

A smiling woman with short brown hair, wearing a light blue cardigan over a purple top, is seated in a wheelchair outdoors. She is holding a white document in her left hand and a black electronic device in her right hand. The background shows a blurred residential street with trees and houses under a clear blue sky.

# **PRIVATE EQUITY IN DURABLE MEDICAL EQUIPMENT**

**How Private Equity Profits Off of  
Disabled and Chronically Ill Americans**

**NOVEMBER 2023**

**PRIVATE EQUITY  
STAKEHOLDER  
PROJECT**



## About the Private Equity Stakeholder Project

The Private Equity Stakeholder Project is a nonprofit organization with a mission to identify, engage, and connect stakeholders affected by private equity to engage investors and empower communities, working families, and others impacted by private equity investments.

PEStakeholder.org

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## About National Disability Rights Network

The National Disability Rights Network (NDRN) is the nonprofit membership organization for the federally mandated Protection and Advocacy (P&A) Systems and the Client Assistance Programs (CAP) for individuals with disabilities.

NDRN.org

X @NDRNadvocates

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# KEY POINTS

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- Durable Medical Equipment (DME) refers to equipment and supplies ordered by a healthcare provider for everyday or extended use. It includes wheelchairs and other mobility aids, respiratory equipment, infusion pumps and supplies, blood sugar meters and test strips, and other equipment used to manage chronic health conditions or disabilities.
- Private equity firms have increasingly bought up DME manufacturers and suppliers and consolidated them. Through aggressive debt-funded growth strategies, a handful of PE-owned DME companies have grown from nonexistence to industry giants over the last decade.
- In recent years PE-owned DME companies have paid millions of dollars to settle allegations of healthcare billing fraud.
- The two largest suppliers of customized (manual and motorized) wheelchairs, within the larger category of Complex Rehabilitative Technology or CRT, are owned by private equity firms. Cost cutting at these companies has been linked to slow response times for repairs that harm wheelchair users.
- PE-owned DME companies have fought recent legislative efforts that seek to expand consumers' ability to repair their own wheelchairs.
- Four PE-owned DME companies are profiled in this report: Numotion (AEA Investors), National Seating & Mobility (Cinven), Apria Healthcare (Blackstone Group), and AdaptHealth (Quadrant Management).
- Private Equity Stakeholder Project and National Disability Rights Network propose several recommendations to curb potential harms by private equity profiteering in the DME industry, including combatting industry consolidation, supporting state right-to-timely-repair legislative efforts, asserting joint liability for private equity firms, and improving Medicare reimbursement models.
- An appendix provides a list of DME companies that are currently owned by private equity firms.

# INTRODUCTION

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Private equity's encroachment into healthcare services has increasingly attracted scrutiny by regulators, lawmakers, healthcare advocates, workers, and consumers. The business model, which targets high profits over relatively short periods of time and relies heavily on debt, has had demonstrably harmful impacts in nursing homes, hospitals, home health and hospice providers, and a range of other healthcare providers. However, private equity's impact extends beyond care delivery; firms have been buying up the companies that manufacture and supply the medical software, devices, and equipment that healthcare providers and consumers rely on.

This report examines the impacts of private equity's growing consolidation of the Durable Medical Equipment (DME) industry. DME is reusable medical equipment, like walkers, wheelchairs, infusion pumps, and oxygen equipment. In other words, DME encompasses the essential tools that many people with disabilities and chronic health conditions need to be able to live,

or to live independently (outside of medical facilities like nursing homes).

Over the last decade, private equity firms have increasingly bought up DME manufacturers and suppliers and consolidated them, using debt-funded growth strategies to achieve market dominance. The resulting companies are highly indebted, and are now seeking ways to cut costs to achieve the outsized returns demanded by their private equity owners.

This profit seeking has clear impacts. Cuts to staffing means that it can take weeks or even months for wheelchair users to get critical repairs. Companies are pushing consumers to bring their equipment into their central shops for repairs, also to cut down on staffing costs, which is often infeasible for individuals who are dependent on their wheelchairs for basic mobility and may have no means for transporting their broken equipment. Private equity firms meanwhile lobby against legislation that would require timely repair of wheelchairs they have provided or, being unable to get timely repairs from the companies themselves, would at least allow wheelchair users the right to repair and maintain their own wheelchairs. PE-owned respiratory and sleep equipment suppliers have paid settlements for defrauding the federal government, in one instance by allegedly pressuring sales representatives to upsell costly equipment to people who did not need it while the private equity firm was at the same time piling debt onto the company to fund payouts to itself.

The DME industry is facing many external challenges: flawed reimbursement structures, obstructive insurance prior authorization rules, supply chain disruptions, restrictive consumer laws, and others. But private equity, with its laser focus on boosting profits at all costs, creates many of the problems for consumers through its own cost-cutting policies. People who rely on DME—for mobility aids, managing diabetes, being able to sleep and breathe safely—should not pay the price for private equity's gamble.

# DME INDUSTRY OVERVIEW

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DME refers to equipment and supplies ordered by a healthcare provider for everyday or extended use, such as walking aids such as canes or walkers, mobility aids such as manual and power wheelchairs, infusion pumps and supplies, blood sugar (glucose) meters and test strips, hospital beds, sleep apnea equipment (such as CPAP machines), and oxygen equipment. Medicare defines DME as equipment that is durable, used for a medical reason, typically only useful to someone who is sick or injured, and is used in the home (i.e. excludes motorized scooters only used for mobility outside the home).<sup>1</sup> Medicaid applies the same definition for DME except that “medical necessity” has a broader meaning under Medicaid than under Medicare, and federal Medicaid regulations prohibit denials based on the fact that the equipment will be used outside the home (42 C.F.R. § 440.70).

The DME industry is large and growing; market research valued the US DME industry at almost \$60 billion as of 2022 and it is projected to have a 5.7% compound annual growth rate (CAGR) between 2023 and 2030.<sup>2</sup>

Demand for DME is increasing due to a variety of factors, including an aging population that will have greater reliance on DME products as well as rising incidence of chronic diseases, such as cancer, diabetes, and other disorders that impact mobility. Recent shifts favoring the delivery of medical care at home further increase demand for DME.<sup>3</sup>

Private equity firms have been among the drivers of growth and consolidation in the DME and medical supplies industry, making headlines for recent high-profile megadeals. Blackstone, Carlyle, and Hellman & Freidman’s \$30 billion acquisition of medical supplies and equipment company Medline Industries in 2021 was one of the biggest leveraged buyouts of all time.<sup>4</sup> Platinum Equity bought LifeScan, which supplies blood glucose monitoring products for people with diabetes, from Johnson & Johnson in a \$2.1 billion buyout in 2018.<sup>5</sup>



However, not all of private equity's inroads in the DME market have made headlines. Private equity firms have quietly been buying up and consolidating DME companies for years.

Drive DeVilbiss Healthcare, now one of the largest DME manufacturers in the US, is the product of multiple private equity mergers and buyouts. It was created in its current form in 2015 by the merger of wheelchair manufacturer Drive Medical, which had been owned by Ferrer Freeman & Company since 2008, and DeVilbiss Healthcare, a sleep products manufacturer owned by Vestar Capital Partners. Drive DeVilbiss Healthcare's current owner, private equity firm Clayton Dubilier & Rice, acquired the merged company in 2016.<sup>6</sup>

Two of the largest wheelchair suppliers, NuMotion and National Seating & Mobility, were also created through a series of acquisitions and "roll-ups" – a common PE strategy of using a platform company to acquire multiple smaller companies in the same industry and combine them.<sup>7</sup> Sleep equipment giant AdaptHealth, formerly known as QMES and Tri-County Medical Supply, acquired at least 56 other companies during its decade of private equity ownership.<sup>8</sup> All three companies are profiled later in this report.

A list of current PE-owned DME companies is available in the Appendix at the end of this report.

One potential driver of private equity's consolidation of the DME industry is Medicare's policy for determining what companies can be recognized as Medicare suppliers. Competitive bidding rules divide the country into regions, and suppliers bid to be able to supply to Medicare beneficiaries in that region. Medicare selects the lowest bidder that meets Medicare's accreditation standards.<sup>9</sup>

This process tends to favor large DME suppliers that can take advantage of economies of scale and negotiate lower rates with Medicare. This in turn can incentivize suppliers to prioritize partnerships with manufacturers that use lower cost, and consequently lower-quality, parts and equipment.<sup>10</sup>

## HEIGHTENED RISK OF FRAUD AMONG DME COMPANIES

Regulators consider DME suppliers to pose a high risk for fraud, waste, and abuse.<sup>11</sup>

From March 2020 to March 2022, the US Centers for Medicare and Medicaid Services (CMS) issued temporary waivers and flexibilities on Medicare requirements to help increase capacity of the provider workforce to respond to the COVID-19 pandemic. According to US General Accounting Office (GAO), such “waivers and flexibilities during emergencies can help maintain access to Medicare services but also pose risks by removing program safeguards.”<sup>12</sup>

In a review of that initiative, the GAO found that of the approximately 220,000 providers enrolled with CMS under the emergency waivers and flexibilities, DME suppliers accounted for just 4% of the total enrollments. However, they represented an overwhelming majority – 83% – of enrollments CMS later revoked after finding they were ineligible.<sup>13</sup>

The risk of fraud is evident in PE-owned DME companies, which have paid millions of dollars in recent years to settle allegations of fraud that occurred while under private equity ownership.

- December 2020: Respiratory equipment supplier Apria Healthcare agreed to pay \$40.5 million to settle allegations of fraudulent billing practices, including overbilling for non-invasive ventilators (NIVs).<sup>14</sup>
- March 2023: Wheelchair supplier Numotion agreed to pay \$7 million to settle claims of Medicaid fraud in Kentucky, Missouri, and Washington, D.C.<sup>15</sup>
- April 2023: DME supplier AdaptHealth (fka QMES and Tri-County Medical Equipment and Supply LLC) agreed to pay \$5.3 million to settle allegations that it defrauded federal healthcare programs.<sup>16</sup>

# WHEELCHAIRS

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One of the clearest examples of private equity's outsized impact on DME is its stranglehold on the customized wheelchair industry, also known as the CRT industry, where two PE-owned suppliers (profiled below) have gobbled up competitors and achieved dominant positions in the market: Numotion, owned by AEA Investors, and National Seating & Mobility (NSM), owned by Cinven.

Private equity's growing influence in the wheelchair industry poses risk to consumers. Private equity firms seek to double or triple their investment over short time periods (4-7 years), and typically use high levels of debt leveraged against the companies they own to acquire and grow those companies. These financial practices often necessitate significant cost cutting by the PE-owned companies to achieve the firms' high return expectations. In the wheelchair space, while the firms' own acquisition and profit goals are key drivers, inadequate insurance reimbursement policies for wheelchair repairs further incentivize companies to prioritize profitable service lines, such as

sales, while cutting spending on less profitable service lines, like technician staffing and training.

Medicare reimbursement policy for wheelchairs plays a critical role in the ways companies decide to cut costs. Medicare does not cover preventative maintenance for wheelchairs,<sup>17</sup> despite research showing that preventative maintenance can substantially decrease the likelihood of wheelchair accidents.<sup>18</sup> The Medicaid program, jointly administered by the federal government and state Medicaid agencies, also imposes rules that can impede access to wheelchair repairs, such as burdensome prior authorization for repairs of a device the Medicaid agency already approved as being medically necessary at the time it was purchased by it, and potentially inadequate reimbursement for repairs whether it grants prior authorization or not.<sup>19</sup>

Wheelchair breakdowns and repairs are highly prevalent. Research shows that approximately 64% of wheelchairs break down in a six-month period.<sup>20</sup> The rate of wheelchair breakdowns and repairs has steadily increased over the years.<sup>21</sup>

Such incidents are not just inconvenient – they can have highly adverse and even dangerous impacts for wheelchair users. Wheelchair users can be left stranded or isolated while waiting for repairs, such as being unable to get out of bed and risking decubitus ulcers (skin breakdown). Delays can also mean having to miss appointments, work or school and pose challenges to accessing groceries or supplies. In some cases, delays can lead to injuries, hospitalizations, and even death.<sup>22</sup> In addition, repairs can be very expensive; a recent survey of wheelchair users with spinal cord injuries found that out of pocket costs to repair ranged from \$50 to \$620, with a median cost of (\$150).<sup>23</sup>

Compounding the inadequate reimbursement policy for preventative maintenance is Medicare’s policy on labor time. While labor and parts are reimbursed, technicians’ travel time – including time to meet clients at their homes, examine wheelchairs, and return them – is not reimbursed.<sup>24</sup>

## Ian Watlington, Washington DC National Seating & Mobility

Ian Watlington has used a NuMotion wheelchair since Numotion purchased ATG Rehab, the company he previously worked with. Since then, Ian has experienced a series of issues with his wheelchair and repair delays. Ian explains that “the amount of emotional distress that NuMotion has caused I can’t even qualify. I’m so anxious about what’s going to be the next hiccup.”

Earlier this year, the back wheels on Ian’s wheelchair stopped working properly. After submitting a request for new tires, Ian waited six months for NuMotion to make the necessary repairs without offering Ian a backup. While NuMotion blamed the delays on his insurer, the power wheelchair manufacturer, and supply chain issues, Ian could not put his life on hold. An accessibility specialist at Amtrak, broken wheels meant that Ian could not go to work or attend social obligations. Ultimately, Ian paid out-of-pocket for a temporary fix so that he could leave his home. Since working with NuMotion, Ian estimates that he’s spent thousands of dollars on ad hoc repairs due to NuMotion delays.

After finally securing the back wheels, NuMotion informed Ian that their repair van could not find a safe place to park in his neighborhood, delaying installation for an additional month. Recently, Ian purchased a new wheelchair and decided he could no longer work with NuMotion. Instead, he bought a wheelchair from the one other customizable wheelchair provider he could find in Washington D.C.



Consequently, cost-cutting by private equity investors, exacerbated by Medicare and private insurance reimbursement policies, can mean reducing resources spent on those aspects of repair services that are made less profitable by reimbursement policy. For example, a former field service technician for AEA-owned Numotion told Mother Jones “I think Numotion tries to run a skeleton crew to minimize costs.” He said that he was responsible for about 1,500 to 2,000 customers, which meant having as many as 10 appointments a day.<sup>25</sup>

The two leading wheelchair suppliers, Numotion and National Seating & Mobility, are profiled below.

## **NUMOTION – AEA INVESTORS**

Numotion is a leading manufacturer of mobility products such as manual and powered wheelchairs and wheelchair parts. It is owned by AEA Investors, which acquired it in 2018 from private equity firms LLR Partners and Audax Group.<sup>26</sup>

LLR and Audax first created Numotion as a platform company in 2013 through the merger of LLR’s United Seating & Mobility with Audax’s ATG Rehab.<sup>27</sup> Since then, the combined company has acquired at least 25 of its wheelchair supply competitors across the country.<sup>28</sup>

Years of private equity ownership have saddled Numotion with substantial debt. AEA used approximately \$460 million in debt secured against Numotion to finance its leveraged buyout of the company in 2018.<sup>29</sup> Numotion is now considered a distressed company by credit rating agency Moody’s with a high probability of default. As of June 2022, its debt to EBITDA ratio was 7.2x. Moody’s noted in its latest rating of Numotion that the company’s poor credit impact score (CIS) “reflects highly negative governance considerations which reflect the company’s financial strategy and risk management resulting from ownership and control by private equity sponsors.”<sup>30</sup>

Costs related to litigation may put additional financial pressure on Numotion.

In March 2023, Numotion agreed to pay \$7 million to resolve fraud claims brought by the federal government. The government alleged that Numotion hid or failed to disclose discounts from DME manufacturers in order to receive higher reimbursement from Medicaid programs Kentucky, Missouri, and Washington, D.C., and “prioritized its financial incentives, to the detriment of these Medicaid programs.”<sup>31</sup>

In addition, personal injury lawsuits brought by Numotion’s customers plague the company. A 2022 investigation found that “Numotion has been the subject of at least 30 personal injury lawsuits across 18 states since 2015.”<sup>32</sup>

## **NATIONAL SEATING & MOBILITY – CINVEN**

National Seating & Mobility (NSM) is owned by European private equity firm Cinven. Like Numotion, NSM has been owned by various private equity firms which have pursued aggressive growth strategies over the last decade; Cinven acquired NSM from Court Square Capital Partners in 2019 for approximately \$850 million. Court Square had acquired NSM from Wellspring Capital Management in 2016,<sup>33</sup> and Wellspring first acquired NSM in 2013.<sup>34</sup>

Since Wellspring’s initial buyout of NSM in 2013, NSM has acquired at least 42 other companies.<sup>35</sup>

NSM has also accrued substantial debt under private equity ownership, with a 6.5x debt to EBITDA ratio as of December 2022 and a B2-PD Probability of Default Rating (PDR). In its rating of NSM, Moody’s notes the company’s highly negative credit impact score due to its private equity ownership.<sup>36</sup>

In connection with Cinven’s 2019 leveraged buyout, NSM took out approximately \$532.5 million in new debt.<sup>37</sup> Earlier that year NSM’s previous private equity owner, Court Square Capital Partners, added \$126.25 million in debt to NSM and subsequently paid itself a dividend.<sup>38</sup>

## Maureen Amirault, Connecticut Numotion

The suspension system on Maureen's power wheelchair provided by Numotion has failed four times in under two years. This has caused her chair to have steering issues, which caused the chair to not steer properly or fail to move at all. Most recently, her chair tipped forward and went into a skid while going down a hill.

Each repair has taken about 6-8+ weeks, which means her chair will have been inoperable for a total of 8 months within a 2-year period for the same issue.



Maureen has also been waiting for modified footplates and hip guides that she was first assessed for in June/July 2021. After the final evaluation, she did not hear back from Numotion even after calling the office multiple times. After emailing the CEO, VP, and every manager she knew at Numotion, she was given a reevaluation in August and was finally scheduled to have new footplates installed in October.

Because of the progression of her disability, Maureen is no longer able to easily move her feet on and off her footplates. Without properly fitted footplates, she has been unable to elevate her feet for the past three years and the integrity of her skin has suffered. She recently had to go to the ER because of a sore that was infected and not healing.



NSM’s credit risk is projected to improve, but that is in part due to “headcount reductions.”<sup>39</sup>

In March 2023, NSM announced that it will outsource its billing and collections department, permanently laying off 108 workers.<sup>40</sup> (The company it chose to outsource services to is AGS Health, which is also owned by a private equity firm.<sup>41</sup>) In other words, NSM’s workers are bearing the cost of its private equity-imposed debt burdens.

NSM has also had its share of litigation costs. For example, in 2015 NSM and German wheelchair manufacturer Sunrise Medical were together ordered to pay a \$9.8 million settlement to a plaintiff for causing life altering injuries as a result of defective wheelchair design, manufacture, warnings, and repair.<sup>42</sup>

Perhaps unsurprisingly, NSM’s codefendant Sunrise Medical has also been owned by private equity firms for many years: Vestar Capital Partners (2000-2012),<sup>43</sup> Equistone Partners (2012-2015), and Nordic Capital (2015-present).<sup>44</sup>

## **PE FIGHTS CONSUMERS’ RIGHT TO TIMELY REPAIR**

Disability rights advocates around the country have in recent years been fighting for mandates for timely repair of their wheelchairs or, in the absence of this, “right to repair” laws. The right to repair efforts seek to reform current laws that make it nearly impossible for consumers to repair and maintain their own powered wheelchairs, or even use independent repair providers, when the suppliers fail to provide timely repairs themselves, by allowing manufacturers to withhold access to the parts and information necessary to conduct repairs and maintenance.

At least 16 states have over the last year considered right to repair legislation that includes the right to wheelchair repair, including **Alaska, California, Delaware, Georgia, Hawaii, Iowa, Illinois, Maine, Michigan, Missouri, Montana, North Carolina, New Jersey, Pennsylvania, Tennessee,** and **Texas.**<sup>45</sup>

## Carol Berger, Connecticut National Seating & Mobility

Carol Berger uses a custom wheelchair supplied by National Seating & Mobility. Carol called NSM in July because she needed her wheelchair's joystick and tilt bar repaired. NSM informed her that they did not have any loaner chairs available, so she had to use her manual chair. Carol has complex spinal and hip deterioration and cannot sit in the manual wheelchair for more than an hour a day without experiencing pain. During that time she had to use the manual wheelchair for as many as 4 or 5 hours on some days, which caused her excruciating pain because she did not have the ability to tilt back or change her seating position. Outside of her minimal time in the manual chair, Carol was completely bed bound. She was unable to get outside for fresh air or enjoy any end-of-summer activities.



When Carol called to check on the status of her repair, NSM told her that they did not know about the tilt bar repair and had not ordered any of the parts. The repairs were not completed until October - over three months after she first contacted NSM.

In most states these efforts are ongoing, though some states have made significant progress. In 2022, Colorado became the first state to pass right to repair legislation, the Consumer Right to Repair Powered Wheelchairs Act (HB22-1031).<sup>46</sup> In November 2022, the Massachusetts Senate voted to support the Wheelchair Warranty Bill (S. 3136).<sup>47</sup>

Both the Colorado and Massachusetts bills were opposed by PE-owned DME companies. For example, a coalition of three DME industry associations submitted a letter in opposition to the Massachusetts legislation following its passage in the Senate, stating that it would “place undue burdens on providers and manufacturers” and establish “prescriptive response times” for repairs.<sup>48</sup>

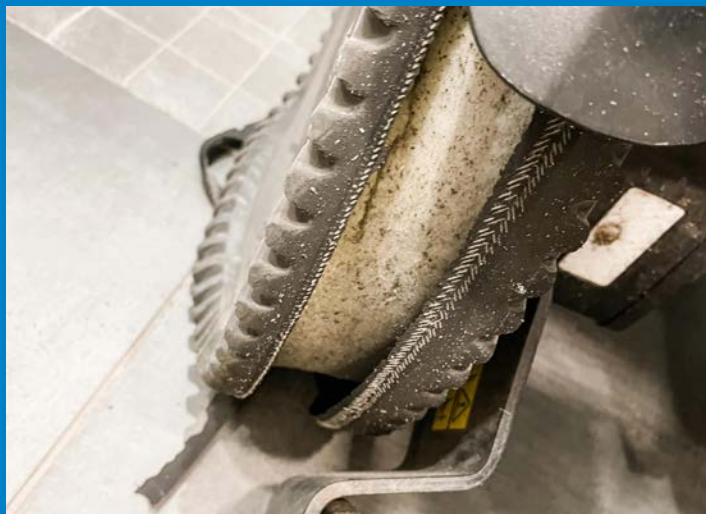
The three industry groups opposing the bill—NCART, American Association of Homecare (AAHomecare), and Home Medical Equipment and Services Association of New England (HOMES)—are all led by boards with significant representation by PE-owned DME companies.

- NCART’s board of directors includes<sup>49</sup> representatives from at least six PE-owned DME companies, including Numotion (AEA Investors)<sup>50</sup>, NSM (Cinven)<sup>51</sup>, Permobil (Investor AB/Particia Industries)<sup>52</sup>, Sunrise Medical (Nordic Capital),<sup>53</sup> Reliable Medical (GMH Ventures, Lakewood Capital),<sup>54</sup> and Ki Mobility (Nordstjernan).<sup>55</sup>
- AAHomecare’s board of directors includes<sup>56</sup> representatives from NSM, Permobil, Apria Healthcare (formerly Blackstone Group), React Health (One Equity Partners),<sup>57</sup> RestorixHealth (One Equity Partners, Silverfern Group)<sup>58</sup>, Spectrum Medical (CVC Capital),<sup>59</sup> CCS Medical (Riva Ridge Capital),<sup>60</sup> and AdaptHealth (formerly PE-owned, profiled above).
- HOMES’ board of directors includes<sup>61</sup> NSM, AdaptHealth, Drive DeVilbiss Healthcare (Clayton, Dubilier & Rice),<sup>62</sup> and Medline Industries (Blackstone, Carlyle and Hellman & Friedman).<sup>63</sup>

## Christine, Massachusetts National Seating & Mobility

Christine uses a customized wheelchair provided by NSM. A Massachusetts resident, Hudson Seating and Mobility previously provided Christine's wheelchair until NSM bought the company in 2014. Upon acquisition, NSM reorganized service provision, replacing Christine's wheelchair technician and branch office employees with new staff unfamiliar with Christine's needs.

In March 2023, Christine got new tires for her wheelchair manufactured by Permobil, also a private equity owned DME provider. With Christine's active lifestyle, tires typically last her approximately 9 months. However, by July 2023, her tires had completely worn out, making her wheelchair functionally unusable. As the photo accompanying this story demonstrates, the tires were "bald" and lacked any treading. Subsequently, Christine submitted the repair request to NSM for new tires and submitted a claim to her insurance provider. In the interim, Christine installed spare tires that were for a different design variation of her wheelchair and not an exact fit. By doing this, Christine risked voiding her wheelchair's warranty but had no other option: she could not move otherwise. Despite expediting her appeal with her insurance company, Christine's new tires were not installed until October 2023. NSM's repairs process and user terms forced Christine to use improperly fitting wheels for more than three months to move at all.



Similarly, NCART, NSM, Numotion, and Permobil each submitted testimony opposing the Colorado right to repair bill.<sup>64</sup>

However, more recently, advocates in Massachusetts and now Connecticut are pushing for legislation which directly imposes duties on the firms to timely repair the customized wheelchairs they themselves provided, with private or attorney general enforcement for non-compliance, or the imposition of “lemon law” sanctions for lack of timely repair. This approach is viewed by these advocates as more effective because a right to repair is of very limited utility to wheelchair users of limited financial means or limited physical abilities, both of which are highly common among the community of wheelchair users. A right to go to an independent repairer is of no use to a low-income individual on Medicaid unable to afford to pay that repairer for the work. In both states, the industry has opposed these types of bills as well. However, in Connecticut, advocates did secure legislation in 2023 which creates a task force charged, among other things, with making recommendations for what is a timely repair of CRT wheelchairs.<sup>65</sup>



# SLEEP AND RESPIRATORY EQUIPMENT



Two of the largest sleep and respiratory DME companies, Apria Healthcare and AdaptHealth, have been private equity owned for many years. They are profiled below.

## APRIA HEALTHCARE – BLACKSTONE

Apria Healthcare is a leading provider of home medical equipment specializing in home respiratory therapy, obstructive sleep apnea treatment, and negative pressure wound therapy (NPWT).<sup>66</sup>

From 2008 until its IPO in 2021, Apria was owned by private equity giant Blackstone Group. Over the course of Blackstone's ownership, the private equity firm reaped hundreds of millions of dollars in dividends and fees from Apria, even while the company was under investigation for fraud.

In December 2020, the US Attorney for the Southern District of New York announced that Apria agreed to pay \$40.5 million to settle allegations of

fraudulent billing practices.<sup>67</sup> According to the lawsuit, Apria engaged in several schemes in violation of the False Claims Act related to the rental of costly non-invasive ventilators (NIVs). Apria allegedly expanded its use of NIVs because programs like Medicaid paid as much as \$1,400 per month to cover their costs.<sup>68</sup>

In its complaint, the Department of Justice alleged that Apria executives tried to aggressively boost profits by taking advantage of the increased reimbursement rates for NIVs, establishing a goal for Apria to increase its NIV rental revenue from \$5 million in 2014 to \$30 million in 2015.<sup>69</sup>

According to the Department of Justice, Apria's leadership began implementing a variety of tactics to increase sales to achieve its lofty revenue goals, including instituting high sales targets with tens of thousands of dollars in annual bonuses, while terminating sales representatives who failed to meet targets. In addition, employees were allegedly directed to comb through medical records for existing oxygen and BiPAP clients to identify patients that salespeople could target for NIVs as well as push physicians to order the more expensive devices, even when the cheaper options could suit the same purpose.<sup>70</sup>

In a press release announcing the settlement, the US Attorney's Office wrote:

"...while Apria knew that it was responsible for monitoring patients' utilization of their NIVs and to stop billing when NIVs were no longer being used, it did not have enough staff, or 'respiratory therapists,' to conduct such monitoring. As a result, Apria routinely billed Medicare and other programs when it did not know whether NIVs were still being used by patients and, therefore, remained medically necessary. Further, even when Apria had information indicating that patients were no longer using their NIVs, it often continued to bill the federal health programs."<sup>71</sup>

Though Blackstone owned Apria for the duration of the alleged fraudulent activity and multiple Blackstone executives served on Apria's board,<sup>72</sup> it was not a party in the lawsuit.

## BLACKSTONE'S PROFITEERING

Just weeks before the fraud settlement was announced, Apria completed a \$260 million dividend recapitalization, taking on debt to pay a \$210 dividend to Blackstone and minority owners.<sup>73</sup>

This was not the first time Blackstone collected cash out of Apria; over the course of its ownership, Blackstone repeatedly took money out of the company through aggressive fees and dividends.

In 2008, Blackstone collected an \$18.7 million transaction fee related to its acquisition of the company.<sup>74</sup>

In 2010, Blackstone attempted to collect a \$500 million dividend from Apria but failed to receive consent from bondholders. Moody's downgraded Apria's credit rating nonetheless, citing the risk that Blackstone might pursue a similar transaction in the future.<sup>75</sup>

Additionally, Apria appears to have paid Blackstone millions of dollars in fees. Under a fee agreement signed when Blackstone took over the company in October 2008, Apria paid Blackstone an annual management fee equal to the greater of \$7 million or 2% of the Company's EBITDA for the preceding year, as well as a \$1.2 million fee for the year ended December 2008 (during which Blackstone owned Apria for less than three months). Under the agreement, Apria also paid a transaction fee equal to 1% of the value of any transactions (e.g. acquisition, divestiture, disposition, merger, consolidation, restructuring, refinancing, recapitalization). The agreement was set to terminate twelve years from the date of the agreement—October 28, 2020.<sup>76</sup>

Per the fee agreement, Blackstone would have collected a minimum of \$82.5 million in management fees alone by October 2020.



## **ADAPTHEALTH – QUADRANT MANAGEMENT**

*(fka QMES and Tri-County Medical Equipment and Supply)*

AdaptHealth is a provider of home medical equipment and medical supplies. Private equity ownership colors AdaptHealth's rise through an aggressive growth strategy; despite having only formed in 2012, it is now one of the leading DME companies in the US, with approximately 3 million patients in all 50 US states.

AdaptHealth's primary services include: 1. Sleep equipment, such as continuous positive airway pressure (CPAP) and bilevel positive airway pressure services (biPAP) products, 2. Medical supplies for people with diabetes, including glucose monitors and insulin pumps, 3. Home medical equipment for patients discharged from acute care facilities, and 4. Home-based oxygen and related chronic therapy services.<sup>77</sup>

Though AdaptHealth is now publicly traded, it was PE-owned from its founding until going public through a merger with a SPAC in 2020.<sup>78</sup> It began as a platform company originally called QMES, which private equity firm Quadrant Management created through a series of acquisitions and mergers beginning in 2012.<sup>79</sup>

Throughout that decade under private equity ownership AdaptHealth pursued an aggressive growth strategy, acquiring least 56 other firms and cutting administrative costs to boost profitability along the way.<sup>80</sup>

Even after its IPO, AdaptHealth continued growing through private equity-backed mergers. For example, in July 2020 One Equity Partners (OEP) invested \$190 million into AdaptHealth to finance its acquisition of Solara Medical Supplies, which distributes diabetic management products including continuous glucose monitors and insulin pumps, and ActivStyle, which provides incontinence and urology products to consumers.<sup>81</sup> OEP subsequently added one of its managing directors to AdaptHealth's board.<sup>82</sup>

In February 2021 AdeptHealth acquired its PE-owned competitor AeroCare, a respiratory and home medical equipment distributor, for approximately \$1.1

billion and 31 million shares of AdaptHealth stock.<sup>83</sup> AeroCare was owned by Peloton Equity, SkyKnight Capital, and SV Health Investors.<sup>84</sup> Peloton Equity subsequently added one of its managing director's to AdaptHealth's board.<sup>85</sup>

## **ALLEGED FRAUD AND PROFITEERING**

In April 2023, AdaptHealth agreed to pay \$5.3 million to settle allegations that it defrauded federal healthcare programs. In its lawsuit against AdaptHealth, the government alleged that between 2013 and 2017 (i.e. under ownership by Quadrant Management), the company “knowingly and willfully billed federal payors for non-invasive ventilators (NIVs) when a patient was instead prescribed and used a BiPAP machine—for which federal payors reimburse suppliers thousands of dollars less per year” and “continued billing federal payors for ventilators after patients no longer needed or were using them, and double-billed federal payors for some ventilator rentals in violation of program requirements.”<sup>86</sup>

In a press release announcing the settlement, United States Attorney Jacqueline C. Romero called for greater scrutiny of companies like AdaptHealth that disregard their obligations to comply with federal standards in order to “maximize their profits.”<sup>87</sup>

In March 2019, AdaptHealth took on new debt in part to finance a \$250 million payout to its owners.<sup>88</sup> Just a few months later, hedge fund and private equity firm Deerfield Management acquired the company with plans to take it public through a special purpose acquisition company (SPAC). At the time, AdaptHealth was the third largest distributor of DME with an enterprise value of \$1 billion.<sup>89</sup>

# POLICY RECOMMENDATIONS

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Urgent legislative and regulatory action is needed to ensure that private equity and other extractive investment models cannot hamper people's access to effective and affordable DME and related services. Below is a list of recommendations for lawmakers and regulators at the state and federal levels.

**Protect consumers' right to timely repair:**

States should support ongoing legislative efforts to require all DME suppliers to timely repair the equipment they have provided, including the imposition of specific timeliness standards, both during and after the warranty period, with private and state attorney general enforcement.

Timely repair legislation is especially needed for suppliers of Complex Rehabilitative Technology (CRT), where just two companies – National Seating and Mobility (NSM) and Numotion—dominate the market. Many people, regardless of their insurance (commercial, Medicare or Medicaid) find themselves subject to extraordinary wait times for replacement parts and service of their wheelchair. Numotion and NSM themselves state that customers should be prepared to wait as long as three months for the ordering and delivery of replacement parts.<sup>90</sup>

Right to repair legislation that requires manufacturers to provide access to information and tools used to diagnose problems and service, maintain, or repair equipment, so consumers can repair devices on their own should only be adopted as a back-stop, with the primary approach the imposition of the duty of timely repair directly on the suppliers who are both responsible and in the best position to conduct the repairs. Right to repair legislation should only be proposed as a supplement to the more direct solution of mandates for specific timeliness standards for repairs imposed on suppliers.

**Combat fraud by PE-owned healthcare companies:**

The Department of Justice (DOJ) should pursue action against private

equity firms whose portfolio companies, including DME suppliers and manufacturers, are found to commit Medicare or Medicaid fraud. There is **substantial overlap** between the risks associated with private equity ownership of healthcare companies and the activities targeted by the False Claims Act (FCA), the federal law that establishes liability for companies that defraud governmental programs such as Medicare and Medicaid.

Given the heightened risk for fraud in the DME space identified by CMS, and given the recent settlements paid by PE-owned DME companies for Medicare and Medicaid fraud, private equity firms should be held jointly liable for legal settlements paid by their portfolio companies.

**Combat industry consolidation:**

The Federal Trade Commission (FTC) should examine anticompetitive practices within DME markets, including scrutinizing healthcare deals involving private equity firm owners even if individual deals do not meet the typical threshold to trigger FTC review.

**Improve reimbursement models:**

Many states and private insurers require prior authorization for specialized equipment and items that cost more than a certain amount. State Medicaid programs should eliminate prior authorization for wheelchair repairs, and, where able to regulate, states should bar private insurers from imposing such requirements.

Preventative maintenance should be a covered benefit under Medicare, Medicaid, and private insurers, including for both primary and back-up wheelchairs.

Payors should include travel time, diagnosis time, repair labor, and parts in reimbursement.

# APPENDIX: LIST OF CURRENTLY PE-OWNED DME COMPANIES

Company	Employees	PE Firms	Latest PE investment
Company	Employees	PE Firms	Latest PE investment
Medline Industries	35,000	The Blackstone Group, The Carlyle Group, Hellman & Friedman, GIC and The Abu Dhabi Investment Authority	2021
Hanger	5,200	Patient Square Capital	2022
SunMed	3,000	Frazier Healthcare Partners	2021
Asker Healthcare Group	2,400	Nalka Invest	2019
Sunrise Medical	2,200	Nordic Capital, AlInvest Partners	2015

Company	Employees	PE Firms	Latest PE investment
LifeScan	2,064	Platinum Equity	2018
National Seating & Mobility	2,000	Cinven	2019
Tynor	1,800	Thuasne Group and Lighthouse Funds	2018
NuMotion	1,705	AEA Investors	2018
Medical Technology and Devices	1,700	Investindustrial, QuattroR, ATP Private Equity Partners	2022
Permobil	1,600	Patricia Industries/Investor AB	2013
Avacare Health	1,300	International Finance Corporation	2022
Etac	1,300	Nordstjernan	Undisclosed

<b>Company</b>	<b>Employees</b>	<b>PE Firms</b>	<b>Latest PE investment</b>
MobilityWorks	1,200	Flexpoint Ford	2018
BraunAbility	1,200	Patricia Industries	2015
NDC	1,125	Platinum Equity	2021
Joerns Healthcare	1,100	Littlejohn & Co., Barings LLC, Benefit Street Partners LLC, Golub Capital, Main Street Capital Corp	2019
IntriCon	1,000	Altaris Capital Partners	2022
Drive DeVilbiss Healthcare	762	Clayton and Dubilier & Rice	2017
Home Care Delivered	498	Beecken Petty O'Keefe & Company	2021
PartsSource	448	Bain Capital	2021

Company	Employees	PE Firms	Latest PE investment
PromptCare	275	Waud Capital Partners	2021
101 Mobility	242	The Halifax Group	2022
Stateserv Medical	210	WindRose Health Investors	2021
Advanced Diabetes Supply	195	Court Square	2020
TwinMed	190	Bison Capital Asset Management	2017
National HME	180	New Mountain Capital	2018
DASCO Home Medical Equipment	173	Silver Oak Services Partners	2020
Compass Health Brands	161	GMB Capital Partners	2020



<b>Company</b>	<b>Employees</b>	<b>PE Firms</b>	<b>Latest PE investment</b>
Montgomery DME		Incline Equity Partners	2022
Lifeway Mobility (formerly EHLS)		Cressey & Company	2021
NPL Home Medical Equipment		Zapis Capital Group	2020
Mini Pharmacy Enterprises		Angeles Equity Partners	2019
Altimate Medical		Granite Equity Partners	2017
NOA Medical Industries		Osprey Capital	2021
loe Care Health		Hepco Capital Management and Wasson Enterprise	2022
Oxygen Concentrator Store		Crescendo Capital Partners	2009

Company	Employees	PE Firms	Latest PE investment
Diathrive		Aries Capital Partners and ERG Enterprises	2019
APA Medical Equipment		WSC & Company and Icosian Capital	2023
OJ Medtech		Eagle Private Capital, UpstreamCapital and Drake Partners	2018
Nuance Medical		MD Holdings and Medallion Capital	2020
SweetMotion		Aspire Ventures	Undisclosed
America's Lift Chair		Live Oak Merchant Partners	2020
Community Home Medical		JP Capital Management	Undisclosed
Healthcare Safety Holdings		CNL Strategic Capital	2020

<b>Company</b>	<b>Employees</b>	<b>PE Firms</b>	<b>Latest PE investment</b>
JQ Medical Supply		Tacoma Investment Holdings, WSC & Company and Orchard Ventures	2021
SG Homecare		Sverica Capital Management	2022
South Bay Home Health Care		Brookside Capital Partners, Northcreek Mezzanine and Devonshire Partners	2021
CCS		Riva Ridge Capital	2020
Veridian Healthcare		HealthEdge Investment Partners, United Western Group, A-CAP	2023

# ENDNOTES

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- 1 “Durable Medical Equipment Coverage,” Medicare.gov, accessed August 18, 2023, <https://www.medicare.gov/coverage/durable-medical-equipment-dme-coverage>.
- 2 “U.S. Durable Medical Equipment Market Size, Share & Trends Analysis Report By Product (Monitoring And Therapeutic Devices, Personal Mobility Devices), And Segment Forecasts, 2023 - 2030”, Grand View Research. <https://www.grandviewresearch.com/industry-analysis/us-durable-medical-equipment-dme-market>
- 3 “U.S. Durable Medical Equipment Market Size, Share & Trends Analysis Report By Product (Monitoring And Therapeutic Devices, Personal Mobility Devices), And Segment Forecasts, 2023 - 2030”, Grand View Research. <https://www.grandviewresearch.com/industry-analysis/us-durable-medical-equipment-dme-market> ; Kevin Palamara and Brendan Schroeder. “M&A in Durable Medical Equipment Market Trends and The Impact of COVID-19,” Provident Healthcare Partners. <https://www.providenthp.com/wp-content/uploads/2020/04/MA-in-Durable-Medical-Equipment-Market-Trends-and-The-Impact-of-COVID-19-vF.pdf>.
- 4 Cara Lombardo and Miriam Gottfried, “Private-Equity Group Reaches Deal to Buy Medline for Over \$30 Billion,” Wall Street Journal, June 5, 2021, <https://www.wsj.com/articles/group-including-blackstone-nears-deal-to-buy-medline-for-over-30-billion-11622910788>.
- 5 “Platinum Equity Completes \$2.1 Billion Acquisition of LifeScan from Johnson & Johnson,” Platinum Equity, October 1, 2018, <https://www.platinumequity.com/news/platinum-equity-completes-2-1-billion-acquisition-of-lifescan/>.
- 6 Nathan Williams, “CD&R Acquires \$800m Drive DeVilbiss,” Private Equity International, September 1, 2016, <https://www.privateequityinternational.com/cdr-acquires-800m-drive-devilbiss/>.
- 7 Pitchbook profile for Numotion, accessed July 2023. <https://my.pitchbook.com/profile/56007-10/company/profile#investments>

; Pitchbook profile for National Seating & Mobility, accessed July 2023. <https://my.pitchbook.com/profile/12250-63/company/profile#investments>

- 8 Joseph DiStefano, “Fast-Growing Home Medical Supplier AdaptHealth to Raise Cash, Go Public,” Philadelphia Inquirer, July 8, 2019, <https://www.inquirer.com/business/phillydeals/adapthealth-ipo-home-healthcare-medical-equipment-plymouth-meeting-20190708.html>.
- 9 Kevin Palamara and Brendan Schroeder. “M&A in Durable Medical Equipment Market Trends and The Impact of COVID-19,” Provident Healthcare Partners. <https://www.providenthp.com/wp-content/uploads/2020/04/MA-in-Durable-Medical-Equipment-Market-Trends-and-The-Impact-of-COVID-19-vF.pdf> pg. 5.
- 10 Kevin Palamara and Brendan Schroeder. “M&A in Durable Medical Equipment Market Trends and The Impact of COVID-19,” Provident Healthcare Partners. <https://www.providenthp.com/wp-content/uploads/2020/04/MA-in-Durable-Medical-Equipment-Market-Trends-and-The-Impact-of-COVID-19-vF.pdf> pg. 5.
- 11 Government Accountability Office, “CMS Needs to Address Risks Posed by Provider Enrollment Waivers and Flexibilities,” GAO-23-105494, December 2022. <https://www.gao.gov/assets/gao-23-105494.pdf>. Pg. 1.
- 12 Government Accountability Office, “CMS Needs to Address Risks Posed by Provider Enrollment Waivers and Flexibilities,” GAO-23-105494, December 2022. <https://www.gao.gov/assets/gao-23-105494.pdf>. Pg. 1.
- 13 Government Accountability Office, “CMS Needs to Address Risks Posed by Provider Enrollment Waivers and Flexibilities,” GAO-23-105494, December 2022. <https://www.gao.gov/assets/gao-23-105494.pdf>. Pg. 1.
- 14 “Acting Manhattan U.S. Attorney Announces \$40.5 Million Settlement With Durable Medical Equipment Provider Apria Healthcare For Fraudulent Billing Practices,” United States Department of Justice, December 21, 2020, <https://www.justice.gov/usao-sdny/pr/acting-manhattan-us-attorney-announces-405-million-settlement-durable-medical-equipment>.
- 15 “Medical Equipment Company Pays \$7 Million to Resolve False Claims Act Allegations,” United States Department of Justice, March 1, 2023, <https://www.justice.gov/usao-edky/pr/medical-equipment-company-pays-7-million-resolve-false-claims-act-allegations>.
- 16 “Plymouth Meeting, Pa Company to Pay \$5.3 Million to Resolve False

- Claims Act Allegations Related to False Billing For Respiratory Devices,” United States Department of Justice, April 21, 2023, <https://www.justice.gov/usao-edpa/pr/plymouth-meeting-pa-company-pay-53-million-resolve-false-claims-act-allegations>.
- 17 “DME Repairs and Maintenance,” Medicare Interactive (blog), accessed August 18, 2023, <https://www.medicareinteractive.org/get-answers/medicare-covered-services/durable-medical-equipment-dme/dme-repairs-and-maintenance>.
- 18 Anand Mhatre et al., “Community-Based Wheelchair Caster Failures Call for Improvements in Quality and Increased Frequency of Preventative Maintenance,” *Spinal Cord* 60, no. 1 (January 2022): 58–62, <https://doi.org/10.1038/s41393-021-00689-3>.
- 19 MACPAC, “Durable Medical Equipment Fee-for-Service Payment Policy,” July 2019. <https://www.macpac.gov/publication/durable-medical-equipment-fee-for-service-payment-policy/>
- 20 Maria Luisa Toro et al., “Type and Frequency of Reported Wheelchair Repairs and Related Adverse Consequences Among People With Spinal Cord Injury,” *Archives of Physical Medicine and Rehabilitation* 97, no. 10 (October 2016): 1753–60, <https://doi.org/10.1016/j.apmr.2016.03.032>.
- 21 Lynn Worobey et al., “Increases in Wheelchair Breakdowns, Repairs, and Adverse Consequences for People with Traumatic Spinal Cord Injury,” *American Journal of Physical Medicine & Rehabilitation* 91, no. 6 (June 2012): 463–69, <https://doi.org/10.1097/PHM.0b013e31825ab5ec>.
- 22 Paul Roberts, “Stranded: Repair Restrictions Immobilize Wheelchair Users,” US PIRG Education Fund, May 2022. [https://pirg.org/wp-content/uploads/2022/05/USPIRGEF\\_Stranded\\_June2022.pdf](https://pirg.org/wp-content/uploads/2022/05/USPIRGEF_Stranded_June2022.pdf) Pg. 4.
- 23 Lynn A. Worobey et al., “Factors Influencing Incidence of Wheelchair Repairs and Consequences Among Individuals with Spinal Cord Injury,” *Archives of Physical Medicine and Rehabilitation* 103, no. 4 (April 2022): 779–89, <https://doi.org/10.1016/j.apmr.2021.01.094>.
- 24 Markian Hawryluk, “Despite a First-Ever ‘Right-to-Repair’ Law, There’s No Easy Fix for Wheelchair Users,” KFF Health News, June 2, 2022, <https://kffhealthnews.org/news/article/power-wheelchair-users-right-to-repair-law-no-easy-fix/>.
- 25 Paul Roberts, “Two Behemoths Dominate the Motorized Wheelchair

- Industry. Disabled Customers Pay the Price. – Mother Jones,” Mother Jones, May 2022, <https://www.motherjones.com/politics/2022/05/motorized-wheelchairs-numotion-national-seating-mobility/>.
- 26 “AEA Investors LP Acquires Numotion, the Nation’s Leading Provider of Complex Rehab Technology (CRT),” Numotion, November 13, 2018, <https://numotion.com/about-us/news/aea-investors-lp-acquires-numotion-the-nation-s-l>.
- 27 Amy Or, “ATG Rehab Merges With United Seating & Mobility,” Wall Street Journal, January 3, 2013, <https://www.wsj.com/articles/DJFLBO0020130103e913rbuuf>.
- 28 Pitchbook profile for Numotion, accessed July 2023. <https://my.pitchbook.com/profile/56007-10/company/profile#investments>.
- 29 “Moody’s Assigns B2 CFR to Acquirer of Numotion,” Moodys Investor Service, October 8, 2018, [https://www.moodys.com/research/Moodys-assigns-B2-CFR-to-acquirer-of-Numotion-Rating-Action--PR\\_389907](https://www.moodys.com/research/Moodys-assigns-B2-CFR-to-acquirer-of-Numotion-Rating-Action--PR_389907).
- 30 “Moody’s Downgrades NMN Holdings III Corp.’s CFR to B3, Outlook Remains Negative,” Moody’s Investor Service, November 11, 2022, [https://www.moodys.com/research/Moodys-downgrades-NMN-Holdings-III-Corps-CFR-to-B3-outlook-Rating-Action--PR\\_471194](https://www.moodys.com/research/Moodys-downgrades-NMN-Holdings-III-Corps-CFR-to-B3-outlook-Rating-Action--PR_471194).
- 31 “Medical Equipment Company Pays \$7 Million to Resolve False Claims Act Allegations,” United States Department of Justice, March 1, 2023, <https://www.justice.gov/usao-edky/pr/medical-equipment-company-pays-7-million-resolve-false-claims-act-allegations>.
- 32 Paul Roberts, “Two Behemoths Dominate the Motorized Wheelchair Industry. Disabled Customers Pay the Price. – Mother Jones,” Mother Jones, May 2022, <https://www.motherjones.com/politics/2022/05/motorized-wheelchairs-numotion-national-seating-mobility/>.
- 33 Sarah Pringle, “Cinven Buys National Seating & Mobility in ~\$850 Mln Transaction,” PE Hub, October 4, 2019, <https://webcache.googleusercontent.com/search?q=cache:J7wlxw8VYhQJ:https://www.pehub.com/cinven-buys-national-seating-mobility-in-850-mln-transaction/&cd=12&hl=en&ct=clnk&gl=us>.
- 34 Wellspring Capital Management, “Wellspring Capital Management Acquires National Seating & Mobility,” PR Newswire, January 2, 2013, <https://www.prnewswire.com/news-releases/wellspring-capital->

- management-acquires-national-seating--mobility-185419792.html.
- 35 Pitchbook profile for National Seating & Mobility, accessed July 2023. <https://my.pitchbook.com/profile/12250-63/company/profile#investments>
- 36 “Moody’s Affirms National Seating’s B2 Corporate Family Rating, Revises Outlook to Negative | Rating Action | Moody’s,” Moody’s Investor Service, December 2, 2022, [https://www.moody.com/research/Moodys-affirms-National-Seatings-B2-Corporate-Family-Rating-revises-outlook-Rating-Action--PR\\_472036](https://www.moody.com/research/Moodys-affirms-National-Seatings-B2-Corporate-Family-Rating-revises-outlook-Rating-Action--PR_472036).
- 37 “Moody’s Assigns B2 CFR to NSM Top Holdings Corp.,” Moody’s Investor Service, October 24, 2019, [https://www.moody.com/research/Moodys-assigns-B2-CFR-to-NSM-Top-Holdings-Corp-Rating-Action--PR\\_412225](https://www.moody.com/research/Moodys-assigns-B2-CFR-to-NSM-Top-Holdings-Corp-Rating-Action--PR_412225).
- 38 Pitchbook profile for National Seating and Mobility, accessed August 2023. <https://my.pitchbook.com/profile/12250-63/company/profile#deal-history/108330-94T>
- 39 “Moody’s Affirms National Seating’s B2 Corporate Family Rating, Revises Outlook to Negative | Rating Action | Moody’s,” Moody’s Investor Service, December 2, 2022, [https://www.moody.com/research/Moodys-affirms-National-Seatings-B2-Corporate-Family-Rating-revises-outlook-Rating-Action--PR\\_472036](https://www.moody.com/research/Moodys-affirms-National-Seatings-B2-Corporate-Family-Rating-revises-outlook-Rating-Action--PR_472036).
- 40 Dave Flessner, “National Seating & Mobility to Lay off 108 Workers in Chattanooga | Chattanooga Times Free Press,” Chattanooga Times Free Press, March 10, 2023, <https://www.timesfreepress.com/news/2023/mar/10/national-seating-mobility-to-lay-off-108-workers/> ; WARN letter to STATE OF TENNESSEE DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT by National Seating & Mobility, Inc. Filed March 2, 2023. WARN # 202300012. <https://www.tn.gov/content/dam/tn/workforce/documents/majorpublications/reports-02/National-Seating-Mobility-TDLWD-WARN-LETTER.pdf>
- 41 EQT Private Equity website, current portfolio. Accessed August 2023. <https://eqtgroup.com/current-portfolio/ags-health/>
- 42 “\$9.8M Awarded in Defective Wheelchair Injury Lawsuit,” Lawyers and Settlements, July 20, 2017, <https://www.lawyersandsettlements.com/settlements/19543/9-8m-awarded-in-defective-wheelchair-injury-lawsuit.html>.
- 43 “Sunrise Medical to Be Acquired by Equistone Partners Europe,”



- Equistone PE, November 6, 2012, <https://www.equistonepe.com/news/news-detail>.
- 44 “Nordic Capital Acquires Sunrise Medical from Equistone,” Nordic Capital, June 11, 2015, <https://www.nordiccapital.com/news-views/press-releases/nordic-capital-acquires-sunrise-medical-from-equistone/>.
- 45 “Right To Repair,” PIRG, August 2, 2023, <https://pirg.org/campaigns/right-to-repair/>.
- 46 John Cooke et al., “Consumer Right To Repair Powered Wheelchairs,” Pub. L. No. HB22-1031. <https://leg.colorado.gov/bills/hb22-1031>
- 47 “Wheelchair Repair Bill,” Disability Law Center Massachusetts, November 4, 2022, <https://www.dlc-ma.org/2022/11/04/wheelchair-repair-bill-press-release/>.
- 48 Letter by Home Medical Equipment & Services Association of New England (HOMES), National Coalition for Assistive and Rehab Technology (NCART), and American Association for Homecare (AAHomecare) Re: Opposition to S. 3136. November 7, 2022. [https://mcusercontent.com/3c0f3755f13930464597f245a/files/a711a3cf-5918-b3e6-fbc8-6defe68668d9/S.\\_3136\\_\\_House\\_MA\\_11\\_7\\_22.pdf](https://mcusercontent.com/3c0f3755f13930464597f245a/files/a711a3cf-5918-b3e6-fbc8-6defe68668d9/S._3136__House_MA_11_7_22.pdf)
- 49 NCART website, accessed August 2023. <https://www.ncart.us/about-us/ncart-leadership>
- 50 “AEA Investors LP Acquires Numotion, the Nation’s Leading Provider of Complex Rehab Technology (CRT),” Numotion, November 13, 2018, <https://numotion.com/about-us/news/aea-investors-lp-acquires-numotion-the-nation-s-l>.
- 51 “Cinven to Invest in National Seating & Mobility,” Cinven, October 4, 2019, <https://www.cinven.com/media/news/cinven-to-invest-in-national-seating-mobility/>.
- 52 “Nordic Capital Sells Permobil for 655 Million Euros,” Reuters, March 27, 2013, sec. Business News, <https://www.reuters.com/article/uk-permobil-sale-idUKBRE92Q0UO20130327>.
- 53 “Sunrise Medical | Investments,” Nordic Capital, accessed August 18, 2023, <https://www.nordiccapital.com/portfolio-cases/investments/sunrise-medical/>.
- 54 Dynamic Healthcare Services, “Dynamic Healthcare Services Acquires Reliable Medical Inc. of Hackensack, New Jersey,” February 19,

- 2014, <https://www.prnewswire.com/news-releases/dynamic-health-care-services-acquires-reliable-medical-inc-of-hackensack-new-jersey-246176841.html>.
- 55 “Nordstjernan’s Subsidiary Etac Invests in Ki Mobility,” Private Equity Wire, October 6, 2021, sec. Deals & Transactions, <http://www.private-equitywire.co.uk/2021/10/06/307244/nordstjernans-subsidiary-etac-invests-ki-mobility>.
- 56 AAHomecare website, accessed August 2023. <https://www.aahomecare.org/about/board>.
- 57 “One Equity Partners Completes Investment in React Health, a Leading Sleep Therapy, Respiratory Therapy and Disinfection Products Manufacturer and Distributor,” One Equity Partners, May 5, 2022, <https://www.oneequity.com/news/newsarticle/5246>.
- 58 “American Medical Technologies and RestorixHealth Announce Transformational Merger to Create Industry-Leading Advanced Wound Care Management Company,” PR Newswire, March 2, 2021, <https://www.prnewswire.com/news-releases/american-medical-technologies-and-restorixhealth-announce-transformational-merger-to-create-industry-leading-advanced-wound-care-management-company-301238314.html>.
- 59 “CVC Fund VIII Invests in Spectrum Medical Group,” CVC, accessed August 18, 2023, <https://www.cvc.com/media/news/2022/2022-07-18-cvc-fund-viii-invests-in-spectrum-medical-group/>.
- 60 CCS, “CCS Announces Company Expansion Focused on Accelerating Innovation in Home-Based Diabetes Care Management,” PR Newswire, August 10, 2022, <https://www.prnewswire.com/news-releases/ccs-announces-company-expansion-focused-on-accelerating-innovation-in-home-based-diabetes-care-management-301602871.html>.
- 61 HOMES website, accessed August 2023. <https://www.homesne.org/bod>.
- 62 Nathan Williams, “CD&R Acquires \$800m Drive DeVilbiss,” Private Equity International, September 1, 2016, <https://www.privateequityinternational.com/cdr-acquires-800m-drive-devilbiss/>.
- 63 “Blackstone, Carlyle and Hellman & Friedman to Invest in Medline,” Blackstone (blog), June 5, 2021, <https://www.blackstone.com/news/press/blackstone-carlyle-and-hellman-friedman-to-invest-in-medline/>.

- 64 HB22-1031 - Amended, referred to the Committee of the Whole Bill Summary. April 18, 2022. <https://leg.colorado.gov/content/e9f26ef61d873a1b-87258828006c0ae5-hearing-summary>
- 65 Katie Pellico, Catherine Shen, “Wheelchair repairs can take months: What local advocates are doing to change that,” WNPR, July 17, 2023. <https://www.ctpublic.org/show/where-we-live/2023-07-17/wheelchair-repairs-can-take-months-what-local-advocates-are-doing-to-correct-that>
- 66 Apria, Inc., Form S-1 Registration Statement, Securities and Exchange Commission. Filed June 7, 2021. <https://www.sec.gov/Archives/edgar/data/1735803/000119312521184385/d182907ds1.htm> pg. 1.
- 67 “Acting Manhattan U.S. Attorney Announces \$40.5 Million Settlement With Durable Medical Equipment Provider Apria Healthcare For Fraudulent Billing Practices,” United States Department of Justice, December 21, 2020, <https://www.justice.gov/usao-sdny/pr/acting-manhattan-us-attorney-announces-405-million-settlement-durable-medical-equipment>.
- 68 “Acting Manhattan U.S. Attorney Announces \$40.5 Million Settlement With Durable Medical Equipment Provider Apria Healthcare For Fraudulent Billing Practices,” United States Department of Justice, December 21, 2020, <https://www.justice.gov/usao-sdny/pr/acting-manhattan-us-attorney-announces-405-million-settlement-durable-medical-equipment>.
- 69 UNITED STATES OF AMERICA, et al. ex rel. MARTINEZ, v APRIA HEALTHCARE GROUP, INC. and APRIA HEALTHCARE LLC., No. 17 Civ. 1059 (ER). <https://www.justice.gov/usao-sdny/press-release/file/1347286/download> pg. 14-15.
- 70 UNITED STATES OF AMERICA, et al. ex rel. MARTINEZ, v APRIA HEALTHCARE GROUP, INC. and APRIA HEALTHCARE LLC., No. 17 Civ. 1059 (ER). <https://www.justice.gov/usao-sdny/press-release/file/1347286/download> pg. 15.
- 71 “Acting Manhattan U.S. Attorney Announces \$40.5 Million Settlement With Durable Medical Equipment Provider Apria Healthcare For Fraudulent Billing Practices,” United States Department of Justice, December 21, 2020, <https://www.justice.gov/usao-sdny/pr/acting-manhattan-us-attorney-announces-405-million-settlement-durable-medical-equipment>.
- 72 Michael Audet and Neil Simkins, <https://web.archive.org/web/20201201210058/https://www.apria.com/investor-relations/>

- board-of-directors/ , accessed Dec 31, 2020.
- 73 Apria, Inc., Form S-1 Registration Statement, Securities and Exchange Commission. Filed June 7, 2021. <https://www.sec.gov/Archives/edgar/data/1735803/000119312521010085/d62545ds1.htm> pg. 14.
- 74 Apria Healthcare Group Inc. Form S-4 Registration Statement. Securities and Exchange Commission. Filed July 16, 2010. <https://www.sec.gov/Archives/edgar/data/820609/000119312510160027/ds4.htm>
- 75 “Moody’s Confirms Apria’s Ratings (Ba3 CFR); Outlook to Negative,” Moody’s Investor Service, April 16, 2010, [https://www.moody.com/research/Moodys-confirms-Aprias-ratings-Ba3-CFR-outlook-to-negative-Rating-Action--PR\\_197991](https://www.moody.com/research/Moodys-confirms-Aprias-ratings-Ba3-CFR-outlook-to-negative-Rating-Action--PR_197991).
- 76 Apria Healthcare Group Inc. Form S-4 Registration Statement. Securities and Exchange Commission. Filed July 16, 2010. <https://www.sec.gov/Archives/edgar/data/820609/000119312510160027/ds4.htm>
- 77 AdaptHealth Corp. Form S-3 Registration Statement, Securities and Exchange Commission, Filed June 28, 2021. [https://www.sec.gov/Archives/edgar/data/1725255/000110465921086386/tm2118057-1\\_s3.htm#tWYCF](https://www.sec.gov/Archives/edgar/data/1725255/000110465921086386/tm2118057-1_s3.htm#tWYCF) pg. 1.
- 78 “AdaptHealth Corp. Announces Pricing of Upsized Public Offering of Class A Common Stock,” PR Newswire, July 1, 2020, <https://www.businesswire.com/news/home/20200701005488/en/AdaptHealth-Corp.-Announces-Pricing-of-Upsized-Public-Offering-of-Class-A-Common-Stock>.
- 79 Sarah Pringle, “Quadrant Eyes Sale of QMES, Medical Equipment Provider | PE Hub,” PE Hub, November 12, 2018, <https://webcache.googleusercontent.com/search?q=cache:QUZ0JNZCOAIJ:https://www.pehub.com/quadrant-eyes-sale-of-qmes-medical-equipment-provider/&c-d=9&hl=en&ct=clnk&gl=us>.
- 80 Joseph DiStefano, “Fast-Growing Home Medical Supplier AdaptHealth to Raise Cash, Go Public,” Philadelphia Inquirer, July 8, 2019, <https://www.inquirer.com/business/phillydeals/adapthealth-ipo-home-healthcare-medical-equipment-plymouth-meeting-20190708.html>.
- 81 “One Equity Partners Completes \$190 Million Investment in AdaptHealth,” One Equity Partners, July 2, 2020, <https://www.oneequity.com/news/newsarticle/4163>.
- 82 “AdaptHealth Adds Director to Board,” HME News, October 4, 2021,

- <https://www.hmenews.com/article/adapthealth-adds-director-to-board>.
- 83 SkyKnight Capital, “AeroCare Announces Completion of Acquisition by AdaptHealth,” PR Newswire, February 2, 2021, <https://www.prnewswire.com/news-releases/aerocare-announces-completion-of-acquisition-by-adapthealth-301219622.html>.
- 84 Iris Dorian, “AdaptHealth to Buy PE-Backed AeroCare,” content, PE Hub (blog), December 1, 2020, <https://www.pehub.com/adapthealth-to-buy-pe-backed-aerocare/>.
- 85 AdaptHealth Corp. Schedule 14A Proxy Statement, Securities and Exchange Commission. June 22, 2022. [https://www.sec.gov/Archives/edgar/data/1725255/000110465922053936/tm2214055d1\\_def14a.htm](https://www.sec.gov/Archives/edgar/data/1725255/000110465922053936/tm2214055d1_def14a.htm) pg. 11.
- 86 “Plymouth Meeting, Pa Company to Pay \$5.3 Million to Resolve False Claims Act Allegations Related to False Billing For Respiratory Devices,” United States Department of Justice, April 21, 2023, <https://www.justice.gov/usao-edpa/pr/plymouth-meeting-pa-company-pay-53-million-resolve-false-claims-act-allegations>.
- 87 “Plymouth Meeting, Pa Company to Pay \$5.3 Million to Resolve False Claims Act Allegations Related to False Billing For Respiratory Devices,” United States Department of Justice, April 21, 2023, <https://www.justice.gov/usao-edpa/pr/plymouth-meeting-pa-company-pay-53-million-resolve-false-claims-act-allegations>.
- 88 AdaptHealth Corp. Form 10-K for the fiscal year ended December 31, 2020. Securities and Exchange Commission. [https://www.sec.gov/ix?doc=/Archives/edgar/data/1725255/000155837021003089/ah-co-20201231x10k.htm#ConsolidatedStatementsofCashFlows\\_941372](https://www.sec.gov/ix?doc=/Archives/edgar/data/1725255/000155837021003089/ah-co-20201231x10k.htm#ConsolidatedStatementsofCashFlows_941372) pg. 100.
- 89 “DFB Healthcare to Acquire AdaptHealth Holdings,” Paul Hastings, July 10, 2019, <https://www.paulhastings.com/news/news-dfb-healthcare-to-acquire-adapthealth-holdings>.
- 90 Numotion website, “Navigating the Order Process – Timeline.” Accessed August 2023. <https://www.numotion.com/navigating-the-ordering-process/timeline> ; NSM website, “Service & Repair – Repair Timeline.” Accessed August 2023. <https://www.nsm-seating.com/service-repair/>



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