JOURNAL OF HEALTH CARE FINANCE

Winter 2020

Leveraging the Future of Healthcare:

Private Equity's Changing Role in Healthcare Delivery, Performance, and Quality

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ABSTRACT

Scholars, reporters, administrators, and clinicians alike have debated the benefits and detriments of private equity investment in healthcare for more than two decades. Yet, nearly all healthcare leaders agree that further consolidation is coming. While our healthcare system is quickly evolving toward value-based and population health-focused accountable care models, so too have private equity healthcare acquisitions become more prevalent and remunerative. Existing research on private equity's healthcare impact is limited in scope, focusing primarily on nursing homes and long-term care facilities, and short in breadth, with only a handful of longitudinal case studies measuring financial performance and patient care quality in post-acute care settings. As a result, it will be increasingly imperative, both for healthcare practitioners and administrators, to continue analyzing the impact private equity has on healthcare organizations' quality of care and financial vitality as this investment strategy becomes more common in the ambulatory, specialty physician practice, and acute care space.*

** This article was written before the onset of the novel coronavirus pandemic. The issues raised in the article, while not addressing directly the impact of the pandemic, will be of increased importance in the future as private equity firms (which have retained access to funds for investment) look for opportunities in a troubled healthcare industry, and as healthcare organizations look for ways to obtain necessary investment for their survival.*

INTRODUCTION

Private equity investment in healthcare has received its fair share of criticism and praise. While some view private equity-backed leveraged buyouts as an entrepreneurial strategy that enables growth for physician practices or acute care and rehabilitation hospitals, others see this practice as the opportunistic capitalization of a social good which negatively impacts communities and the patient experience. Bos and Harrington (2017) argue that the rapid divestiture of unprofitable service lines following new ownership or closure brought on by private equity investment in healthcare organizations leaves patients in risk-oriented transition periods. By the same token, Cometto and Brikci (2009) state that the profit-driven incentive dominant in the private equity sector may harm our healthcare system by creating intensified fragmentation along income and quality lines. On the contrary, Bloom and Sadun (2015) reason that private equity-owned healthcare firms are typically well managed and have significantly better management practices than almost all other groups, including family-run, founder-owned, or government-owned firms, especially in developing countries where healthcare infrastructure is nascent. Moreover, Harrington et al (2012) makes the claim that private equity-owned healthcare firms are better able to control their financial costs and staffing levels as a result of their management expertise, market experience, and access to resources.

While there is an excess of literature on private equity's managerial capacity and financial strategy in long-term care (Bos & Harrington, 2017, Pradhan & Weech-Maldonado, 2013, Harrington, Olney, Carrillo & Kang, 2012, Pradhan & Harman 2010), there is simply not enough evidence to validate the claim that private equity firm-ownership of healthcare organizations will lead to lower quality in ambulatory, specialty physician practice, or acute care settings. Several published studies examine the quality of nursing homes after a private equity-backed buyout (Pradhan, Weech-Maldonado, Harman, Laberge, & Hyer, 2013, Pradhan & Harman, 2010), but few to no published studies examine the quality of ambulatory, specialty physician practices, or acute care hospitals after a private equity-backed buyout. The purpose of this essay is to not only analyze existing literature on the impact of private equity in healthcare, but also provide a new direction in future research so that healthcare managers and practitioners may make accurate and informed decisions when considering private equity-backed leveraged buyouts.

REVIEW OF LITERATURE

In the late 1990's and early 2000's, several large, publicly traded, for-profit nursing home chains experienced acquisitions by private equity firms which, in a turbulent global economy, sought out healthcare as a safe haven for investment (Pradhan & Weech-Maldonado, 2013). These firms focused on profit maximization by purchasing underperforming long-term care businesses that could be overhauled or divested for quick returns in three to seven years, creating leverage by transferring risk from stakeholders to lenders, and establishing economies of scale in submarkets through massive buyout deals. In such leveraged buyouts, acquisitions were financed by investment firms using a small amount of equity and a large amount of outside debt financing (Pradhan, 2010). According to the Government Accountability Office, private equity firms owned nearly 1,900 nursing homes and long-term care facilities by 2009 (Pradhan & Weech-Maldonado, 2013).

Justifiably, healthcare scholars during this period carried the responsibility of measuring the positive and negative effects such investments had on the quality of care in nursing homes and long-term care facilities. Harrington (2012), noted that nursing homes made decisions that prioritized financial goals at the expense of care quality when they were debt-financed and were equally pressured by shareholders and investors to grow short-term profits. Harrington also found that private equity-owned nursing homes had lower staffing levels and higher levels of quality deficiencies, or serious deficiencies, when compared to not-for-profit-owned nursing homes. Yet, large private equity-owned nursing home chains, like Golden Living, favored a higher proportion of Registered Nurses among staff leading to improved clinical decision making, lower hospital admissions, and better managed care for residents (Bos and Harrington, 2017).

Pradhan and Weech-Maldonado (2013) argued that patients served by private equity-owned nursing homes were at risk as the extremely high levels of debt carried by these facilities could lead to bankruptcies caused by debt servicing problems. To counter this fear, Kaplan and Strömberg (2008) conducted a study of 17,171 private-equity-sponsored transactions that occurred between 1970 and 2007, showing that only 6% of deals ended in bankruptcy; "an annual default rate that is lower than that in Moody's reports for all U.S. corporate bond issuers from 1980 to 2002."

From 2010 to 2017, the landscape for private equity evolved dramatically. The value of private equity healthcare acquisitions increased 187% reaching $42.6 Billion, while the number of healthcare deals increased by 48%. Divergent from the deals of the late 1990's and early 2000's, however, most recent deals have involved physician group practices and hospitals (Gondi and Song, 2019). This comes as no surprise to analysts as private equity firms are known for reducing costs, improving efficiencies by internalizing or centralizing billing, growing information technology capabilities, and strengthening management. Moreover, private equity investment tends to lead to higher prices and volume for rendered services by consolidating market power in a fragmented system, playing to the rising consumer demand of healthcare, and appealing to physicians who are disinterested in managing their own practice or considering retirement from the profession altogether.

Nonetheless, as seen in long-term care facilities in the United States and Great Britain, and with other essential services such as water, "one can question whether time-limited investment funds, with their emphasis on relatively short-term financial goals, are appropriate owners of these long-term assets - especially at times of turbulence" (Ford, 2017). Moving forward, scholars will need to measure quality and financial performance for private equity-backed ambulatory, specialty physician practice, and acute care sites in the same manner they have for long-term care facilities. Such investments may not only bring about industry-shifting opportunities, but also threaten the progress of patient-centeredness sought after in value-based care models.

MEDIA ANALYSIS

Before analyzing the opportunities and threats created by private equity investment in healthcare, it is important to investigate the healthcare industry's perception of the controversial investment strategy. To do so, the author of this paper examined recent trends in healthcare media involving private equity and its portrayal in order to gain a better understanding of the rationale behind the industry's reluctance to welcome the investment strategy. The author posits that because healthcare practitioners and administrators exist in a highly structured organizational field driven primarily by status competition, their behaviors may be subject to institutional isomorphism

where, "efforts to deal rationally with the uncertainty and constraint [of private equity investment] often lead, in the aggregate, to homogeneity in structure, culture, and output" (DiMaggio & Powell, 1983). Importantly, this element of research aims to answer the question: is the hesitation to welcome private equity investment in ambulatory, specialty physician practice, and acute care settings driven by fears of quality deterioration established from research on nursing homes and/or is it driven by a collective rationality portrayed in healthcare media?

METHODS AND RESULTS

Using Proquest's ABI/Inform, this author conducted a simple hit analysis with the search criteria [pub.exact ("Modern Healthcare") AND ("Private Equity")] covering the years 2005 – 2019. From this search, the author encountered 383 *Modern Healthcare* articles that contained the phrase "Private Equity," varying in frequency from 2005 – 2019. These results are demonstrated in Figure 1. After conducting this search, the author compared the results to Bain & Company's *Global Healthcare Private Equity and Corporate M&A Report 2019*, which highlights the value of private equity healthcare deals in the same comparative period. The details from this report can be found in Figure 2.

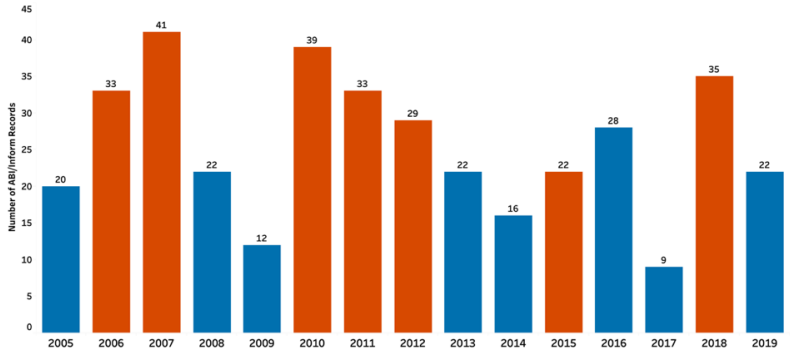

Figure 1 – ABI/Inform search [pub.exact ("*Modern Healthcare*") AND ("Private Equity")]

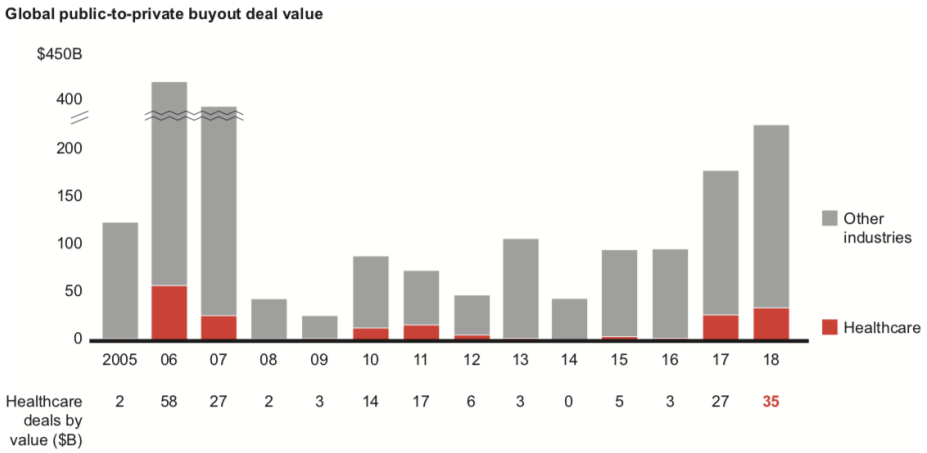

Figure 2 – Bain & Company Global Public-to-Private Buyout Deal Value

As shown in Figures 1 and 2, the years that produced the highest frequency of *Modern Healthcare* articles about private equity (2006, 2007, 2010, 2011, 2012, 2015, and 2018) parallel the years in which public-to-private buyout deals in healthcare had the highest value (2006 - $58 Billion, 2007 - $27 Billion, 2010 - $14 Billion, 2011 - $17 Billion, 2012 - $6 Billion, 2015 - $5 Billion, 2018 - $35 Billion). While some of *Modern Healthcare*'s articles may have addressed quality of care and health outcomes in private equity-owned healthcare organizations, it is evident from the comparative analysis in Figures 1 and 2 that healthcare reporting on private equity has followed deals, not fears of quality deterioration.

PRACTITIONER AND MANAGERIAL IMPLICATIONS

Benefits of private equity investment

Depending on fit, healthcare organizations may benefit immensely from private equity investment, especially with regard to management performance. Bloom and Sadun (2015) showed that private equity ownership is typically associated with improved monitoring and operating practices, regardless of the firm's state or country of management origin, as these firms tend to use advanced data analytics, modern technologies, and Lean-driven management techniques to drive performance. Bloom and Sadun go on to say that "private equity [firms] function essentially the same as dispersed shareholder firms from a management perspective" (Bloom and Sadun, 2015). That is to say that private equity investment in healthcare should generate no more fear than HCA Healthcare, Encompass Health, Tenet Healthcare Corporation, Universal Health Services, or Teladoc Health may elicit in the current healthcare marketplace.

To counter, some may argue that superior management of private equity-owned organizations comes as a result of purchasing well-managed firms. Though, Bloom and Sadun (2015) again argue that this investment strategy is, "unlikely [as] the common perception is that PE firms look for badly managed targets to acquire for performance turnaround." Furthermore, Pradhan, Weech-Maldonado (2013) maintain that private equity ownership is better positioned to resolve agency problems, limit managerial opportunism, and decrease red tape by generating stronger incentives for current management. Private equity firms are even shown to offer better incentives for pay, promotion and continued employment. Bos and Harrington (2017) defend that private equity ownership can implement uniform labor management systems more readily, and decrease manager's span of control, subsequently improving oversight and quality control.

Private equity firms may also offer healthcare organizations innovative strategies to achieve financial success, such as introducing performance-related pay. For physician groups, buyouts may be attractive as physicians can replace future earnings and incur lower taxes from Capital Gains following the sale of their practice compared to tax on operating income. Moreover, specialty physician practices such as urology groups value private equity partners' ability to improve infrastructure and better negotiate with payers, in addition to the "upfront tax-advantaged cash payment that may benefit physicians within 10 years of retirement" (Hilton, 2019). Related to this perspective, Cometto & Brikci (2009) indicated that private equity-owned companies can ensure optimal allocation of resources, improve quality of care through their focus on measurable results, and use their flexibility to adapt to changing supply and demand factors. Bos and Harrington (2017) established that private equity-owned nursing homes had higher net income per patient. They also found that private equity firms tend to invest in employee benefits, training, and information technology to help with patient records and revenue cycle management. Pradhan,

Weech-Maldonado (2013) found that private equity-owned nursing homes have higher operating margins, total margins, and total revenues. Pradhan goes on to say that "the higher amount of debt created in private equity transactions improves organizational performance because debt has a salutatory effect on managerial discretion as managers are legally obliged to meet debt obligations, limiting the wastage of free cash flow."

Threats from private equity investment

For better or for worse, private equity investment may threaten the current healthcare landscape as we know it. Some healthcare stakeholders fear patients will lose out on choice and prices could creep higher as a result of private equity takeovers in fragmented sectors of the healthcare industry such as emergency care or anesthesiology (Livingston, 2018). For Academic Medical Centers (AMCs), private equity firms may threaten control over the vertical organization structure of physicians and physician groups. As more private equity firms acquire physician and specialty physician group practices, volume for low-acuity services, especially from a private payer-mix, may be driven away, leaving AMCs to care for only the highest-acuity and lowest-reimbursed cases. As Gondi and Song (2019) argue, AMCs use revenues from some insurers to subsidize care for low-income patients and to fund medical education and research, while private equity may have different implications for spending. Even though consolidation "may create economies of scale…increased market power over price negotiations with insurers and boosting volume for ancillary revenue streams may increase spending" (Gondi and Song, 2019).

From an accountability of care and quality perspective, the structured organization of private equity firms under layered Limited Liability Corporations may hinder state and federal government oversight of quality of care, making it difficult to hold a private equity firm accountable for malpractice (Bos and Harrington, 2017). Differences in state malpractice legislation and a weak regulatory environment have contributed to this malaise. Moreover, these firms' ability to move corporate offices to locations that best serve a company's potential high litigation costs to defend against liability claims per bed (e.g. from Arkansas to Texas), makes it challenging for patients to secure a claim against facilities for poor outcomes or harm.

Another key concern for quality is that private equity-owned specialty physician practices may keep referrals within the practice rendering referral patterns less responsive to patient needs or preferences (Gondi and Song, 2019). Private equity-employed dermatologists have expressed concern that investors seek to increase profits by hiring advanced practice providers (APPs) to work in unsupervised satellite settings, "redirecting referrals to employees of the consolidated group, and eliminating opportunities for dermatologists to recommend and select the best route for each patient" (Kronemyer, 2018). Regulators will need to be wary of violations of the Stark Law and the Antikickback statute within these firms' behavior. Unfortunately, evidence that tracks such referral patterns and compares the quality of private equity–owned practices to physician-owned practices is limited, due in part to nondisclosure agreements between parties of interest.

CONCLUSION AND DIRECTION FOR FUTURE RESEARCH

Private equity firms view healthcare investments as safe bets in a turbulent global economy leading some critics to claim that the inherent profit-maximizing strategies fostered by such firms may endanger the livelihood of healthcare consumers. At the foundation of such reproach lay the perspective that private equity firms view healthcare delivery systems as revenue-generating assets, rather than entities designed to provide a social utility. Resultantly, fears have emerged that these firms will infringe on patients' access to care by consolidating physician groups, escalating healthcare costs by emphasizing volume-driven practice, and diminishing quality because of divestiture and cost-containment.

While there is ample literature detailing private equity's performance in nursing homes and long-term care facilities, there is simply not enough evidence to defend the null hypothesis that private equity ownership of ambulatory, specialty physician practice, or acute care sites worsens health outcomes and quality for patients. In fact, private equity investment may even have the potential to increase access and quality as it not only encourages fierce competition and innovation in healthcare markets, but also provides exhausted physicians newfound energy, technological support, and financial incentive to continue practicing in a healthcare world driven by burdensome reporting and value-based penalties. With this in mind, future research must consider new measures beyond clinical care quality, management performance and financial performance to determine the true value of private equity healthcare investments.

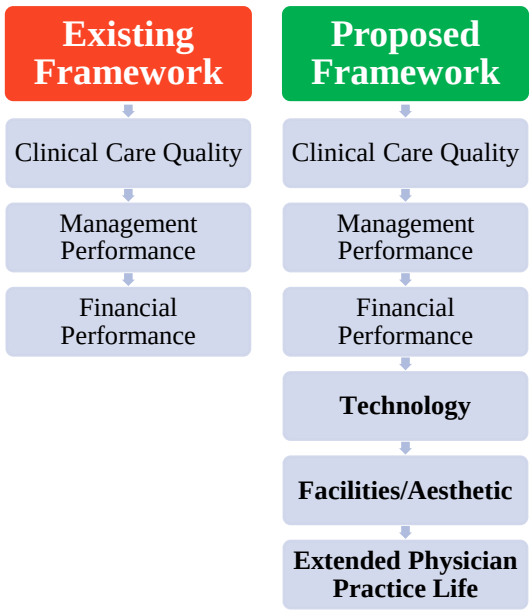

Figure 3 – Frameworks for Measuring the Impact of Private Equity on Healthcare

A new research framework must first assess the value of any technological investment made by the purchasing private equity firm such as information technology infrastructure or electronic health record systems including revenue cycle management, practice management, and quality reporting systems. Benefits of such technological investments could be measured by percent change of denied claims, bills collectible, and patient portal utilization, or simply by the dollar value of new information technology hardware and software. Next, research should consider upgrades to purchased care sites' physical property, plant, and equipment. Benefits of facilities

investment could be measured by obtaining data on patient and staff perception of the practice site, including overall aesthetic, cleanliness, or access to parking, as well as by data on physical expansion measured in square footage, number of additional exam rooms, or the dollar value of renovations. Finally, research should consider the value of future earnings in order to determine whether private equity investment can actually extend a physician's perceived financial practice life. The value of future earnings is typically accounted for as goodwill, but also could be measured by conducting longitudinal case studies on physicians' job satisfaction pre- and post-leveraged buy-out.

Healthcare practitioners and administrators cannot mistake fears of uncertainty with fears of deviating from industry norms. While private equity investment in healthcare certainly threatens elements of conventional healthcare delivery, including clinical care quality and access, the investment strategy presents evenhanded opportunities to uproot healthcare markets, globally, for the better. Practitioners and administrators may be reluctant to take on private equity investment, even if the strategy proves beneficial, as healthcare organizations tend to operate "according to norms of social legitimation that frequently conflict with market considerations of efficiency" (Fennell, 1980). This is why future research outside the scope of long-term care is essential to determine private equity's true impact on our healthcare industry, our practitioners and managers, and our patients.

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