

# ADVERSE REACTION: HOW WILL THE FLOOD OF PRIVATE EQUITY MONEY INTO HEALTH CARE PROVIDERS IMPACT ACCESS TO, COST AND QUALITY OF CARE?



# PRIVATE EQUITY'S GROWING FOOTHOLD IN THE HEALTH CARE INDUSTRY

Investments by private equity firms in the health care industry have surged in recent years and continue to grow. In 2018, the value of private equity deals in health care reached a record-breaking \$31 billion for 388 transactions. That represented a 45% increase in deal count and a 71% surge in total deal value compared with six years prior.¹ Globally, health care accounted for about 13% of all private equity buyout deals as of March 2019.²

Analysts expect this surge in deals to continue through 2019, noting a "frenzy" of consolidation and investment in physician services, including orthopedics, urology, OB/GYN, gastroenterology, radiology, and eye care.<sup>3</sup>

This frenzy is likely driven by high returns and the perceived resilience of the industry to recession-related volatility. A 2019 Bain & Co report notes that in the current economic cycle, health care deals have returned \$2.2 for every \$1 of invested capital. That multiple is higher than any other sector.<sup>4</sup>

Private equity ownership of health care assets has garnered considerable attention among medical professionals, patient advocates, and academics. Anecdotal evidence points to several areas of potential risk.

#### SUMMARY

- Private equity investment in the healthcare sector has surged in recent years, reaching record-breaking levels for number and value of acquisitions.
- Case studies of currently or recently private equity-owned companies highlight private equity behavior in the health care industry:
- Elder care and home health:
  - Carlyle Group HCR ManorCare
  - Fillmore Capital Golden Living Centers
- Hospital systems:
  - Paladin Healthcare Hahnemann Hospital
  - Cerberus Capital Management Steward Health Care
  - Leonard Green & Partners Prospect Medical Holdings
  - BlueMountain Capital New LifeCare Hospitals
- Physician staffing and emergency services:
  - Blackstone Group Team Health Holdings
  - KKR Envision Healthcare
  - KKR Global Medical Response
  - American Securities Air Methods
- Behavioral health:
  - Centerbridge Partners Civitas Solutions
  - Webster Equity Partners BayMark Health Services
- The surge in private equity investment has sparked concerns among medical professionals, patient advocates, and academics over quality of care, health system stability, jobs and human capital, regulatory oversight, and affordability.



#### SENIOR CARE AND HOME HEALTH CARE

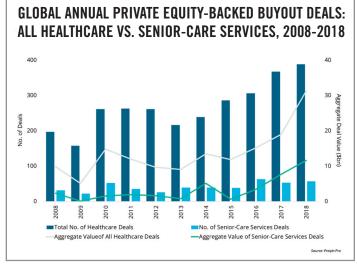
Senior care centers, home health care and nursing homes, and assisted living facilities have experienced pronounced private equity activity; there were a record number of home health care deals in 2018.<sup>5</sup> Private equity's presence in the US nursing home industry has been particularly well documented, where 4 out of the

10 largest for-profit nursing home chains were purchased by private equity firm between 2003-2008.<sup>6</sup> Demand for assisted living and home health care centers is projected to skyrocket as baby boomers age and require more assistance.<sup>7</sup>

According to private equity data provider Preqin, the annual aggregate value of the deals for senior care companies increased fivefold between 2008 and 2018. The number of deals reached a record 63 transactions in 2016. The aggregate deal value has continued increasing beyond that due to some recent high-value transactions, such as KKR's 2018 acquisition of Envision Healthcare Corporation and TPG and Welsh, Carson, Anderson, & Stowe's 2018 acquisition of Kindred Healthcare.<sup>8</sup>

Considering the high level and visibility of private equity investment in senior care and home health care, there has been considerable research and media

attention surrounding its impacts, particularly related to patient care.



"Private Equity's Appetite for Healthcare Operators," Pregin, March 2019.

#### Carlyle Group - HCR ManorCare

HCR Manorcare, for example, made headlines in in November 2018 when a *Washington Post* investigation found that under Carlyle Group's nine-year ownership, the private equity firm loaded the chain with debt and implemented cost-cutting measures leading to widespread regulatory issues before filing for bankruptcy in 2016.<sup>9</sup>

Carlyle bought HCR ManorCare in 2007 for \$6.1 billion plus fees and expenses, putting down about \$1.3 billion of its own capital and borrowing the remaining \$4.8 billion. <sup>10</sup>

#### TOP PRIVATE EQUITY-BACKED HOME HEALTH AND ELDER CARE COMPANIES

NAME	SUBTYPE	PRIVATE EQUITY FIRM	ACQUIRED	
Kindred Healthcare/ Long term care/home health, rehabilitation services,		TPG, Welsh, Carson, Anderson & Stowe, Humana hospice, community care	July 2018	
Aveanna Healthcare	Pediatric home care	Bain Capital, Penfund, J.H. Whitney Capital Partners	March 2017	
AccentCare	Home care	Advent International	June 2019	
Life Care Companies	Senior living, elder care	McCarthy Capital	July 2010	
Apria Healthcare	Home care	Blackstone Group	2008	

In 2011, it undertook a sale-leaseback transaction through which it sold almost all the nursing homes' underlying real estate to a third party, forcing the homes to pay rent to the new owner. HCR ManorCare made about \$6.1 billion in the real

estate sale. It then used that money to pay off some of the billions in debt it had accrued through Carlyle's buyout and pay a dividend to Carlyle and its investors. 11

While Carlyle recovered the original \$1.3 billion it put into acquisition through the sale-leaseback transaction and extracted at least an additional \$80 million in fees from HCR ManorCare, HCR ManorCare struggled to pay rent. It then began a series of cost-cutting measures, including sweeping layoffs, to stay afloat. 12

The Post investigation found that in four of the five states where HCR ManorCare had the most nursing homes, violations at its homes rose steadily and outpaced increases at other nursing homes. Between 2013 and 2017, health-code violations each year rose 26%. Citations for more serious violations, such as those potentially putting patients in immediate jeopardy, rose 29%.<sup>13</sup>

In interviews with the Washington Post ManorCare's owners blamed a 2011 cut to Medicare reimbursements as the cause for financial distress. However, most of the industry weathered the reduction. The company was simply too burdened with debt to weather changes in the market.<sup>14</sup>

Andrew Porch, an independent consultant on quality statistics to whom HCR ManorCare referred questions about health-code violations, told the Washington Post: "Carlyle was a very interesting group to deal with. They're all bankers and investment people. We had some very tough conversations where they did not know a thing about this business at all."15

Non-profit Promedica bought ManorCare in July 2018.<sup>16</sup>

#### Fillmore Capital – Golden Living Centers

Golden Living Centers was acquired by private equity firm Fillmore Capital in a leveraged buyout in 2006. At the time, it was the second largest for-profit nursing home company in the US, with 342 nursing facilities. <sup>17</sup> As of October 2019, the only facilities Golden Living lists on its website are 24 homes in Indiana. 18

A 2017 academic study aimed at determining how private equity ownership impacts patient care at nursing facilities analyzed Golden Living Centers. The study found that private equity ownership continued trends that began pre-private equity ownership. Instead of stabilizing and growing the company, Fillmore drove it further into distress. 19

# The Washington Post

Overdoses, bedsores, broken bones: What happened when a private-equity firm sought to care for society's most vulnerable

By Peter Whoriskey and Dan Keating

November 25, 2018 at 9:04 p.m. EST

"Carlyle was a very interesting group to deal with. They're all bankers and investment people. We had some very tough conversations where they did not know a thing about this business at all."

Andrew Porch, an independent consultant on quality statistics to whom HCR ManorCare referred questions about health-code violations, 2018





According to the study, Fillmore continued a pattern of intensified control of staffing levels, bringing overall staffing levels below the national average. In California, total staffing hours per-patient-per-day pre-2007 were comparable to its industry counterparts. This decreased significantly after 2007. This was especially true for certified nursing assistants (CNAs) and licensed vocational nurses.<sup>20</sup>

Fillmore's legal restructuring of Golden Living created regulatory challenges; it created different LLCs to own the operating company, the property, and the individual nursing homes. The study noted that the extra layers and LLCs often hinder state and federal oversight of quality of care and make it more difficult for the government to hold the company accountable.<sup>21</sup>

Under Fillmore's ownership, the Golden Living was a defendant in several large-scale lawsuits. The company's legal trouble, which began before Fillmore acquired it, appears to have worsened under private equity ownership. The lawsuits under Fillmore's ownership include:

- A 2011 class action case for inadequate staffing levels in California<sup>22</sup>
- A whistleblower suit against Golden Living's AseraCare hospice company in which the USDOJ intervened<sup>23</sup>
- A settlement with the USDOJ for providing inadequate wound care in Georgia, requiring a Corporate Integrity Agreement for federal oversight.<sup>24</sup>

Beginning in 2015, Pennsylvania's Attorney General filed suit against Golden Living alleging that the company used deceptive conduct to lure seniors into living in its facilities and then provided substandard care. The suit eventually forced Golden Living to sell its 36 Pennsylvania nursing home licenses to other chains in 2018.<sup>25</sup>

According to *Skilled Nursing News*, Golden Living still owns the real estate for all 36 homes it used to manage in Pennsylvania. An analysis of Medicaid cost reports for 20 of its homes led PennLive to estimate that Golden Living received at least \$12 million in rent in 2017 from the operators now running its Pennsylvania properties.<sup>26</sup>

Fillmore Capital still owns Golden Living facilities but has divested much of the portfolio. In a series of small transactions with various buyers between October 2016 and February 2017, Golden Living sold facilities in Mississippi, Alabama, Georgia, Kansas, North Carolina, California, Virginia, and Nebraska.<sup>27</sup>

It is not clear how many facilities Golden Living still owns or operates or where the remaining facilities are. Golden Living's website lists only 24 facilities, all located in Indiana. An April news report indicated that it recently owned three Stockton, CA facilities that were under receivership. 29

#### **HOSPITAL SYSTEMS**

According to the American Hospital Association, as of August 2018 hospitals were closing at a rate of 30 per year. Closures occurred both at for-profit and non-profit



#### TOP PRIVATE EQUITY-BACKED HOSPITAL SYSTEMS

NAME	PRIVATE EQUITY FIRM	ACQUIRED
LifePoint Health	Apollo Global Management	November 2018
Steward Health Care System	Cerberus Capital Management	November 2010
Premise Health	OMERS Private Equity	July 2018
Prospect Medical Holdings	Leonard Green & Partners	December 2010

hospitals.<sup>30</sup> However, private equity ownership may exacerbate this trend. While private equity owners prefer to avoid bankruptcy, they can recover their equity and make a profit regardless.<sup>31</sup> Private equity firms thus may have more incentive to undertake more short-term strategies like sale-leaseback transactions and large acquisitions than to invest in keeping less profitable hospitals open.<sup>32</sup>

#### Paladin Healthcare – Hahnemann Hospital

The closure of Hahnemann Hospital in Philadelphia raised concern that private equity firms may buy hospitals with little intention of keeping them open, instead opting to utilize the underlying real estate and assets for other purposes.<sup>33</sup> Private equity firm Paladin Healthcare bought Hahnemann and its sister hospital St. Christopher's in Philadelphia in January 2018. Paladin Healthcare Chairman Joel Freedman said in a press release announcing the sale:

"We are committed to sustaining and enhancing the outstanding clinical and academic programs at both hospitals, providing the capital investment they need to thrive, and preserving their long-term future as financially stable healthcare providers and employers." 34

A year and a half later, Freedman announced that Hahnemann was not profitable enough and would be forced to close.<sup>35</sup> The closure eliminates a crucial safety net hospital for Philadelphia's poor residents of color. An analysis by the Philadelphia Inquirer found that close to half of the people admitted to Hahnemann were on Medicaid and two-thirds are black or Latino.<sup>36</sup> Additionally, over 2,500 hospital employees lost their jobs.<sup>37</sup>

According to city records, the real estate under the hospital totals about 1 million square feet and has a market value of \$58 million. The real estate is not included in the bankruptcy.<sup>38</sup> When Paladin bought the hospital, it simultaneously entered into a joint venture with private equity real estate firm Harrison Street Real Estate Capital, LLC to acquire a portfolio of buildings on the medical campus.<sup>39</sup>

Meanwhile, the portfolio was structured in a way that according to some experts, didn't make sense from an investment perspective. Eileen Appelbaum, Director of the Center for Economic and Policy Research, told the American Prospect "This is pretty clearly a pure real estate deal... Paladin continues to own the real estate and stands to make a fortune without lifting a finger by selling it to developers who are already salivating over what they can do with this well-located property."

Developers and real estate experts see opportunity in Hahnemann Hospital's real estate. An executive vice president at real estate services group Colliers International called it a "gateway location," and "a real opportunity to put another piece in place that continues the redevelopment of North Broad Street." He suggested it could be used for a hotel to serve the nearby convention center. Another developer, the president of Parkway Corp, suggested the land could be used for technology and research businesses. 42

#### Cerberus Capital Management – Steward Health Care

Over the last few years, Steward Health Care grew from a 6-hospital Massachusetts community health system to a 38-hospital nationwide system. The growth took place under the ownership of Cerberus Capital Management, which acquired the then-non-profit Catholic system in 2010, converting it into a for-profit health system.<sup>43</sup>

In 2016, Steward sold the real estate under its 9 Massachusetts hospitals for \$1.25 billion and a 5% equity stake in the company to health care REIT Medical Properties Trust (MPT). Steward's CEO said that equity stake would give Steward a "second source of capital funding and allow it to grow its model of community-based care in other states." Cerberus was able to pay itself back for its initial investment in Steward. Steward now leases those properties and pays rent to MPT.

Steward then began expanding aggressively; the following year it bought buy 8 hospitals across Pennsylvania,



Florida, and Ohio from Community Health Systems (CHS) $^{46}$  and 18 hospitals from TPG Capital-owned Iasis Healthcare. $^{47}$ 

Steward's national growth has been accompanied by closures and discontinuation of services. In the first few years of Cerberus ownership, Steward closed its pediatric unit at Morton Hospital in Taunton, MA and the family medicine residency program at Carney Hospital that it had initiated just two years earlier. <sup>48</sup> In December 2014, Steward closed Quincy Hospital, making Quincy the largest city in New England without a hospital. The state's Attorney General undertook an investigation of the closure and ordered Steward to keep the emergency department open for up to two years. <sup>49</sup> When the emergency unit closes in 2020, Quincy will become the largest city in Massachusetts without an ER. <sup>50</sup>

In 2018 Steward permanently closed the maternity wing at Morton Hospital<sup>51</sup> as well as the entire Northside Regional Medical Center in Youngstown, Ohio, which it had acquired the year before.<sup>52</sup> In July 2019, it closed neonatal unit of Easton Hospital in Pennsylvania, which it had also purchased in 2017.<sup>53</sup>

In September 2019, the Massachusetts Nurses Association filed charges with the National Labor Relations Board (NLRB) against Steward for allegedly threatening to close the Nashoba Valley Medical Center unless the union accepted the hospital's "final offer" for a union contract.<sup>54</sup> The contract was ratified the following month after 10 months of negotiations and a 100% strike authorization vote.<sup>55</sup>

Throughout Cerberus's ownership Steward has faced litigation and regulatory scrutiny. Steward has twice been fined by the state of Massachusetts for failing to disclose its audited financial statements to state agencies. <sup>56</sup> In 2018, a physician filed a whistle-blower lawsuit against Steward for allegedly pressuring physicians to refer patients only to Steward-operated hospitals and specialists. <sup>57</sup> As of May 2019, the lawsuit was ongoing as Steward contested the claims. <sup>58</sup> The same year, CHS sued Steward when it failed to pay over \$10 million in costs associated with the sale of the 8-hospital portfolio Steward purchased. <sup>59</sup> According to court records, the case was ongoing as of October 2019.

#### **Leonard Green & Partners – Prospect Medical Holdings**

Private equity firm Leonard Green & Partners purchased Prospect Medical Holdings in December 2010. At the time, Prospect owned and operated five community-based hospitals in the greater Los Angeles area. <sup>60</sup> It now owns and operates 20 hospitals and more than 165 clinics in Pennsylvania, California, New Jersey, Connecticut, Rhode Island, and Texas. <sup>61</sup>

In July 2019, Prospect initiated a \$1.55 billion sale-leaseback deal with Medical Properties Trust in which it sold its real estate to the health care REIT and leased it back, paying rent for property it had once owned. The deal included all of its operations in Pennsylvania, Connecticut, and California.<sup>62</sup>

The sale-leaseback deal did not include Prospect-owned Nix Health Care System in Texas, but Prospect appears to be gearing up to sell Nix Health:

- In July 2019, Nix announced it was selling a 24-floor high rise where Nix Medical Center was the main tenant. The future of the medical center is uncertain. Company representatives said: "We are currently reviewing strategic options for our Nix Health operations. These options may include identifying a local or national operator to acquire the facilities." 63
- In August 2019, Nix Health announced that it would close its home health department, laying off as many as 585 employees.<sup>64</sup>





 In September 2019, Nix Health announced it would close its 208-bed acute care hospital.<sup>65</sup>

#### BlueMountain Capital – New LifeCare Hospitals

Private equity-backed New LifeCare Hospitals filed for Chapter 11 bankruptcy in May 2019. It is owned primarily by affiliates of BlueMountain Capital, Monarch Alternative Capital and Twin Haven Special Opportunities Fund. At the time of the bankruptcy filing, it operated 17 hospitals in 9 states. It closed several hospitals leading up to the bankruptcy.<sup>66</sup>

#### PHYSICIAN STAFFING & EMERGENCY SERVICES

#### **Physician Staffing**

Hospitals increasingly contract out staffing for emergency rooms and other specialty departments to physician staffing companies. Because the contracted physicians are often out of the insurance network the hospital uses, patients can get saddled with unexpected and sometimes very large medical bills.<sup>67</sup>

The two largest physician staffing firms are Blackstone Group-owned Team Health and KKR-owned Envision Healthcare. Together, the two firms make up about 30% of the market for physician staffing services.<sup>68</sup>

A 2017 study by researchers at Yale University analyzed insurance company filings and found that when KKR's Envision Healthcare entered a market, out-of-network billing rates increased between 81 and 90 percentage points. Blackstone's Team Health triggered a rate increase of 33 percentage points. <sup>69</sup>

Lawmakers have introduced bipartisan Congressional legislation that would put an end to surprise medical billing. A September 2019 investigation by the *New York Times* found that Team Health and Envision have contributed more than \$28 million on an ad campaign to oppose the legislation through a shadowy lobbying entity called Doctor Patient Unity in 2019.<sup>70</sup>

Following the New York Times report, Congressional Energy and Commerce Committee Chairman Frank Pallone (D-NJ) and Ranking Member Greg Walden (R-OR) launched an investigation into the role of private equity firms in surprise billing.<sup>71</sup>

Some states have already outlawed surprise medical billing, including California, New York, and Oregon. In 2018, Bloomberg reported that those states' retirement systems remain heavily invested in the asset managers that own the companies that engage in the practice.<sup>72</sup>

#### Air Ambulances

Two of the three largest air medical transport companies that dominate the market are private equity owned: Global Medical Response is owned by KKR and Air Methods is owned by American Securities. Both companies have come under scrutiny for surprise medical billing.<sup>73</sup>

Air Methods and its collections agency are currently facing a class action lawsuit from six plaintiffs who allege the company charged exorbitant prices for services that patients never agreed to pay. The average of the plaintiffs' bills comes to almost \$46,000 per person.<sup>74</sup>

In Colorado, AirMedCare Network, a consortium of four seemingly independent ambulance companies all owned

#### TOP PRIVATE EQUITY-BACKED PHYSICIAN STAFFING COMPANIES

NAME	PRIVATE EQUITY FIRM	ACQUIRED	
Envision Healthcare	KKR	October 2018	
Team Health Holdings	Blackstone Group	February 2017	
American Physician Partners	BBH Capital Partners, Brentwood Capital	April 2015	
Sound Physicians	Athyrium Capital, Summit Partners, Silversmith Capital, Revelstoke Capital Partners	June 2018	





by Global Medical Response, offers subscription services for people worried about out-of-network fees. According to the *American Prospect*, "the subscription promises that the patient will not be billed out-of-network for any flight in the AirMedCare Network. Of course, as the fine print of the subscription pamphlet notes, the patient has no control whatsoever over which company arrives first to transport them." 75

While the number of air ambulance helicopters has increased as the industry has grown, a 2017 GAO report found that air ambulance prices doubled between 2010 and 2014.<sup>76</sup> A 2019 GAO report found that 69% of air ambulance trips taken in 2017 were out-of-network.<sup>77</sup>

Over the past five years, more than a dozen federal lawsuits have accused air ambulance providers of unfair billing practices.<sup>78</sup>

#### **Ground Ambulances**

A 2016 investigation by the *New York Times* uncovered numerous problems with private equity ownership of ambulances, including at least two lawsuits alleging that the poor quality of service led to patient deaths.<sup>79</sup>

The *Times* found that of the 12 ambulance companies recently owned by private equity, three had filed for bankruptcy in the three years before the article was published. Rural/Metro was one of those that went through bankruptcy under ownership by private equity firm Warburg Pincus and reemerged with another private equity owner and distressed debt investor, Oaktree Capital Management.<sup>80</sup> Rural/Metro was acquired by American Medical Response (AMR), a segment of Envision Healthcare, in 2015.<sup>81</sup>

Over the course of Rural/Metro's private equity ownership, a myriad of problems emerged. Slow response times and unavailable ambulances led to county-imposed financial penalties and severed contracts. In Arizona, employees said ambulances weren't properly stocked, raises for senior staff were eliminated, and pensions were slashed.<sup>82</sup>

In 2015 Rural/Metro's competitor American Medical Response (AMR), which was owned by Envision Healthcare, took over Rural/Metro.<sup>83</sup> Private equity firm KKR acquired Envision, and thus Rural/Metro and AMR, in 2018.<sup>84</sup>

#### **Behavioral Health**

Private equity has made up a significant portion of recent merger activity in behavioral health. Behavioral health broadly refers to mental health and addiction services; services may include outpatient and inpatient therapy, intellectual and developmental disability treatment, psychiatric hospitals, methadone clinics, and detox centers. A fast-growing industry, behavioral health transactions reached historic highs in 2018, at 97 known transactions; that represents a 59% year-over-year increase from 2017. During the same period, private equity buyers went from accounting for 48% of acquisitions in behavioral health to 69% of acquisitions.<sup>85</sup>

Private equity firms have been particularly active in acquiring methadone clinics. The president for the American Association for the Treatment of Opioid Dependence told the *Wall Street Journal* in September 2017 that "while a decade ago roughly 60% of the clinics were nonprofits, today nearly 60% are for-profit entities." 86

Centerbridge Partners in 2018 acquired Civitas Solutions, a mental health and autism treatment company, in one of



e About Us

Addiction Treatment T



the largest behavioral health transactions in recent years with an estimated enterprise value of \$1.4 billion.<sup>87</sup> Civitas is the leading national provider of home- and community-based health services to people with intellectual, developmental, physical or behavioral disabilities.<sup>88</sup>

BayMark Health Services, a portfolio company of private equity firm Webster Equity Partners, has been one of the most active acquirers of behavioral health providers. Since August 2016, BayMark has announced 15 transactions, six of which occurred in 2018. Baymark is now the largest opioid treatment company in North America with 218 programs across 32 states and one Canadian province. <sup>89</sup> In January 2019, Webster announced plans to sell BayMark in the second half of 2019. Sources close to the matter reportedly indicated the most likely buyer will be another large private equity firm. <sup>90</sup>



TOP PRIVATE EQUITY-BACKED BEHAVIORAL HEALTH COMPANIES					
NAME	SUBTYPE	PRIVATE EQUITY FIRM	ACQUIRED		
Civitas Solutions	Intellectual and developmental disabilities	Centerbridge Partners, Vistria Group	March 2019		
BrightView	Addiction treatment centers	Shore Capital Partners	October 2017		
Pathways Health & Community Support	Home and community behavioral health and social services	ATAR Capital	October 2018		
RHA Health Services	Behavioral health home care, intellectual and developmental disabilities	Blue Wolf Capital, Constitution Capital	August 2019		
LEARN Behavioral	Autism treatment	Gryphon Investors, PineBridge Investments	March 2019		

#### **ISSUES**

Based on physician and academic studies as well as anecdotal experiences, private equity investments in health care providers have raised a number of issues:

**Quality of care:** Private equity-owned heath care companies may employ cost cutting measures to meet debt obligations or owners' investment expectations, including reducing or closing less profitable services, reducing staff, and favoring fast growth over long term investments in safety and quality. Such cost cutting had demonstrable effects on HCR ManorCare, whose health violations markedly increased over the course of ownership by a private equity firm. In other areas, physicians have expressed concern over pressure to direct referrals internally to capture revenue from additional services, which may render referral patterns less responsive to patient needs or preferences.<sup>91</sup>

**System stability:** The closing of Hahnemann hospital, shutting down Steward, Nix Health, and New LifeCare programs and facilities, the HCR ManorCare bankruptcy, and similar examples point to risks to health systems' stability under private equity ownership. The signature private equity practice of highly levered acquisitions and further saddling companies with debt may leave them more vulnerable to market volatility. While private equity owners may still want to avoid bankruptcy, they may make a profit regardless and thus may have less reason to focus on the health care provider's long-term success. Where the underlying assets (e.g. real estate) are worth more than the operation of the hospital itself, firms may prefer to close a system and sell or redevelop the property rather than keep it open.

**Decreased liability and regulatory oversight:** The structure of private equity-owned medical practices reduces liability for the private equity owners. Legal restructuring of companies into separate LLCs makes it difficult to pursue

litigation for systemic issues. Despite exercising control over their portfolio companies, private equity owners are rarely held accountable for the actions of companies they own.

**Employees/Human Capital:** Private equity-owned health care companies employ hundreds of thousands of workers in the US; we conservatively estimate the total number to be at least 930,000 employees. Pacility closures due to cost cutting and bankruptcies, such as at HCR Manorcare, Hahnemann Hospital, Steward Health, Nix Health, and New LifeCare Hospitals, create significant disruptions for health care workers. Where facilities stay open, private equity-driven cost cutting may lead to labor disputes over wages and benefits.

**Affordability of services:** Balance (i.e. "Surprise") billing practices can make emergency services exorbitantly expensive for patients, especially for services like air ambulances, where private equity firms dominate the market. In areas where private equity-owned practices appear to be reducing access for Medicaid-funded services, such as in behavioral health, patients may experience reduced access to affordable services. 93

Lack of transparency: Non-disclosure agreements and the general opacity of private equity ownership structures make it difficult to evaluate the impact of private equity ownership of health care companies. In some cases, private equity-owned health care providers have willfully withheld financial information, like Cerberus-owned Steward Health Care refusing to submit financial information to the Massachusetts Center for Health Information and Analysis. 94 As long as the data on private equity-owned health care companies remains inaccessible, it will be difficult to analyze the impact of private equity ownership on the health care industry and hold owners accountable for problems.

# **Appendix**

NAME	TYPE	<b>EMPLOYEES</b>	PE FIRM	ACQUIRED
Golden Living Centers	Long term care, nursing homes, hospice, home care	-	Fillmore Capital Partners	March 2006
Kindred Healthcare/ Kindred at Home	Long term care/home health, rehabilitation services, hospice, community care	34,500	TPG Capital, Welsh, Carson, Anderson & Stowe, Humana	July 2018
Aveanna Healthcare	Pediatric home care	32,000	Bain Capital, Penfund, J.H. Whitney Capital Partners	March 2017
AccentCare	Home care	25,000	Advent International	June 2019
Life Care Companies	Senior living, elder care	23,000	McCarthy Capital	July 2010
Apria Healthcare	Home care	13,000	Blackstone Group	2008
Kindred Healthcare (Nursing Facility Business)	Long term care, nursing homes, hospice, home care	11,500	BlueMountain Capital Management	October 2017
Plum Healthcare Group	Long term care, nursing homes, hospice	11,000	Bay Bridge Capital Partners	December 2012
LaVie Care Centers	Skilled nursing, rehabilitation	10,000	Formation Capital, Senior Care Development	December 2011
Interim HealthCare	Home care and hospice staffing franchise	10,000 Levine Leichtman Capital Partners		September 2015
Home Care Assistance (HCA)	Home care	10,000	0,000 Summit Capital Partners	
Holiday Retirement/ Harvest Management	Assisted living	10,000	00 Fortress Investment Group Dece	
Reliant Rehabilitation	Rehabilitation services contractor to SNFs	9,000	00 H.I.G. Capital Augus	
CareFinders Total Care	Home care	7,600	Banyan Investment Partners, May 20 Linda Mintz, Sanford G. Hausner	
Elara Caring	Home care	7,200	Blue Wolf Capital, Decen Kelso Private Equity	
Enlivant (Assisted Living Concepts)	Senior living	7,000	TPG Capital, Sabra Health Care REIT	July 2013
Erickson Living	Senior living	7,000	Redwood Capital Investments	December 2009
Pathways Health and Community Support	Home and community behavioral health and social services	6,000	ATAR Capital	October 2018
RHA Health Services	Behavioral health home care, intellectual and developmental disabilities	5,000	Blue Wolf Capital, Constitution Capital	August 2019
Covenant Care	Assisted living	4,500	Centre Partners, Bregal Partners	July 2008
InnovAge	Senior care	1,600	Welsh, Carson, Anderson & Stowe	May 2016
Hospice Compassus	Hospice	1,200	Formation Capital, Audax Group	December 2014
Mission Health Communities	Skilled nursing, senior living, home health	1,000	Skyway Capital Group	January 2014



# **Appendix**

NAME	ТҮРЕ	EMPLOYEES	PE FIRM	ACQUIRED
Curo Health Services	Home care, hospice	-	TPG, Welsh, Carson, Anderson & Stowe (+ Humana)	July 2018
Extendicare (U.S. Business)	Long term care, nursing homes, home health	-	Formation Capital, Safanad	July 2015
Golden Living (A Portfolio of 17 Facilities in California)	Long term care, nursing homes	-	BlueMountain Capital Management	December 2016
Medical Solutions	Travel nursing	-	TPG Capital	June 2017
Prospect Medical Holdings	Health system/Home care	-	Leonard Green & Partners	December 2010

## **HOSPITALS & HEALTH SYSTEMS**

NAME	ТҮРЕ	EMPLOYEES	PE FIRM	ACQUIRED
LifePoint Health	Non-urban healthcare centers	43,000	Apollo Global Management Anderson & Stowe (+ Humana)	November 2019
Steward Health Care System	Health system	42,000	Cerberus Capital Management	November 2019
Kindred Healthcare/ Kindred at Home	Long term care/home health, rehabilitation services, hospice, community care	34.500	TPG Capital, Welsh, Carson, Anderson & Stowe, Humana	July 2019
Premise Health	Health system	4,684	OMERS Private Equity	July 2019
Emerus Hospital Partners Private Company	Community Hospitals	1,400	Welsh, Carson, Anderson & Stowe	September 2019
Prospect Medical Holdings	Health system	-	Leonard Green & Partners	December 2019

## **PHYSICIAN STAFFING & EMERGENCY SERVICES**

NAME	ТҮРЕ	EMPLOYEES	PE FIRM	ACQUIRED
Envision Healthcare	Ambulance/ Patient transportation/physician staffing	69,300	KKR	October 2018
Global Medical Response	Ambulance/ Patient transportation	35,000	KKR, Ardian Capital	April 2015, March 2018
Team Health Holdings	Healthcare outsourcing/ staffing	20,000	Blackstone Group	February 2017
American Physician Partners	Physician staffing/ emergency services	17,000 BBH Capital Partners, Brentwood Capital		April 2015
HealthPRO/Heritage	Nursing home/ LTC staffing outsourcing	9,000 Beecken Petty O'Keefe & Company Dec		December 2015
Air Methods	Medical transport by air	5,000 American Securities		April 2017
PartnerMD	Healthcare outsourcing/ staffing	4,200 Markel Ventures July 2		July 2011
Sound Physicians	Physician staffing	3,500 Athyrium Capital, Summit Partners, June 2 Silversmith Capital, Revelstoke Capital Partners		June 2018
SpecialtyCare	Healthcare outsourcing/ staffing	2,000	Kohlberg & Company	September 2017
CHG Healthcare Services	Healthcare outsourcing/ staffing	1,800 Leonard Green & Partners, Novembe Ares Management		November 2012

# **Appendix**

NAME	ТҮРЕ	EMPLOYEES	PE FIRM	ACQUIRED
DuPage Medical Group	Physician staffing	1,241	Ares Management, Athyrium Capital, Guidon Partners	August 2017
Schumacher Clinical Partners	Emergency staffing	1,140	Onex Partners	August 2015
Aequor Healthcare Services	Healthcare outsourcing/ staffing	-	DW Healthcare Partners	May 2018
US Acute Care Solutions	Emergency staffing	-	Welsh, Carson, Anderson & Stowe	April 2015

## **BEHAVIORAL HEALTH**

NAME	ТҮРЕ	EMPLOYEES	PE FIRM	ACQUIRED
Civitas Solutions disabilities	Intellectual and developmental	23,000	Centerbridge Partners, Vistria Group	March 2019
BrightView	Addiction treatment centers	19,000	Shore Capital Partners	October 2017
Pathways Health and Community Support	Home and community behavioral health and social services	6,000	ATAR Capital	October 2018
RHA Health Services	Behavioral health home care, intellectual and developmental disabilities	5,000	Blue Wolf Capital, Constitution Capital	August 2019
LEARN Behavioral	Autism treatment	3,400	Gryphon Investors, PineBridge Investments	March 2019
Center For Autism & Related Disorders	Autism treatment	3,000	Blackstone Group	May 2018
Autism Learning Partners	Autism treatment	2,600	FFL Partners	December 2017
Pyramid Healthcare	Behavioral Health/Addiction treatment	tion treatment 1,700 Clearview Capital		July 2011
Oceans Healthcare	Behavioral Health	1,277 General Catalyst Partners and HLM Venture Partners		January 2013
Meridian Behavioral Health	Behavioral Health/Addiction treatment	t 1,200 Audax Group		December 2015
Promises Behavioral Health	Behavioral Health/Addiction treatment	1,000	BlueMountain Capital Management	March 2019
Active Day	Adult daycare	1,000	Audax Group	December 2015
SUN Behavioral Health	Psychiatric hospitals	1,000	1,000 NewSpring Capital, LLR Partners, Ap Petra Capital Partners, and HealthInvest Equity Partners	
360 Behavioral Health	Autism treatment	-	DW Healthcare Partners	March 2018
Blue Sprig Pediatrics	Autism treatment	-	KKR	January 2017
BayMark Health Services	Addiction treatment centers	-	Webster Capital Management	June 2015
Pinnacle Treatment Centers	Addiction treatment centers	-	Linden Capital Partners	August 2016
Community Medical Services	Addiction treatment centers	-	Clearview Capital	March 2018
Discovery Behavioral Health	Behavioral Health, women, children, adolescents	-	Webster Capital Management	August 2011



# **Appendix**

Affordable Dentures

Dental care

AMBULATORY CARE  Rehavioral Health/Addiction treatment - The Carriyle Group November 2018  AMBULATORY CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  Concentra Occupational Health/Addiction treatment - The Vistria Group December 2018  ATI Physical Therapy Physical Therapy 6,000 Advent International May 2016  Upstream Rehabilitation Outpatient rehabilitation 5,000 Revelon Capital Partners, Northwestern Mutual Capital Partners, Northwestern Mutual Capital Partners, Northwestern Mutual Capital Ambulatory Centers 2,500 BC Partners, Ares Management November 2018  US Renal Care Dialysis 1,001 Bain Capital Partners December 2016  US Revelotive Capital Partners, Perburary 2019  Ambulatory Centers 2,500 BC Partners, Ares Management November 2018  US Renal Care Dialysis 1,001 Bain Capital Partners Perburary 2019  CORRECTIONAL HEALTH  TYPE EMPLOYEES PE FIRM ACQUIRED  Correctional healthcare 15,000 H.I.G. Capital Partners Perburary 2019  CORRECTIONAL HEALTH  TYPE EMPLOYEES PE FIRM ACQUIRED  Correctional healthcare 15,000 BlueMountain Capital Management April 2017  Armor Correctional Medical Group Cos)  Correctional healthcare 1,600 Georgetown Capital Management April 2017  Armor Correctional Health Correctional healthcare 1,600 Georgetown Capital Management April 2017  Armor Correctional Health Correctional healthcare 1,600 Georgetown Capital Management April 2017  Armor Correctional Correctional Healthcare 1,600 Representation Capital Management April 2017  Armor Correctional Management Dental practice management 5,000 KKR April 2018  Aspen Dental Management Dental practice management 5,000 New Mountain Capital September 2012  Carrestream Dental Partners Dental care 4,500 New Mountain Capital September 2017  Carrestream Dental Partners Dental care February 2012  Emile Brands Dental irragine and products 1,300 Clayton Dublier & Rice and September 2017  Carrestream Dental Care Alliance Dental irragine and products 1,300 Clayton Dublier & Rice and September 2017  Carrestream Dental Care Alliance Dental irragine Correctional Appl	NAME	TVDE	EMDI OVEEC	DE EIDM	ACQUIDED
Healthcare Behavioral Health Group Behavioral Health/Addiction treatment - The Vistria Group December 2018  AMBULATORY CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED Concentra Occupational Health, urgent care 8,000 Welsh, Carson, Anderson & Stowe, June 2015 Cressey & Company ATI Physical Therapy Physical Therapy 6,000 Advent International May 2016 Upstream Rehabilitation Outpatient rehabilitation 5,000 Revelstoke Capital Partners, Yukon Partners, Northwestern Mutual Capital Athletico Physical Therapy Physical Therapy 5,000 BDT Capital Partners, Were Clobal Partners, Victor Partners,	NAME	TYPE	EMPLOYEES	PE FIRM	ACQUIRED
AMBULATORY CARE  NAME TYPE EMPLOYES PE FIRM ACQUIRED  Concentra Occupational Health, urgent care 8,000 Welsh, Carson, Anderson & Stowe, Cressey & Company  ATT Physical Therapy Physical Therapy 6,000 Advent International May 2016  Upstream Rehabilitation Outpetient rehabilitation 5,000 Revelstoke Capital Partners, Wilcon Partners, Northwestern Mutual Capital  Athletico Physical Therapy Physical Therapy 5,000 BDT Capital Partners December 2015  NueHealth Ambulatory Centers 2,500 BC Partners, Ares Management November 2018  US Renal Care Dialysis 1,001 Bain Capital, Summit Partners, February 2019  Revelstroke Capital Partners  Opthamology - H.I.G. Capital Partners  CORRECTIONAL HEALTH  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  Wellpath (Na Correct Care Solutions) Correctional Mealthcare 1,600 BlueMountain Capital Management April 2017  Armor Correctional Correctional Healthcare 1,600 Georgetown Capital Management April 2017  Armor Correctional Correctional Healthcare 1,600 Georgetown Capital Management April 2018  DENTAL CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  May 2018  DENTAL CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  May 2018  Heartland Dental Care Non-clinical dental support services 12,000 KKR April 2018  Aspen Dental Management Dental care 4,500 New Mountain Capital Services 2010 (Ligh)  Western Dental Partners  Dental Care Dental Partners  Dental care 4,500 New Mountain Capital September 2012  American Dental Partners  Dental care Dental Imagine and products 1,300 Clayton Dublier & Rice and September 2017  Care Capital Care Alliance Dental practice management 1,100 Harvest Partners, July 2015		Behavioral Health/Addiction treatment		The Carlyle Group	November 2018
NAME TYPE EMPLOYES PE FIRM ACQUIRED  Concentra Occupational Health, urgent care 8,000 Welsh, Carson, Anderson & Stowe, Cressey & Company  ATI Physical Therapy Physical Therapy 6,000 Advent International May 2016  Upstream Rehabilitation Outpatient rehabilitation 5,000 Revelstoke Capital Partners, WP Global Partners, Northwestern Mutual Capital  Athletico Physical Therapy Physical Therapy 5,000 BDT Capital Partners December 2015  Nuel-lealth Ambulatory Centers 2,500 BC Partners, Ares Management November 2018  US Renal Care Dialysis 1,001 Bain Capital, Summit Partners, Revelstoke Capital Partners Pebruary 2019  CORRECTIONAL HEALTH  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  Wellpath (fika Correct Care Solutions' Correctional healthcare 15,000 H.I.G. Capital August 2010  Correctional Health Cortzon Health 11,000 BlueMountain Capital Management April 2017  Armor Correctional Health Cortzon Health 11,000 BlueMountain Capital Management April 2017  Armor Correctional Correctional healthcare 1,600 Georgetown Capital Management May 2018  DENTAL CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  May 2018  DENTAL CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  May 2018  DENTAL CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  May 2018  DENTAL CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  May 2018  DENTAL CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  May 2018  DENTAL CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  May 2018  Acquired Acquired Acquired April 2018  Acquired Acquired Acquired April 2018  Acquired Acquired Acquired Acquired Acquired Acquired April 2018  Acquired	Behavioral Health Group	Behavioral Health/Addiction treatment	-	The Vistria Group	December 2018
Concentra Occupational Health, urgent care 8,000 Welsh, Carson, Anderson & Stowe, Cressey & Company  ATI Physical Therapy Physical Therapy 6,000 Advent International May 2016  Upstream Rehabilitation Outpatient rehabilitation 5,000 Revelstoke Capital Partners, WP Global Partners, WP Global Partners, WP Global Partners, Northwestern Mutual Capital  Athletico Physical Therapy Physical Therapy 5,000 BDT Capital Partners Northwestern Mutual Capital  Athletico Physical Therapy Physical Therapy 5,000 BDT Capital Partners Northwestern Mutual Capital  November 2016  NueHealth Ambulatory Centers 2,500 BC Partners, Ares Management November 2018  US Renal Care Dialysis 1,001 Bain Capital, Summit Partners, February 2019  American Vision Partners Opthamology - H.I.G. Capital Partners  Are Employees PE Firm ACQUIRED  CORRECTIONAL HEALTH  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  Wellpath (fika Correct Care Solutions' Correctional healthcare 15,000 H.I.G. Capital August 2010  Solutions' Correctional Medical Group Cos)  Corricon Health Corricon Health 11,000 BlueMountain Capital Management April 2017  Armor Correctional Correctional healthcare 1,600 Georgetown Capital May 2018  DENTAL CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  DENTAL CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  Aspen Dental Management Dental practice management 5,000 K/KR April 2018  Aspen Dental Management Dental practice management 5,000 Leonard Green & Partners, Ares Management 2010 (I.G.P)  Western Dental Partners Dental care 4,500 New Mountain Capital September 2012  American Dental Partners Dental care 2,651 JLL Partners February 2012  Smile Brands Dental practice management 1,745 Gryphon Investors & Triangle Capital August 2016  Carestream Dental Care Aliance Dental practice management 1,100 Harvest Partners, July 2015	AMBULATORY CARE				
ATI Physical Therapy Physical Therapy 6,000 Advent International May 2016  Upstream Rehabilitation Outpatient rehabilitation 5,000 Revisible Capital Partners, WP Global Partners, Vukon Partners, Northwestern Mutual Capital  Athletico Physical Therapy Physical Therapy 5,000 BDT Capital Partners Northwestern Mutual Capital  Athletich Physical Therapy Physical Therapy 5,000 BDT Capital Partners Northwestern Mutual Capital  November 2016  NueHealth Ambulatory Centers 2,500 BC Partners, Ares Management November 2018  US Renal Care Dialysis 1,001 Bair Capital, Summit Partners, February 2019  Revelstroke Capital Partners Pebruary 2019  CORRECTIONAL HEALTH  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  Wellpath (fika Correct Care Solutions/ Correctional Health Correct Care Solutions/ Correctional Medical Group Cos)  Corizon Health Correct Care Solutions Correctional Correctional Health Services  DENTAL CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  DENTAL CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  May 2018  DENTAL CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  May 2018  Aspen Dental Management Dental practice management 5,000 KKR April 2018  Aspen Dental Management Dental practice management 5,000 Leonard Green & Partners, 2006 (Ares) Ares Management 2010 (LGP)  Western Dental Partners Dental care 4,500 New Mountain Capital September 2012  American Dental Partners Dental care 2,651 JLL Partners February 2012  Smile Brands Dental practice management 1,745 Gryphon Investors & Triangle Capital August 2016  Care Stream Dental Dental practice management 1,100 Harvest Partners, July 2015	NAME	ТҮРЕ	EMPLOYEES	PE FIRM	ACQUIRED
Upstream Rehabilitation Outpatient rehabilitation 5,000 Revelstoke Capital Partners, WP Global Partners, Vukon Partners, Northwestern Mutual Capital Athletico Physical Therapy Physical Therapy 5,000 BDT Capital Partners Northwestern Mutual Capital NueHealth Ambulatory Centers 2,500 BC Partners, Ares Management November 2018 US Renal Care Dialysis 1,001 Bain Capital, Summit Partners, Revelstroke Capital Partners Opthamology - H.I.G. Capital Partners American Vision Partners Opthamology - H.I.G. Capital Partners Pebruary 2019  CORRECTIONAL HEALTH  NAME TYPE EMPLOYEES PE FIRM ACQUIRED Wellpath (fka Correct Care Solutions/ Correctional Medical Group Cos) Corizon Health Corizon Health 11,000 BlueMountain Capital Management April 2017  Armor Correctional Correctional Healthcare 1,600 Georgetown Capital May 2018  DENTAL CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  May 2018  DENTAL CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  May 2018  Aspen Dental Management Dental care Non-clinical dental support services 12,000 KKR April 2018  Aspen Dental Management Dental practice management 5,000 Leonard Green & Partners, 2006 (Ares) Ares Management 2010 (LGP)  Western Dental Services Dental care 4,500 New Mountain Capital September 2012  American Dental Partners Dental care 2,651 JLL Partners February 2012  Smile Brands Dental practice management 1,745 Gryphon Investors & Triangle Capital August 2016  Carestream Dental Dental imagine and products 1,300 Clayton Dulies & Rice and Care Capital  Dental Care Alliance Dental practice management 1,100 Harvest Partners, July 2015	Concentra	Occupational Health, urgent care	8,000		June 2015
Athletico Physical Therapy Physical Therapy 5,000 BDT Capital Partners, Northwestern Mutual Capital Athletico Physical Therapy Physical Therapy 5,000 BDT Capital Partners December 2016 NueHealth Ambulatory Centers 2,500 BC Partners, Ares Management November 2018 US Renal Care Dialysis 1,001 Bain Capital, Summit Partners, Revelstroke Capital Partners American Vision Partners Opthamology - H.I.G. Capital April 2017  CORRECTIONAL HEALTH  NAME TYPE EMPLOYEES PE FIRM ACQUIRED Wellpath (fka Correct Care Solutions/ Correctional healthcare Solutions/ Correctional Medical Group Cos) Corizon Health Corrizon Health 11,000 BlueMountain Capital Management April 2017  Armor Correctional Correctional healthcare 1,600 Georgetown Capital May 2018 Health Services  DENTAL CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  Wellpath (fka Correct Care Solutions/ Correctional healthcare 1,600 Georgetown Capital Management May 2018  BENTAL CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  Western Dental Management Dental dental support services 12,000 KKR April 2018  Aspen Dental Management Dental practice management 5,000 Leonard Green & Partners, 2005 (Ares) Ares Management 2010 (LGP)  Western Dental Services Dental care 4,500 New Mountain Capital September 2012  Armerican Dental Partners Dental care 2,651 JLL Partners February 2012  Smile Brands Dental imagine and products 1,300 Clayton Dubilier & Rice and Care Capital  Dental Care Alliance Dental practice management 1,100 Harvest Partners, July 2015	ATI Physical Therapy	Physical Therapy	6,000	Advent International	May 2016
NueHealth Ambulatory Centers 2,500 BC Partners, Ares Management November 2018 US Renal Care Dialysis 1,001 Bain Capital, Summit Partners, February 2019 American Vision Partners Opthamology - H.I.G. Capital April 2017  CORRECTIONAL HEALTH  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  Wellpath (fika Correct Care Solutions/ Correctional Medical Group Cos)  Corizon Health Correctional Medical Group Cos)  Correctional Health Correctional Healthcare 11,000 BlueMountain Capital Management April 2017  Armor Correctional Health Correctional healthcare 1,600 Georgetown Capital Management May 2018  DENTAL CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  Heartland Dental Care Non-clinical dental support services 12,000 KKR April 2018  Aspen Dental Management Dental practice management 5,000 Leonard Green & Partners, 2006 (Ares) Ares Management 2010 (LGP)  Western Dental Services Dental care 4,500 New Mountain Capital September 2012  American Dental Partners Dental care 2,651 JLL Partners February 2012  Smile Brands Dental imagine and products 1,300 Clayton Dubilire & Rice and Care Capital Opental Partners, July 2015  Dental Care Alliance Dental practice management 1,100 Harvest Partners, July 2015	Upstream Rehabilitation	Outpatient rehabilitation	5,000	WP Global Partners, Yukon Partners,	December 2015
US Renal Care Dialysis 1,001 Bain Capital, Summit Partners, Revelstroke Capital Partners Pebruary 2019  American Vision Partners Opthamology - H.I.G. Capital April 2017  CORRECTIONAL HEALTH  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  Wellpath (fika Correct Care Solutions/ Correctional Medical Group Cos)  Corrigon Health Corrigon Health Dental Care Health Services  DENTAL CARE  NAME TYPE EMPLOYEES PE FIRM AUGUST August 2010  BlueMountain Capital Management April 2017  Armor Correctional Health Services  DENTAL CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  Heartland Dental Care Non-clinical dental support services 12,000 KKR April 2018  Aspen Dental Management Dental practice management 5,000 Leonard Green & Partners, 2006 (Ares) Ares Management April 2010 (LGP)  Western Dental Services Dental care 4,500 New Mountain Capital September 2012  American Dental Partners Dental care 2,651 JLL Partners February 2012  Smile Brands Dental imagine and products 1,300 Clayton Dubilier & Rice and Care Capital Dental Practice management 1,100 Harvest Partners, July 2015	Athletico Physical Therapy	Physical Therapy	5,000	BDT Capital Partners	December 2016
American Vision Partners Opthamology - H.I.G. Capital April 2017  CORRECTIONAL HEALTH  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  Wellpath (fika Correct Care Solutions/ Correctional Medical Group Cos)  Corrigon Health Correctional Medical Group Cos)  Corrigon Health Correctional Healthcare 11,000 BlueMountain Capital Management April 2017  Armor Correctional Health Correctional healthcare 1,600 Georgetown Capital May 2018  DENTAL CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  Heartland Dental Care Non-clinical dental support services 12,000 KKR April 2018  Aspen Dental Management Dental practice management 5,000 Leonard Green & Partners, 2006 (Ares) Ares Management 2010 (LGP)  Western Dental Services Dental care 4,500 New Mountain Capital September 2012  American Dental Partners Dental care 2,651 JLL Partners February 2012  Smile Brands Dental imagine and products 1,300 Clayton Dubilier & Rice and Care Capital Dental Care Capital Dental practice management 1,100 Harvest Partners, July 2015	NueHealth	Ambulatory Centers	2,500	BC Partners, Ares Management	November 2018
CORRECTIONAL HEALTH  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  Wellpath (fka Correct Care Solutions/ Correctional healthcare Solutions/ Correctional Medical Group Cos)  Corizon Health Corizon Health 11,000 BlueMountain Capital Management April 2017  Armor Correctional Health Services  DENTAL CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  Heartland Dental Care Non-clinical dental support services 12,000 KKR April 2018  Aspen Dental Management Dental practice management 5,000 Leonard Green & Partners, 2006 (Ares) Ares Management 2010 (LGP)  Western Dental Services Dental care 4,500 New Mountain Capital September 2012  American Dental Partners Dental care 2,651 JLL Partners February 2012  Smile Brands Dental imagine and products 1,300 Clayton Dubilier & Rice and Care Capital Dental Care Capital Dental practice management 1,100 Harvest Partners, July 2015	US Renal Care	Dialysis	1,001		February 2019
Wellpath (fka Correct Care Solutions/ Correctional healthcare Correctional healthcare Solutions/ Correctional Medical Group Cos)  Corizon Health Corizon Health 11,000 BlueMountain Capital Management April 2017  Armor Correctional Health Services Correctional healthcare 1,600 Georgetown Capital Management May 2018  DENTAL CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  Heartland Dental Care Non-clinical dental support services 12,000 KKR April 2018  Aspen Dental Management Dental practice management 5,000 Leonard Green & Partners, Ares Management 2010 (LGP)  Western Dental Services Dental care 4,500 New Mountain Capital September 2012  American Dental Partners Dental care 2,651 JLL Partners February 2012  Smile Brands Dental imagine and products 1,300 Clayton Dubilier & Rice and Care Capital  Dental Care Alliance Dental practice management 1,100 Harvest Partners, July 2015	American Vision Partners	Opthamology	-	H.I.G. Capital	April 2017
Wellpath (fka Correct Care Solutions/ Correctional Medical Group Cos)  Corizon Health Corrigon Health 11,000 BlueMountain Capital Management April 2017  Armor Correctional Health Services  DENTAL CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  Heartland Dental Care Non-clinical dental support services 12,000 KKR April 2018  Aspen Dental Management Dental practice management 5,000 Leonard Green & Partners, Ares Management 2010 (LGP)  Western Dental Services Dental care 4,500 New Mountain Capital September 2012  American Dental Partners Dental care 2,651 JLL Partners February 2012  Smile Brands Dental imagine and products 1,300 Clayton Dubilier & Rice and Care Capital Dental practice management 1,100 Harvest Partners, July 2015	CORRECTIONAL HEALT	Н			
Solutions/ Correctional Medical Group Cos)  Corizon Health Corrigon Health 11,000 BlueMountain Capital Management April 2017  Armor Correctional Correctional Healthcare 1,600 Georgetown Capital May 2018  DENTAL CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  Heartland Dental Care Non-clinical dental support services 12,000 KKR April 2018  Aspen Dental Management Dental practice management 5,000 Leonard Green & Partners, 2006 (Ares) 2010 (LGP)  Western Dental Services Dental care 4,500 New Mountain Capital September 2012  American Dental Partners Dental care 2,651 JLL Partners February 2012  Smile Brands Dental imagine and products 1,300 Clayton Dubilier & Rice and Care Capital  Dental Care Alliance Dental practice management 1,100 Harvest Partners, July 2015	NAME	ТҮРЕ	EMPLOYEES	PE FIRM	ACQUIRED
Armor Correctional Health Services  DENTAL CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  Heartland Dental Care Non-clinical dental support services 12,000 KKR April 2018  Aspen Dental Management Dental practice management 5,000 Leonard Green & Partners, 2006 (Ares) 2010 (LGP)  Western Dental Services Dental care 4,500 New Mountain Capital September 2012  American Dental Partners Dental care 2,651 JLL Partners February 2012  Smile Brands Dental imagine and products 1,300 Clayton Dubilier & Rice and Care Capital  Dental Care Alliance Dental practice management 1,100 Harvest Partners, July 2015	Solutions/ Correctional	Correctional healthcare	15,000	H.I.G. Capital	August 2010
DENTAL CARE  NAME TYPE EMPLOYEES PE FIRM ACQUIRED  Heartland Dental Care Non-clinical dental support services 12,000 KKR April 2018  Aspen Dental Management Dental practice management 5,000 Leonard Green & Partners, 2006 (Ares) Ares Management 2010 (LGP)  Western Dental Services Dental care 4,500 New Mountain Capital September 2012  American Dental Partners Dental care 2,651 JLL Partners February 2012  Smile Brands Dental practice management 1,745 Gryphon Investors & Triangle Capital August 2016  Carestream Dental Dental imagine and products 1,300 Clayton Dubilier & Rice and Care Capital  Dental Care Alliance Dental practice management 1,100 Harvest Partners, July 2015					
Heartland Dental Care Non-clinical dental support services 12,000 KKR April 2018  Aspen Dental Management Dental practice management 5,000 Leonard Green & Partners, 2006 (Ares) 2010 (LGP)  Western Dental Services Dental care 4,500 New Mountain Capital September 2012  American Dental Partners Dental care 2,651 JLL Partners February 2012  Smile Brands Dental practice management 1,745 Gryphon Investors & Triangle Capital August 2016  Carestream Dental Dental imagine and products 1,300 Clayton Dubilier & Rice and Care Capital  Dental Care Alliance Dental practice management 1,100 Harvest Partners, July 2015	Corizon Health	Corizon Health	11,000	BlueMountain Capital Management	April 2017
Heartland Dental Care Non-clinical dental support services 12,000 KKR April 2018  Aspen Dental Management Dental practice management 5,000 Leonard Green & Partners, 2006 (Ares) 2010 (LGP)  Western Dental Services Dental care 4,500 New Mountain Capital September 2012  American Dental Partners Dental care 2,651 JLL Partners February 2012  Smile Brands Dental practice management 1,745 Gryphon Investors & Triangle Capital August 2016  Carestream Dental Dental imagine and products 1,300 Clayton Dubilier & Rice and Care Capital  Dental Care Alliance Dental practice management 1,100 Harvest Partners, July 2015	Armor Correctional				
Aspen Dental Management Dental practice management 5,000 Leonard Green & Partners, Ares Management 2010 (LGP)  Western Dental Services Dental care 4,500 New Mountain Capital September 2012  American Dental Partners Dental care 2,651 JLL Partners February 2012  Smile Brands Dental practice management 1,745 Gryphon Investors & Triangle Capital August 2016  Carestream Dental Dental imagine and products 1,300 Clayton Dubilier & Rice and Care Capital  Dental Care Alliance Dental practice management 1,100 Harvest Partners, July 2015	Armor Correctional Health Services				'
Ares Management 2010 (LGP)  Western Dental Services Dental care 4,500 New Mountain Capital September 2012  American Dental Partners Dental care 2,651 JLL Partners February 2012  Smile Brands Dental practice management 1,745 Gryphon Investors & Triangle Capital August 2016  Carestream Dental Dental imagine and products 1,300 Clayton Dubilier & Rice and Care Capital  Dental Care Alliance Dental practice management 1,100 Harvest Partners, July 2015	Armor Correctional Health Services DENTAL CARE	Correctional healthcare	1,600	Georgetown Capital	May 2018
American Dental PartnersDental care2,651JLL PartnersFebruary 2012Smile BrandsDental practice management1,745Gryphon Investors & Triangle CapitalAugust 2016Carestream DentalDental imagine and products1,300Clayton Dubilier & Rice and Care CapitalSeptember 2017Dental Care AllianceDental practice management1,100Harvest Partners,July 2015	Armor Correctional Health Services DENTAL CARE NAME	Correctional healthcare  TYPE	1,600	Georgetown Capital  PE FIRM	May 2018  ACQUIRED
Smile Brands Dental practice management 1,745 Gryphon Investors & Triangle Capital August 2016  Carestream Dental Dental imagine and products 1,300 Clayton Dubilier & Rice and Care Capital  Dental Care Alliance Dental practice management 1,100 Harvest Partners, July 2015	Armor Correctional Health Services  DENTAL CARE  NAME Heartland Dental Care	TYPE  Non-clinical dental support services	1,600 <b>EMPLOYEES</b> 12,000	PE FIRM  KKR  Leonard Green & Partners,	May 2018  ACQUIRED  April 2018  2006 (Ares)
Carestream Dental Dental imagine and products 1,300 Clayton Dubilier & Rice and Care Capital  Dental Care Alliance Dental practice management 1,100 Harvest Partners, July 2015	Armor Correctional Health Services  DENTAL CARE  NAME Heartland Dental Care  Aspen Dental Management	TYPE  Non-clinical dental support services  Dental practice management	1,600 <b>EMPLOYEES</b> 12,000 5,000	PE FIRM  KKR  Leonard Green & Partners, Ares Management	ACQUIRED April 2018 2006 (Ares) 2010 (LGP)
Care Capital  Dental Care Alliance Dental practice management 1,100 Harvest Partners, July 2015	Armor Correctional Health Services  DENTAL CARE  NAME Heartland Dental Care Aspen Dental Management Western Dental Services	TYPE  Non-clinical dental support services  Dental practice management  Dental care	1,600 <b>EMPLOYEES</b> 12,000 5,000 4,500	PE FIRM  KKR  Leonard Green & Partners, Ares Management  New Mountain Capital	ACQUIRED April 2018 2006 (Ares) 2010 (LGP) September 2012
	Armor Correctional Health Services  DENTAL CARE  NAME Heartland Dental Care Aspen Dental Management  Western Dental Services American Dental Partners	TYPE  Non-clinical dental support services  Dental practice management  Dental care  Dental care	1,600 <b>EMPLOYEES</b> 12,000 5,000 4,500 2,651	PE FIRM  KKR  Leonard Green & Partners, Ares Management  New Mountain Capital  JLL Partners	ACQUIRED April 2018 2006 (Ares) 2010 (LGP) September 2012 February 2012
	Armor Correctional Health Services  DENTAL CARE  NAME Heartland Dental Care Aspen Dental Management  Western Dental Services American Dental Partners  Smile Brands	TYPE  Non-clinical dental support services  Dental practice management  Dental care  Dental care  Dental practice management	1,600  EMPLOYEES 12,000 5,000 4,500 2,651 1,745	PE FIRM  KKR  Leonard Green & Partners, Ares Management  New Mountain Capital  JLL Partners  Gryphon Investors & Triangle Capital  Clayton Dubilier & Rice and	ACQUIRED April 2018 2006 (Ares) 2010 (LGP) September 2012 February 2012 August 2016

1,000

Berkshire Partners and Partners Group October 2015

# **Appendix**

DHV	DMVCII	FC 2.	DHVDWV	CFIITICALS
PHA	RIVIAI.II	- N	PHARIVIA	I.FIIIII.AI N

NAME	TYPE	EMPLOYEES	PE FIRM	ACQUIRED
PharMerica/BrightSpring	Pharmacy services, home and community health	50,700	KKR, Athyrium Capital, Walgreens Boots Alliance	December 2017
PAREXEL International	Biotechnology and pharmaceutical development	20,000	Pamplona Capital Management	September 2017
Pharmaceutical Product Development	Pharmaceutical research and development	19,000	The Carlyle Group, Hellman & Friedman	December 2011
Publicis Healthcare Communications	Pharmaceuticals	4,000	Altamont Capital Partners	January 2019
PCI Pharma Services	Pharmaceuticals	3,200	Partners Group, Thomas H. Lee Partners	June 2016
Guardian Pharmacy Services Pharmacy services		2,400	Cardinal Equity Partners, Bindley Capital Partners	July 2003

## **HEALTH TECH**

NAME	ТҮРЕ	EMPLOYEES	PE FIRM	ACQUIRED
NexTech Systems	Medical record software	50,000	Thomas H Lee Partners	June 2019
Carestream Health	Diagnostic imagine and healthcare IT	6,000	Onex Partners	May 2007
Gebbs Healthcare Solutions	Medical billing software	6,000	ChrysCapital	December 2018
AthenaHealth	Healthcare IT services, software	5,156	Evergreen Coast Capital, Veritas Capital	February 2019
Ortho-Clinical Diagnostics	Diagnostic equipment	4,300	The Carlyle Group	June 2014

## OTHER

TYPE Therapeutic Massage/wellness Medical scribe training and	<b>EMPLOYEES</b> 35,000	PE FIRM  Ares Capital, Roark Capital Group	ACQUIRED October 2012
		Ares Capital, Roark Capital Group	October 2012
Medical scribe training and			0010001 2012
management services	15,000	Chicago Growth Partners and Vesey Street Capital	
Medical billing and collections	13,000	TA Associates Management	June 2012
Anesthesia/ Pain Mgmt	3,500	Berkshire Partners, Tetrad and Welsh, Carson, Anderson & Stowe	2013
Medical billing	3,200	Pamplona Capital Management	January 2016
Laboratory	2,900	Borealis Infrastructure	February 2007
Workers' compensation diagnostic services	-	Apax Partners, Altamir	November 2013
Radiology	-	Welsh, Carson, Anderson & Stowe	2018
	management services  Medical billing and collections  Anesthesia/ Pain Mgmt  Medical billing  Laboratory  Workers' compensation diagnostic services	management services  Medical billing and collections 13,000  Anesthesia/ Pain Mgmt 3,500  Medical billing 3,200  Laboratory 2,900  Workers' compensation diagnostic services	management services  Vesey Street Capital  Medical billing and collections  13,000  TA Associates Management  Anesthesia/ Pain Mgmt  3,500  Berkshire Partners, Tetrad and Welsh, Carson, Anderson & Stowe  Medical billing  3,200  Pamplona Capital Management  Laboratory  2,900  Borealis Infrastructure  Workers' compensation diagnostic services

Data compiled from Pitchbook as of October 2019.



# **Endnotes**

- "Private Equity's Appetite for Healthcare Operators," Preqin, March 14, 2019. <a href="https://www.preqin.com/insights/blogs/private-equitys-appetite-for-healthcare-equity-appetite-for-healthcare-equity-equity-appetite-for-healthcare-equity-equity-appetite-for-healthcare-equity-equity-appetite-for-healthcare-equity-equity-appetite-for-healthcare-equity-eq operators/25809>
- <sup>2</sup> "Private equity sees ripe opportunity in healthcare this year," Healthcare Dive, March 25, 2019. <a href="https://www.healthcaredive.com/news/private-equity-sees-">https://www.healthcaredive.com/news/private-equity-sees-</a> ripe-opportunity-in-healthcare-this-year/548831/>
- <sup>3</sup> "INSIGHT: The Health-Care M&A Meter—Hot 2018 to Be Followed by Hotter 2019," Bloomberg Law, February 8, 2019. <a href="https://news.bloomberglaw.com/health-law-and-business/insight-the-health-law-and-business/ins care-m-a-meter-hot-2018-to-be-followed-by-hotter-2019
- <sup>4</sup> Multiple on a gross pooled basis. "GLOBAL PRIVATE EQUITY REPORT 2019," Bain & Company. <a href="https://www.bain.com/contentassets/2792a2cbcdcf4e94acfddc077a85c5ea/b">https://www.bain.com/contentassets/2792a2cbcdcf4e94acfddc077a85c5ea/b</a> ain\_report\_private\_equity\_report\_2019.pdf> pg. 24.
- <sup>5</sup> "INSIGHT: The Health-Care M&A Meter—Hot 2018 to Be Followed by Hotter 2019," Bloomberg Law, February 8, 2019. <a href="https://news.bloomberglaw.com/health-law-and-business/insight-the-health-law-and-business/ins care-m-a-meter-hot-2018-to-be-followed-by-hotter-2019>
- <sup>6</sup> Bos, A., & Harrington, C, "What Happens to a Nursing Home Chain When Private Equity Takes Over? A Longitudinal Case Study. INQUIRY: The Journal of Health Care Organization, Provision, and Financing" November 22, 2017. <a href="https://journals.sagepub.com/doi/full/10.1177/0046958017742761">https://journals.sagepub.com/doi/full/10.1177/0046958017742761</a>
- 7 "Private Equity's Appetite for Healthcare Operators," Preqin, March 14, 2019. <a href="https://www.preqin.com/insights/blogs/private-equitys-appetite-for-healthcare-equity-appetite-for-healthcar operators/25809>
- 8 Ibid.
- <sup>9</sup> Peter Whoriskey and Dan Keating, "Overdoses, bedsores, broken bones: What happened when a private-equity firm sought to care for society's most vulnerable," Washington Post, November 25, 2018.
- <a href="https://www.washingtonpost.com/business/economy/opioid-overdoses-bed-">https://www.washingtonpost.com/business/economy/opioid-overdoses-bed-</a> sores-and-broken-bones-what-happened-when-a-private-equity-firm-soughtprofits-in-caring-for-societys-most-vulnerable/2018/11/25/09089a4a-ed14-11e 8-baac-2a674e91502b\_story.html?noredirect=on>
- <sup>10</sup> Ibid.
- <sup>11</sup> Ibid.
- <sup>12</sup> Ibid.
- <sup>13</sup> Ibid. <sup>14</sup> Ibid.
- <sup>15</sup> Ibid.
- <sup>16</sup> Alex Kacik, "ProMedica closes HCR ManorCare acquisition," Modern Healthcare, July 27, 2018. <a href="https://www.modernhealthcare.com/article/20180727/NEWS/180729911/pro">https://www.modernhealthcare.com/article/20180727/NEWS/180729911/pro</a> medica-closes-hcr-manorcare-acquisition>
- <sup>17</sup> Bos, A., & Harrington, C, "What Happens to a Nursing Home Chain When Private Equity Takes Over? A Longitudinal Case Study. INQUIRY: The Journal of Health Care Organization, Provision, and Financing" November 22, 2017. <a href="https://journals.sagepub.com/doi/full/10.1177/0046958017742761">https://journals.sagepub.com/doi/full/10.1177/0046958017742761</a>
- <sup>18</sup> Golden Living Centers website, accessed October 21, 2019. <a href="https://www.goldenlivingcenters.com/find-a-senior-living-center/">https://www.goldenlivingcenters.com/find-a-senior-living-center/</a>
- <sup>19</sup> Bos, A., & Harrington, C, "What Happens to a Nursing Home Chain When Private Equity Takes Over," *The Journal of Health Care Organization, Provision,* and Financing, November 22, 2017.
  - <a href="https://journals.sagepub.com/doi/full/10.1177/0046958017742761">https://journals.sagepub.com/doi/full/10.1177/0046958017742761</a>
- <sup>20</sup> Ibid.
- <sup>21</sup> Ibid.
- <sup>22</sup> Dan Johnson, "Golden Living Center is among facilities accused of nurse under-staffing," Press Democrat, July 7, 2011 <a href="https://www.pressdemocrat.com/news/2303361-181/golden-living-center-is-">https://www.pressdemocrat.com/news/2303361-181/golden-living-center-is-</a>
- <sup>23</sup> "US Files Complaint Against National Chain of Hospice Providers Alleging False Claims on the Medicare Program," US DOJ Press Release, January 3, 2012. <a href="https://www.justice.gov/opa/pr/us-files-complaint-against-national-">https://www.justice.gov/opa/pr/us-files-complaint-against-national-</a> chain-hospice-providers-alleging-false-claims-medicare>

- <sup>24</sup> "False Claims Act Lawsuit Forces Golden Living to Settle Claims of Fraudulent Wound Care," Berger Montague press release. <a href="https://bergermontague.com/false-claims-act-lawsuit-forces-golden-living-to-">https://bergermontague.com/false-claims-act-lawsuit-forces-golden-living-to-</a> settle-claims-of-fraudulent-wound-care/>
- <sup>25</sup> "PA Supreme Court Ruling: Attorney General's Lawsuit to Protect Seniors in Nursing Homes is Reinstated," Attorney General John Shapiro press release, September 28, 2018. <a href="https://www.attorneygeneral.gov/taking-action/press-re-">https://www.attorneygeneral.gov/taking-action/press-re-</a> leases/pa-supreme-court-ruling-attorney-generals-lawsuit-to-protect-seniors-in-nursing-homes-is-reinstated/>; Maggie Flynn, "Report: Troubled Former Golden Living Facilities Highlight Oversight Issues, Skilled Nursing News. <a href="https://skillednursingnews.com/2018/11/report-former-golden-living-facilities-type-facilities-facilitie highlight-oversight-issues-pennsylvania/>
- <sup>26</sup> Ibid.
- <sup>27</sup> Pitchbook data, accessed October 23, 2019.
- <sup>28</sup> Golden Living Centers website, accessed October 2019. <a href="https://www.golden-page-12019">https://www.golden-page-12019</a>. <a href="https://www.golden-page-1201 livingcenters.com/find-a-senior-living-center/>
- <sup>29</sup> "3 Stockton nursing facilities placed in receivership," the Record, April 21, 2019. <a href="https://www.recordnet.com/news/20190421/3-stockton-nursing-facili-">https://www.recordnet.com/news/20190421/3-stockton-nursing-facili-</a> ties-placed-in-receivership>
- $^{
  m 30}$  "HOSPITALS CLOSING AT RATE OF 30 PER YEAR, WITH NO END IN SIGHT," HealthLeaders, August 21, 2018. <a href="https://www.healthleadersmedia.com/strat-">https://www.healthleadersmedia.com/strat-</a> egy/hospitals-closing-rate-30-year-no-end-sight>
- <sup>31</sup> https://pestakeholder.org/kkr-bain-capital-vornado-repeatedly-rewardedthemselves-for-adding-debt-to-toys-r-us/
- 32 https://prospect.org/health/how-private-equity-makes-you-sicker/
- <sup>33</sup> Nina Feldman, "Many fear Hahnemann's story will send a message: Buying a failing hospital pays," WHYY, July 31, 2019. <a href="https://whyy.org/articles/many-number-12">https://whyy.org/article fear-hahnemanns-story-will-send-a-message-buying-a-failing-hospital-pays/> and Matthew Rothstein, "Philly Hospital the First to be Stripped for Assets by Private Equity," Bisnow, July 14, 2019. <a href="https://www.bisnow.com/philadel-">https://www.bisnow.com/philadel-</a> phia/news/healthcare/private-equity-hospitals-philadelphia-hahnemann-
- 34 "Tenet and Paladin Healthcare Reach Definitive Agreement to Transfer Owner-ship of Tenet's Philadelphia Hospitals," press release, September 1, 2017. <a href="https://www.businesswire.com/news/home/20170901005433/en/Tenet-Pal-4">https://www.businesswire.com/news/home/20170901005433/en/Tenet-Pal-4</a> adin-Healthcare-Reach-Definitive-Agreement-Transfer>
- <sup>35</sup> Nina Feldman, "Buying and closing a failing hospital can pay off," *Philadel*phia Inquirer, August 2, 2019. <a href="https://www.phillytrib.com/news/business/buying-and-closing-a-failing-hospi-">https://www.phillytrib.com/news/business/buying-and-closing-a-failing-hospi-</a> tal-can-pay-off/article\_1eb6eb0a-0f9b-5f7d-89e1-0dd331a4c99c.html>
- <sup>36</sup> Tom Avril and Dylan Purcell, "Closing Hahnemann could deprive some struggling neighborhoods of a key safety net," Philadelphia Inquirer, July 2, 2019 <a href="https://www.inquirer.com/health/hahnemann-hospital-emergency-room-">https://www.inquirer.com/health/hahnemann-hospital-emergency-room-</a> crowded-20190702.html>
- <sup>37</sup> Matthew Rothstein, "Philly Hospital the First to be Stripped for Assets by Private Equity," Bisnow, July 14, 2019. <a href="https://www.bisnow.com/philadelphia/news/healthcare/private-equity-hospi-">https://www.bisnow.com/philadelphia/news/healthcare/private-equity-hospi-</a> tals-philadelphia-hahnemann-99848>
- <sup>38</sup> Nina Feldman, "Many fear Hahnemann's story will send a message: Buying a failing hospital pays," WHYY, July 31, 2019. <a href="https://whyy.org/articles/many-name="https://whyy.org/articles/many-name="https://whyy.org/articles/many-name="https://whyy.org/articles/many-name="https://whyy.org/articles/many-name="https://whyy.org/articles/many-name="https://why.org/articles/many-name=" fear-hahnemanns-story-will-send-a-message-buying-a-failing-hospital-pays/>
- 39 Iris Dorbain, "American Academic and Harrison Street Real Estate buy four medical office buildings and parking garages," PE Hib Network, January 12, 2018. <a href="https://www.pehub.com/2018/01/american-academic-harrison-street-">https://www.pehub.com/2018/01/american-academic-harrison-street-</a> real-estate-buy-four-medical-office-buildings-parking-garages/>
- $^{
  m 40}$  Mike Elk, "Private Equity's Latest Scheme: Closing Urban Hospitals and Selling Off the Real Estate," The American Prospect, July 11, 2019. <a href="https://prospect.org/health/private-equity-s-latest-scheme-closing-urban-hos-">https://prospect.org/health/private-equity-s-latest-scheme-closing-urban-hos-</a> pitals-selling-real-estate/>
- <sup>41</sup> Jacob Adelman, "As Hahnemann enters bankruptcy, 'gateway' development site could open up in Center City," Philadelphia Inquirer, July 1, 2019. <a href="https://www.inquirer.com/news/hahnemann-bankruptcy-real-estate-develop-">https://www.inquirer.com/news/hahnemann-bankruptcy-real-estate-develop-</a> ment-hotel-convention-center-apartments-offices-20190701.html>
- <sup>42</sup> Ibid.



# **Endnotes**

- <sup>43</sup> "Acquisition of Caritas Christi Now Complete," Caritas Health Care Press Release, November 9, 2010. <a href="https://www.fiercehealthcare.com/healthcare/acquisition-caritas-christi-now-complete">https://www.fiercehealthcare.com/healthcare/acquisition-caritas-christi-now-complete</a>
- 44 "Steward Gets \$1.25b to fund expansion," Boston Globe, September 26, 2016. https://www.bostonglobe.com/business/2016/09/26/steward-gets-fund-expansion-repay-cerberus/hgC7sjOqZ1InH1B1bV991M/story.html
- <sup>45</sup> Eileen Appelbaum, "How Private Equity Makes You Sicker," *The American Prospect*, October 7, 2019. <a href="https://prospect.org/health/how-private-equity-makes-you-sicker/">https://prospect.org/health/how-private-equity-makes-you-sicker/</a>
- <sup>46</sup> Ayla Ellison, "CHS divests 11 hospitals, adds 3 more to sale pipeline," *Becker's Hospital Review*, May 1, 2017. <a href="https://www.beckershospitalreview.com/hospital-transactions-and-valuation/chs-divests-8-hospitals-to-steward-adds-another-to-sale-pipeline.html">https://www.beckershospitalreview.com/hospitals-to-steward-adds-another-to-sale-pipeline.html</a>
- <sup>47</sup> David Carey, "TPG Sells lasis to Steward Health Care for \$2 Billion," Bloomberg, May 19, 2017. <a href="https://www.bloomberg.com/news/articles/2017-05-19/tpg-said-to-sell-iasis-to-steward-health-care-for-2-billion">https://www.bloomberg.com/news/articles/2017-05-19/tpg-said-to-sell-iasis-to-steward-health-care-for-2-billion</a>
- <sup>48</sup> Bill Forry, "Carney will end Family Medicine residency in '16," *Dorchester Reporter*, December 17, 2015; Deborah Allard, "Morton Hospital closing inpatient pediatric unit, reducing staff," *the Herald News*, March 21, 2013. <a href="https://www.heraldnews.com/article/20130321/NEWS/303219899">https://www.heraldnews.com/article/20130321/NEWS/303219899</a>
- <sup>49</sup> Patrick Ronan, "Quincy hospital property sold in major deal with downtown implications," *Patriot Ledger*, Decembr 8, 2016.
  <a href="https://www.patriotledger.com/news/20161208/quincy-hospital-property-sold-in-major-deal-with-downtown-implications">https://www.patriotledger.com/news/20161208/quincy-hospital-property-sold-in-major-deal-with-downtown-implications</a>; "Quincy ER To Stay Open 2 Years After Hospital Closing," CBS Boston, January 14, 2015. <a href="https://boston.cbslo-cal.com/2015/01/14/quincy-er-to-stay-open-2-years-after-hospital-closing/">https://boston.cbslo-cal.com/2015/01/14/quincy-er-to-stay-open-2-years-after-hospital-closing/</a>>
- <sup>50</sup> Eric Tiernan, "Quincy may soon be the largest city in Mass. without an ER. Then what?," *Patriot Ledger*, August 9, 2019. <a href="https://www.patriotledger.com/news/20190809/quincy-may-soon-be-largest-city-in-mass-without-er-then-what">https://www.patriotledger.com/news/20190809/quincy-may-soon-be-largest-city-in-mass-without-er-then-what</a>
- <sup>51</sup> "TOP STORIES OF 2018: Morton Hospital closes maternity unit permanently," *Taunton Daily Gazette*, December 18, 2018.
  <a href="https://www.tauntongazette.com/news/20181218/top-stories-of-2018-morton-hospital-closes-maternity-unit-permanently">https://www.tauntongazette.com/news/20181218/top-stories-of-2018-morton-hospital-closes-maternity-unit-permanently>
- <sup>52</sup> Ayla Ellison, "Steward to close Ohio hospital, lay off 388," *Becker's Hospital Review*, August 16, 2018.
  <a href="https://www.beckershospitalreview.com/finance/steward-to-close-ohio-hospital-lay-off-388.html">https://www.beckershospitalreview.com/finance/steward-to-close-ohio-hospital-lay-off-388.html</a>
- <sup>53</sup> BINGHUI HUANG, "Easton Hospital closes its neonatal intensive care unit," the Morning Call, July 3, 2019. <a href="https://www.mcall.com/health/mc-hea-nicu-closure-easton-hospital-20190703-5pe4bdklsfhildiynkluof2vya-story.html">https://www.mcall.com/health/mc-hea-nicu-closure-easton-hospital-20190703-5pe4bdklsfhildiynkluof2vya-story.html</a>
- <sup>54</sup> Kelly Gooch, "Steward Health threatened nurses with hospital closing, unfair labor charges allege," *Becker's Hospital Review*, September 9, 2019. <a href="https://www.beckershospitalreview.com/human-capital-and-risk/steward-health-threatened-nurses-with-hospital-closing-unfair-labor-charges-allege.html">https://www.beckershospitalreview.com/human-capital-and-risk/steward-health-threatened-nurses-with-hospital-closing-unfair-labor-charges-allege.html</a>>
- <sup>55</sup> "RNs at Steward Nashoba Valley Medical Center Overwhelmingly Ratify New Three-Year Contract," Massachusetts Nurses Association Press Release, October 10, 2019. <a href="https://www.massnurses.org/news-and-events/p/open-ltem/11449">https://www.massnurses.org/news-and-events/p/open-ltem/11449</a>
- <sup>56</sup> Priyanka Dayal Mccluskey, "Hospital Chain Steward Sues to Keep Finances Private, Challenges Agency's Powers," *The Boston Globe*, October 31, 2017. <a href="https://www.bostonglobe.com/business/2017/10/31/steward-health-care-sues-state-over-financial-data/QWoXVntO8mrAuYqXROoioN/story.html">https://www.bostonglobe.com/business/2017/10/31/steward-health-care-sues-state-over-financial-data/QWoXVntO8mrAuYqXROoioN/story.html</a>
- <sup>57</sup> "Steward Healthcare Pressured Doctors to Restrict Referrals Outside Chain, Suit Says," Boston Globe, May 25, 2018.
  <a href="https://www3.bostonglobe.com/metro/2018/05/24/doctor-lawsuit-says-stew-ard-health-care-exerted-undue-pressure-restrict-referrals-outside-chain/xSLjUn27mhmF3NDltkeZgO/story.html?arc404=true>
- <sup>58</sup> Leigh Page, "Is It Ethical to Pressure Physicians to Refer In-House?," Medscape, May 21, 2019. <a href="https://www.medscape.com/viewarticle/913055">https://www.medscape.com/viewarticle/913055</a>>
- <sup>59</sup> Leo Vartorella, "CHS, Steward battle in court over unpaid bills in 8-hospital deal," *Becker's Hospital Review*, December 27, 2018. <a href="https://www.becker-shospitalreview.com/finance/chs-steward-battle-in-court-over-unpaid-bills-in-8-hospital-deal.html">https://www.becker-shospitalreview.com/finance/chs-steward-battle-in-court-over-unpaid-bills-in-8-hospital-deal.html</a>>

- <sup>60</sup> "Prospect Medical Holdings, Inc. to Be Acquired by Leonard Green & Partners, L.P. and Management for \$8.50 Per Share," August 16, 2010.
  <a href="https://www.businesswire.com/news/home/20100816005890/en/Prospect-Medical-Holdings-Acquired-Leonard-Green-Partners">https://www.businesswire.com/news/home/20100816005890/en/Prospect-Medical-Holdings-Acquired-Leonard-Green-Partners</a>
- <sup>61</sup> "Prospect to Receive \$1.55 Billion Investment from Medical Properties Trust, Inc.," Jul 15, 2019. 
  https://www.businesswire.com/news/home/20190715005786/en/Prospect-Receive-1.55-Billion-Investment-Medical-Properties >
- <sup>62</sup> Ibid.
- <sup>63</sup> Fares Sabawi, "Historic River Walk building for sale: Future of Nix Medical Center uncertain," ABC 12, July 30, 2019. <a href="https://www.ksat.com/news/his-toric-river-walk-building-for-sale-future-of-nix-medical-center-uncertain">https://www.ksat.com/news/his-toric-river-walk-building-for-sale-future-of-nix-medical-center-uncertain</a>
- <sup>64</sup> Joyce Famakinwa, "Nix Health to Lay Off Over 500 Home Health Workers," Home Healthcare News, September 2, 2019. <a href="https://homehealthcarenews.com/2019/09/nix-health-to-lay-off-over-500-home-health-workers/">https://homehealthcarenews.com/2019/09/nix-health-workers/</a>
- <sup>65</sup> Laura Grace, "Downtown Nix Medical Center officially closing," My SA, September 3, 2019. <a href="https://www.mysanantonio.com/business/health-care/article/Downtown-Nix-Medical-Center-officially-closing-14410183.php">https://www.mysanantonio.com/business/health-care/article/Downtown-Nix-Medical-Center-officially-closing-14410183.php</a>
- <sup>66</sup> Ayla Ellison, "Private equity-owned hospital chain files for bankruptcy," Becker's Hospital Review, May 9, 2019. <a href="https://www.beckershospitalreview.com/finance/private-equity-owned-hospital-chain-files-for-bankruptcy.html">https://www.beckershospitalreview.com/finance/private-equity-owned-hospital-chain-files-for-bankruptcy.html</a>
- <sup>67</sup> https://www.ineteconomics.org/perspectives/blog/private-equity-and-surprise-medical-billing
- <sup>68</sup> "Investors' Deep-Pocket Push To Defend Surprise Medical Bills," Kaiser Health News, September 11, 2019.
- <sup>69</sup> "SURPRISE! OUT-OF-NETWORK BILLING FOR EMERGENCY CARE IN THE-UNITED STATES," NBER Working Paper Series, January 2018. "Investors' Deep-Pocket Push To Defend Surprise Medical Bills," Kaiser Health News, September 11, 2019.
- Margot Sanger-Katz, Julie Creswell and Reed Abelson, "Mystery Solved: Private-Equity-Backed Firms Are Behind Ad Blitz on 'Surprise Billing' New York Times, September 13, 2019.
  <a href="https://www.nytimes.com/2019/09/13/upshot/surprise-billing-laws-ad-spending-doctor-patient-unity.html">https://www.nytimes.com/2019/09/13/upshot/surprise-billing-laws-ad-spending-doctor-patient-unity.html</a>
- 71 "Pallone and Walden Launch Bipartisan Investigation into Private Equity Firms' Role in Surprise Billing Practices," Media release, Sept 16, 2019.
- 72 "How Private Equity Keeps States Invested in Medical Billing Practices They've Banned," Bloomberg, Jul 3, 2018.
- <sup>73</sup> John Tozzi, "Air Ambulances Are Flying More Patients Than Ever, and Leaving Massive Bills Behind," Bloomberg, June 11, 2018.
  <a href="https://www.bloomberg.com/news/features/2018-06-11/private-equity-backed-air-ambulances-leave-behind-massive-bills">https://www.bloomberg.com/news/features/2018-06-11/private-equity-backed-air-ambulances-leave-behind-massive-bills</a>
- <sup>74</sup> Erin Gilmore, "Air Methods, Collection Firm Sued Over Allegedly Undisclosed, 'Excessive' Air Transport Pricing," Classaction.org, July 5, 2019. <a href="https://www.classaction.org/news/air-methods-collection-firm-sued-over-allegedly-undisclosed-excessive-air-transport-pricing">https://www.classaction.org/news/air-methods-collection-firm-sued-over-allegedly-undisclosed-excessive-air-transport-pricing</a>
- <sup>75</sup> Olivia Webb, "Private Equity Chases Ambulances," *The American Prospect*, October 3, 2019. <a href="https://prospect.org/health/private-equity-chases-ambulances-emergency-medical-transport/">https://prospect.org/health/private-equity-chases-ambulances-emergency-medical-transport/</a>
- Government Accountability Office, "AIR AMBULANCE Data Collection and Transparency Needed to Enhance DOT Oversight," July 2017. <a href="https://www.gao.gov/assets/690/686167.pdf">https://www.gao.gov/assets/690/686167.pdf</a>
- <sup>77</sup> Government Accountability Office, "AIR AMBULANCE Available Data Show Privately-Insured Patients Are at Financial Risk," March 2019. <a href="https://www.gao.gov/assets/700/697684.pdf">https://www.gao.gov/assets/700/697684.pdf</a> >
- <sup>78</sup> Christina Caron, "Families Fight Back Against Surprise Air Ambulance Bills," New York Times, September 4, 2019. <a href="https://parenting.nytimes.com/childrens-health/air-ambulance-bills">https://parenting.nytimes.com/childrens-health/air-ambulance-bills</a>>
- <sup>79</sup> Danielle Ivory, Ben Protess and Kitty Bennett, "When You Dial 911 and Wall Street Answers," New York Times, June 25, 2016. <a href="https://www.nytimes.com/2016/06/26/business/dealbook/when-you-dial-911-and-wall-street-answers.html">https://www.nytimes.com/2016/06/26/business/dealbook/when-you-dial-911-and-wall-street-answers.html</a>



# **Endnotes**

- 80 https://www.wsj.com/articles/envision-healthcare-to-buy-rural-metro-an-ambulance-services-provider-1438290169
- 81 "AMR acquiring Rural/Metro corporation," EMS1, July 20, 2015. <a href="https://www.ems1.com/american-medical-response/articles/amr-acquiring-ruralmetro-corporation-an86zx296onmolXh/">https://www.ems1.com/american-medical-response/articles/amr-acquiring-ruralmetro-corporation-an86zx296onmolXh/</a>
- <sup>82</sup> Danielle Ivory, Ben Protess and Kitty Bennett, "When You Dial 911 and Wall Street Answers," New York Times, June 25, 2016. <a href="https://www.nytimes.com/2016/06/26/business/deal-book/when-you-dial-911-and-wall-street-answers.html">https://www.nytimes.com/2016/06/26/business/deal-book/when-you-dial-911-and-wall-street-answers.html</a>
- 83 https://www.ems1.com/rural-metro/articles/amr-completes-ruralmetro-acquisition-3R7gp92FfiBkFEre/
- <sup>84</sup> Tara Bannow, "KKR completes Envision acquisition," Modern Healthcare, October 11, 2018. <a href="https://www.modernhealthcare.com/article/20181011/NEWS/181019976/kkr-completes-envision-acquisition">https://www.modernhealthcare.com/article/20181011/NEWS/181019976/kkr-completes-envision-acquisition</a>
- 85 Sophea Chau and John Ferrara, "Q12019 Behavioral Healthcare Services," Capstone Headwaters, March 2019. <a href="http://capstoneheadwaters.com/sites/default/files/Capstone%20Headwaters%20Behavioral%20Healthcare%20Services%20M%26A%20Coverage%20Report\_Q1%202019.pdf">http://capstone%20Healthcare%20Services%20M%26A%20Coverage%20Report\_Q1%202019.pdf</a>
- <sup>86</sup> Jeanne Whalen and Laura Cooper, "Private-Equity Pours Cash Into Opioid-Treatment Sector," Wall Street Journal, September 2, 2017. <a href="https://www.wsj.com/articles/opioid-crisis-opens-opportunities-for-private-equity-firms-1504353601">https://www.wsj.com/articles/opioid-crisis-opens-opportunities-for-private-equity-firms-1504353601</a>>
- 87 "Centerbridge to take over Civitas for \$1.4B," Pitchbook, December 20, 2018. <a href="https://pitchbook.com/newsletter/centerbridge-to-take-over-civitas-for-14b">https://pitchbook.com/newsletter/centerbridge-to-take-over-civitas-for-14b</a>
- <sup>88</sup> "Centerbridge Partners Completes Acquisition of Civitas Solutions, Inc.," Press Release, March 8, 2019. <a href="https://www.businesswire.com/news/home/20190308005282/en/Center-bridge-Partners-Completes-Acquisition-Civitas-Solutions">https://www.businesswire.com/news/home/20190308005282/en/Center-bridge-Partners-Completes-Acquisition-Civitas-Solutions></a>
- 89 "BayMark Health Keeps Buying," Irving Levin Associates, May 7, 2019. <a href="https://healthcare.levinassociates.com/2019/05/07/baymark-health-keeps-buying/">https://healthcare.levinassociates.com/2019/05/07/baymark-health-keeps-buying/</a>
- <sup>90</sup> Sarah Pringle, "BayMark, Webster-backed opioid-treatment company, preps for sales process," Buyouts, January 2, 2019. <a href="https://www.pehub.com/buyouts/baymark-webster-backed-opioid-treatment-company-preps-for-sales-process/">https://www.pehub.com/buyouts/baymark-webster-backed-opioid-treatment-company-preps-for-sales-process/</a>>
- <sup>91</sup> Suhas Gondi, Zirui Song, MD, PhD, "Potential Implications of Private Equity Investments in Health Care Delivery," *JAMA*, February 28, 2019. <a href="https://jamanetwork.com/journals/jama/article-abstract/2727259">https://jamanetwork.com/journals/jama/article-abstract/2727259</a>
- <sup>92</sup> Compiled from Pitchbook data.
- <sup>93</sup> Jeanne Whalen and Laura Cooper, "Private-Equity Pours Cash Into Opioid-Treatment Sector," Wall Street Journal, September 2, 2017. <a href="https://www.wsj.com/articles/opioid-crisis-opens-opportunities-for-private-equity-firms-1504353601">https://www.wsj.com/articles/opioid-crisis-opens-opportunities-for-private-equity-firms-1504353601</a>>
- <sup>94</sup> Emily Rappleye, "Steward Health Care withholds financial information amid growth," *Becker's Hospital Review*, September 7, 2017. <a href="https://www.beckershospitalreview.com/finance/steward-health-care-withholds-financial-information-amid-growth.html">https://www.beckershospitalreview.com/finance/steward-health-care-withholds-financial-information-amid-growth.html</a>