant risks to infrastructure. Hurricane Sandy cost NYU Langone Medical Center in New York City \$1.2 billion in damages and lost revenue.<sup>viii</sup> Although NYU is not publicly traded, this example demonstrates the magnitude of the risks posed to health care delivery companies.

HCA Holdings reports that its “business activities could be harmed by a particularly active hurricane season or even a single storm, and the property insurance we obtain may not be adequate to cover losses from future hurricanes or other natural disasters.”

### Value Impact and Timing

An increased frequency of extreme weather events in the near and long term has the potential to negatively impact profits, the value of physical assets, and cost of capital.

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## SOCIAL CAPITAL

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Health care delivery companies provide a critical social service. Firms in this industry are subsequently expected to deliver quality care, while providing universal access to services. As legislative and societal emphasis is increasingly placed on improved quality of care, patient outcomes, efficiency, privacy, and reduced costs, companies that are able to manage these aspects of social capital will be better positioned to enhance shareholder value.

## Quality of Care and Patient Satisfaction

The ability to deliver quality care and ensure patient satisfaction is an essential value driver for health care delivery companies. The link between performance in this area and shareholder value has been strengthened by the Patient Protection and Affordable Care Act (PPACA). Included in the Act's provisions, is the establishment of the Hospital Value-Based Purchasing Program, which provides incentive payments based on performance on a series of health care quality measures. Further, hospitals will be subject to reductions in inpatient payments for excessive readmissions and hospital acquired conditions.

## Evidence

Under the Hospital Value-Based Purchasing Program, the Center for Medicare & Medicaid Services (CMS) will distribute \$850 million in incentives in 2013 based on a weighted average of patient experience scores and 12 clinical process-of-care measures. In 2012, more than 2,200 hospitals experienced reductions in their Medicare reimbursements of up to one percent. These cuts resulted from high rates of readmissions, and are expected to cost affected hospitals \$280 million in Medicare funds over the next year.<sup>ix</sup> The reduction in reimbursements relating to excessive readmissions rates will increase to two percent in fiscal year 2014, and three percent in 2015. Beginning in 2015, hospitals that are ranked in the lowest quartile with respect to national risk adjusted hospital acquired conditions in the previous year will receive a one percent reduction in their total inpatient operating Medicare payments.

A recent study indicating that approximately 195,000 deaths occur each year due to medical errors further demonstrates opportunities for improvement in quality of care.<sup>x</sup>

## Value Impact and Timing

Recently mandated financial incentives will place further emphasis on quality of care, allowing for both value creation and destruction. The extent, direction, and timing of the impact on revenue, reputation, and cost of capital will correlate directly with performance on the associated indicators.

## Access for Low Income Patients

Although the Patient Protection and Affordable Care Act (PPACA) will increase the number of insured individuals, the Congressional Budget Office estimates that 30 million nonelderly people will remain uninsured in 2023. The challenges associated with serving uninsured and low-income patients will be further compounded by reductions in Disproportionate Share Hospital (DSH) payments beginning in fiscal year 2014. Disclosure on efforts to extend services to uninsured populations and DSH allocations will allow shareholders to understand how companies in this industry are able to provide access to low-income patients and how serving the uninsured affects the business model.

### Evidence

Under the PPACA, Medicare DSH payments will be reduced 25 percent of the amount they would have been without the law. CMS estimates that these reimbursements reductions will total \$50 billion between 2010 and 2019. The potential impact on value and the need for innovation in this area is also articulated by The Medicare and Medicaid Services Innovation Center's decision to fund up to \$1 billion in grants for applicants (including health care providers) who implement compelling ideas to deliver better health care to people enrolled in Medicare, Medicaid, and the Children's Health Insurance Program.

## Value Impact and Timing

Health care delivery companies that are able to develop innovative pricing structures that allow them to profit from increased Medicare enrollment and to expand their patient base will create a positive impact on revenue.

## Patient Privacy and Electronic Health Records

The Health Insurance Portability and Accountability Act (HIPAA) requires health care providers to establish administrative, physical, and technical safeguards to protect the integrity, confidentiality, and availability of patient health information. Failure to comply with these regulations can lead to civil and criminal penalties, while the American Recovery and Reinvestment Act (ARRA) has provided for enhanced enforcement and increased fines. The ARRA also established financial incentives for the meaningful use of electronic health records, and reduced Medicare payments for companies that fail to demonstrate meaningful use. Disclosure on HIPAA violations and electronic health records adoption will allow shareholders to monitor performance in these areas.

### Evidence

In 2010, the Federal government announced a five-year plan to incentivize the implementation of electronic medical records by providing

\$27 billion over 10 years. Further, health care providers that fail to implement electronic health records by 2015 will face cuts in Medicare payments. The reductions will be one percent in 2015, and will increase by a percentage point annually. This coupled with an increase in the cap on annual civil monetary penalties for HIPAA violations from \$25,000 to \$1.5 million suggest the potential for significant financial impacts associated with performance in this area.

### Value Impact and Timing

In addition to capitalizing on available incentives and avoiding associated fines, electronic health records and protecting patient privacy have the potential to improve efficiency and reduce errors, thereby increasing profits and reducing liabilities.

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## HUMAN CAPITAL

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Health care delivery companies face significant competition in recruiting and retaining qualified staff. Improved disclosure in the area of human capital management will provide shareholders with a more complete understanding of how health care delivery companies are enhancing value.

## Employee Recruitment, Development, and Retention

Health care delivery companies will face increased competition for physicians as the PPACA increases demand and intensifies current and future shortages. The ongoing ability to recruit, develop, and retain health care practitioners is critical to success in this industry and disclosure on related performance indicators allows shareholders to understand how companies are managing a critical human capital factor in the health care delivery industry.

### Evidence

As the number of insured individuals continues to grow, the Association of American Medical Colleges estimates that the shortage of doctors will reach 130,000 by the year 2025.<sup>11</sup> This shortage will be most acute in primary care (estimated to be 15,230) and specialties such as gerontology, where the shortage is expected to be 11,000 as there are currently 35 million Americans over the age of 65.<sup>xii xiii</sup>

Universal Health Services reports that “the top ten attending physicians within each of our facilities represent a large share of our inpatient revenues and admissions. The loss of one or more of the physicians, even if temporary, could cause material reduction in our revenues, which could take significant time to replace given the difficulty and cost associated with recruiting and retaining physicians.”

## Value Impact and Timing

Poor performance in employee recruitment and retention can impact a company's ability to deliver quality care and to address increasing demand, and therefore negatively impact profits in the near and long term.

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## BUSINESS MODEL AND INNOVATION

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Although health care delivery companies have numerous opportunities for the development of new business models and innovation, these were determined not to be related to sustainability for this industry.

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## GOVERNANCE

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Evolving regulatory environments, downward pricing pressures, and competition in the health care delivery industry increase the importance of strong governance. Management structures must be able to negotiate shifts in policy while eliminating fraud and unnecessary procedures and ensuring transparency in pricing and billing. Information on governance performance is essential for shareholders to understand management quality and a company's ability to protect value.

## Fraud and Unnecessary Procedures

Health care delivery companies are subject to significant fines and penalties under the Federal False Claims Act and similar state laws. Entities that receive at least \$5 million annually in Medicaid payments must have written policies for all employees and contractors regarding false claims, false statements, and whistleblower protections under these laws. The ability to ensure compliance in this area is likely to have material implications for health delivery companies.

### Evidence

Since the False Claims Act was amended in 1986, the Federal government has recovered in excess of \$30 billion.<sup>xiv</sup> Although the Act is not specific to health care delivery, companies in this sector have been subject to significant fines for fraudulently billing of Medicare and Medicaid. Recoveries have reached record levels in recent years, suggesting that the government is increasing efforts to prevent fraud.<sup>xv</sup> In addition, the PPACA includes federal funding of \$350 million over 10 years to fight health care fraud, waste and abuse.

In 2013, 55 hospitals agreed to pay a total of more than \$34 million to settle false claims allegations relating to Medicare billings for kyphoplasty procedures. The settlements involved 23 hospitals affiliated with HCA Holdings, and resulted in fines of more than \$7 million. In 2012, Tenet Healthcare agreed to pay \$43 million to settle claims that it overbilled Medicare at certain rehabilitation facilities.<sup>xvi</sup>

## Value Impact and Timing

Fines resulting from fraud and unnecessary procedures have the potential to reduce profits and generate liabilities. Although fines can result in isolated payments which present near term losses, persistent violations raise questions about management's judgment and ability to protect shareholder value in the long term.

## Pricing and Billing Transparency

Currently more than half of all states require that hospitals report pricing information, and legislative trends suggest that a federal mandate is possible. Developing legislation, coupled with increased emphasis on health care cost containment, is likely to enhance scrutiny on the pricing and billing practices of companies in this industry. Firms that are able to achieve compliance and transparent pricing structures will be better positioned to protect shareholder value.

### Evidence

A May, 2013 analysis of bills submitted to Medicare found that hospitals charge, on average, three to five times what the agency

pays. The study found that for profit hospitals typically submitted higher bills than nonprofit centers.<sup>xvii</sup> The disparity in billing practices was also recent exemplified by a study published in Archives of Internal Medicine found that cost of care for acute appendicitis in different facilities in California ranged from \$1,529 to \$182,955.<sup>xviii</sup> The study also found that approximately one-third of the variation in charges was unexplained.<sup>xix</sup>

## Value Impact and Timing

Health care delivery companies that are able to align their pricing with industry norms will likely avoid regulatory scrutiny and the potential for reputational damage. Companies that continue operate without transparency may lose patients and the ability to negotiate with managed care companies, resulting in a direct impact on profits.

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## SASB INDUSTRY WATCH LIST

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The following section provides a brief description of sustainability issues that did not meet SASB's materiality threshold at present, but could have a material impact on the health care delivery industry in the future.

### Facilities Designed for Wellness

Increasing demand for medical services has and will continue to drive companies in this industry to expand capacity. Preliminary research suggests that companies that take advantage of this opportunity to build or retrofit facilities that incorporate design for wellness may experience reduced patient recovery times and improved outcomes. Specifically, access to daylight, natural ventilation, reduced exposure to toxic chemicals, a view, and the appropriate degree of privacy have been demonstrated to expedite the healing process.

### Preventive Care

Legislative emphasis on preventive care, and new coverage requirements for managed care companies will likely result in decreased health care spending. The impact of this approach and the associated savings could have a material impact on the health care delivery industry as companies address demand through new products and services including wellness programs.

## APPENDIX I: Top Five Companies by Revenue | Health Care Delivery

- HCA Holdings Inc.
- Community Health Systems Inc.
- Tenet Healthcare Corp.
- Universal Health Services Inc.
- Davita Healthcare Partners Inc.

## APPENDIX II: Evidence of Materiality | Health Care Delivery

The following table provides a summary of the evidence of materiality for each issue in the health care delivery industry.

| MATERIAL SUSTAINABILITY ISSUES |   | EVIDENCE OF INTEREST |      |          |       |      | EVIDENCE OF FINANCIAL IMPACT |                  |                 |      | FORWARD-LOOKING IMPACT |           |        |     |
|--------------------------------|---|----------------------|------|----------|-------|------|------------------------------|------------------|-----------------|------|------------------------|-----------|--------|-----|
|                                |   | MM                   | IWGs |          | Other | EI   | Revenue / Cost               | Asset/ Liability | Cost of Capital | EFI  | Probability            | Magnitude | Timing | FLI |
|                                |   |                      | %    | Priority |       |      |                              |                  |                 |      |                        |           |        |     |
| ENVIRONMENTAL CAPITAL          | Energy and Waste Efficiency                               | 38%                  | 94%  | 5        |       | Med  | •                            | •                |                 | Med  | •                      | •         | Near   | Yes |
|                                | Climate Change Impacts on Human Health and Infrastructure | 10%                  | -    | -        | •     | Low  | •                            | •                | •               | Med  | •                      | •         | Near   | Yes |
| SOCIAL CAPITAL                 | Quality of Care and Patient Satisfaction                  | 60%                  | 94%  | 1        | •     | High | •                            | •                | •               | High | •                      | •         | Near   | Yes |
|                                | Access for Low Income Patients                            | 65%                  | 83%  | 2        |       | High | •                            |                  |                 | Low  |                        |           |        |     |
|                                | Patient Privacy and Electronic Health Records             | 25%                  | 78%  | 8        | •     | Med  | •                            | •                |                 | Low  | •                      | •         | Near   | Yes |
| HUMAN CAPITAL                  | Employee Recruitment, Development, and Retention          | 48%                  | 89%  | 6        |       | Med  | •                            |                  |                 | Med  | •                      | •         | Near   | Yes |
| GOVERNANCE                     | Fraud and Unnecessary Procedures                          | 55%                  | 94%  | 3        |       | Med  | •                            | •                |                 | Med  |                        |           |        |     |
|                                | Pricing and Billing Transparency                          | 50%                  | 72%  | 7        |       | Low  | •                            |                  |                 | Med  | •                      | •         | Near   | Yes |

| EMERGING SUSTAINABILITY ISSUES |                                  | EVIDENCE OF INTEREST |      |          |       |     | EVIDENCE OF FINANCIAL IMPACT |                  |                 |     | FORWARD-LOOKING IMPACT |           |        |     |
|--------------------------------|----------------------------------|----------------------|------|----------|-------|-----|------------------------------|------------------|-----------------|-----|------------------------|-----------|--------|-----|
|                                |                                  | MM                   | IWGs |          | Other | EI  | Revenue / Cost               | Asset/ Liability | Cost of Capital | EFI | Probability            | Magnitude | Timing | FLI |
|                                |                                  |                      | %    | Priority |       |     |                              |                  |                 |     |                        |           |        |     |
| SOCIAL CAPITAL                 | Preventive Care                  | 55%                  | 78%  | 4        | •     | Low |                              |                  |                 |     | •                      | •         | Near   | Yes |
| GOVERNANCE                     | Facilities Designed for Wellness | 15%                  | 78%  | 9        | •     | Low |                              |                  |                 |     | •                      |           | Near   | Yes |

**MM:** Materiality Map, a percentile score of the relative importance of the issue among SASB's initial list of 43 generic sustainability issues. The score is based on the frequency of relevant keywords in documents (i.e., 10-Ks, shareholder resolutions, legal news, news articles, and corporate sustainability reports) that are available on the Bloomberg terminal for the industry's publicly listed companies.

**IWGs:** SASB Industry Working Groups

**%:** The percentage of IWG participants that found the issue to be material. (-) denotes that the issue was added after the IWG was convened.

**Priority:** Average ranking of the issue in terms of importance. One denotes the most material issue. (-) denotes that the issue was added after the IWG was convened.

**Other:** Other evidence of interest including: in-depth 10-k analysis, shareholder resolutions, corporate sustainability reports, traditional financial analysis, impending regulation, and academic studies. This is primarily used in cases where the issue was added after the IWG or the issue received lower MM and IWG scores. However, this test is also used in some cases where there is significant additional evidence of interest.

**EI:** Evidence of Interest, a subjective assessment based on quantitative and qualitative findings.

**EFI:** Evidence of Financial Impact, a subjective assessment based on quantitative and qualitative findings.

**FLI:** Forward Looking Impact, a subjective assessment on the presence of a material forward-looking impact

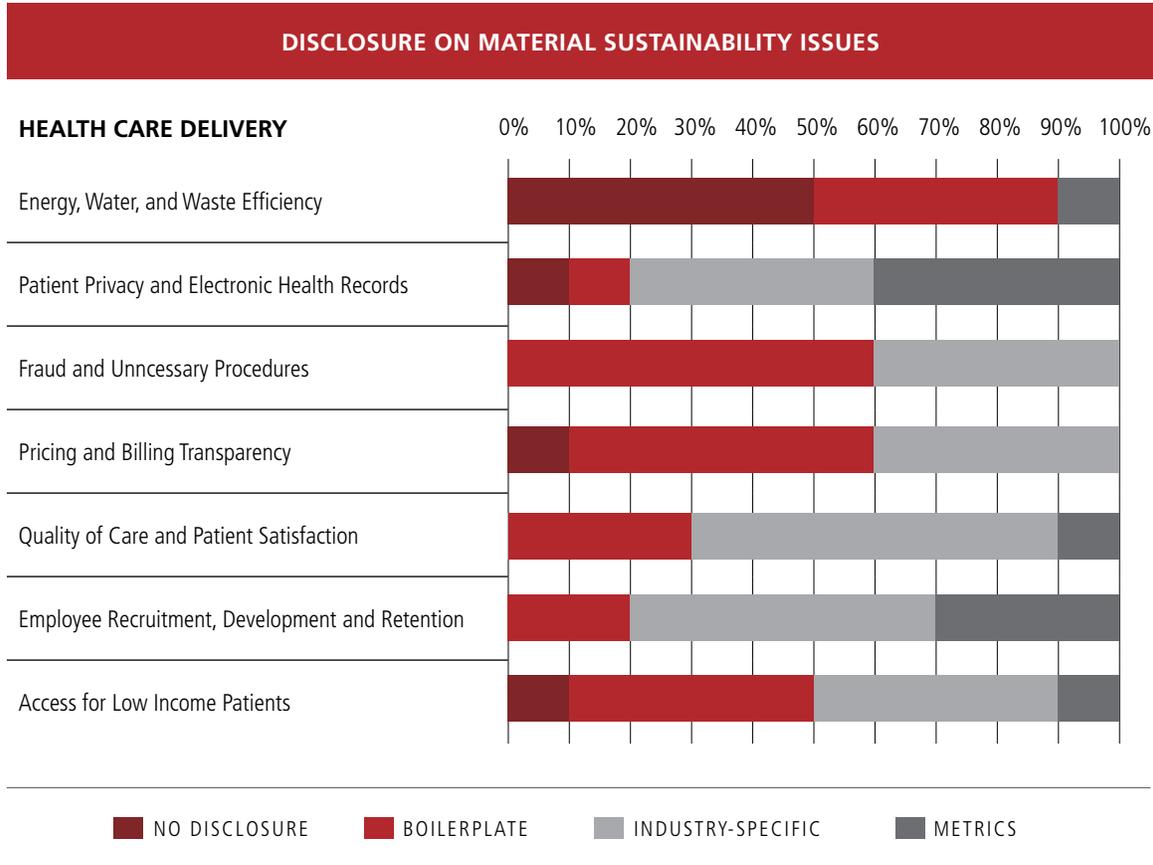
## APPENDIX III: Sustainability Accounting Metrics | Health Care Delivery

The following table provides a list of sustainability issues and the associated accounting metrics for the health care delivery industry.

| TOPIC  | CODE      | ACCOUNTING METRIC  |
|--|-----------|--|
| <b>Quality of Care and Patient Satisfaction</b>                  | HC0301-01 | Hospital Values Based Purchasing Total Performance score, broken down by Clinical Process Domain score, Outcome Domain score, and Patient Experience Domain score.   |
|  | HC0301-02 | Number of Serious Reportable Events (SREs) as defined by the National Quality Forum.   |
|  | HC0301-03 | Health care-acquired infections, as defined by the CDC's National Healthcare Safety Network, for: (1) Central Line-associated Bloodstream Infections (CLABSIs); (2) Surgical Site Infections (SSIs); (3) Catheter-associated Urinary Tract Infections (CAUTIs).  |
|  | HC0301-04 | Excess readmission ratio for pneumonia, acute myocardial infarction, and heart failure, as defined by the Centers for Medicare & Medicaid Services (CMS). Readmissions Payment Adjustment Amount as part of the Hospital Readmissions Reduction Program.   |
| <b>Access for Low-Income Patients</b>                            | HC0301-05 | Description of strategy to manage the mix of patient insurance status (i.e., private insurance, government insurance, and uninsured), including a description of alternative pricing mechanisms or programs for the uninsured.   |
|  | HC0301-06 | Amount of Medicare Disproportionate Share Hospital (DSH) adjustment payments received.   |
| <b>Employee Recruitment, Development, and Retention</b>          | HC0301-07 | Employee turnover by voluntary and involuntary for: (1) physicians, (2) non-physician health care practitioners, and (3) all others.   |
|  | HC0301-08 | Description of talent recruitment and retention efforts for health care practitioners, such as mentorship programs, flexible scheduling, and leadership development initiatives. Where applicable, participation or utilization rates for each type of effort.   |
| <b>Pricing and Billing Transparency</b>                          | HC0301-09 | Description of policies or initiatives to ensure that patients are adequately informed about price before undergoing a procedure.  |
|  | HC0301-10 | Description of how pricing information for services (including inpatient and outpatient) is made publicly available, including the number of the registrant's 25 most common services for which pricing information is publicly available, and the percentage of total services performed (by volume) that these represent.  |
| <b>Energy and Waste Efficiency</b>                               | HC0301-11 | Total annual energy consumed (gigajoules) and percentage renewable (e.g., wind, biomass, solar).   |
|  | HC0301-12 | Total weight of regulated medical waste generation (as defined by the Medical Waste Tracking Act of 1988) and total weight by disposition (e.g., on-site incineration, landfill, treatment/storage/disposal facility, etc.).   |
|  | HC0301-13 | Total weight of pharmaceutical waste generation and total weight by disposition (e.g., on-site incineration, landfill, Treatment/Storage/Disposal Facility, etc.). Break down by: (1) hazardous waste and (2) non-hazardous (solid) waste.   |
| <b>Climate Change Impacts on Human Health and Infrastructure</b> | HC0301-14 | Description of the strategy to address the effects of climate change on business operations, physical infrastructure, and facility design. Discussion of specific risks (such as physical risks) presented by changes in the frequency and intensity of extreme weather events and changes to the morbidity and mortality of illnesses and diseases.   |
| <b>Fraud and Unnecessary Procedures</b>                          | HC0301-15 | Description of legal and regulatory fines and settlements associated with Medicare and Medicaid Fraud under the False Claims Act. Dollar amount of fines and settlements and a description of corrective actions implemented in response to events.  |
| <b>Patient Privacy and Electronic Health Records</b>             | HC0301-16 | Percentage of patient records that are electronic medical records (EMR) or electronic health records (EHR) meeting the Centers for Medicare and Medicaid Services (CMS) "meaningful use" requirements.   |
|  | HC0301-17 | Description of legal and regulatory fines and settlements associated with Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy and Security Rules violations or The Health Information Technology for Economic and Clinical Health (HITECH) Act violations. Dollar amount of fines and settlements and a description of corrective actions implemented in response to events. |

## APPENDIX IV: Analysis of 10-K Disclosures | Health Care Delivery

The following graph demonstrates an aggregate assessment of how the top ten companies in the health care delivery industry are currently reporting on material sustainability issues in the Form 10-K. The analysis was completed prior to the finalization of the issues, so the graph does not reflect disclosure on all issues.



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