

# Hospital Mergers: Mixed Impact on Price, Quality of Patient Care, and Hospital Performance

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**Abstract-** The US health care industry has undergone considerable consolidation, with mergers and acquisitions happening amongst health insurers, pharmaceutical companies and hospitals. Although there have been mergers in the pharmaceutical and insurance sectors, this paper will focus only on the impact that hospital mergers have had. With the trend all but continuing, various arguments for and against hospital mergers have been propounded, with different points of view on the net effects that hospital mergers have had. The main concerns of both sides is the impact that hospital mergers have had on price, quality of patient care and hospital efficiency. In this article, we find that the impact of hospital mergers on these indices has been mixed as there is no predictable effect that hospital mergers will definitely have. Indeed, it appears that the impact of a hospital merger is specific to the degree of hospital consolidation in the region where the hospitals operate, the market share of each partner to the merger, and how good they are in terms of quality of care prior to the merger.

**Index Terms-** Hospital Mergers, Hospital Consolidation, Health Quality, Price, Hospital Efficiency

## I. INTRODUCTION

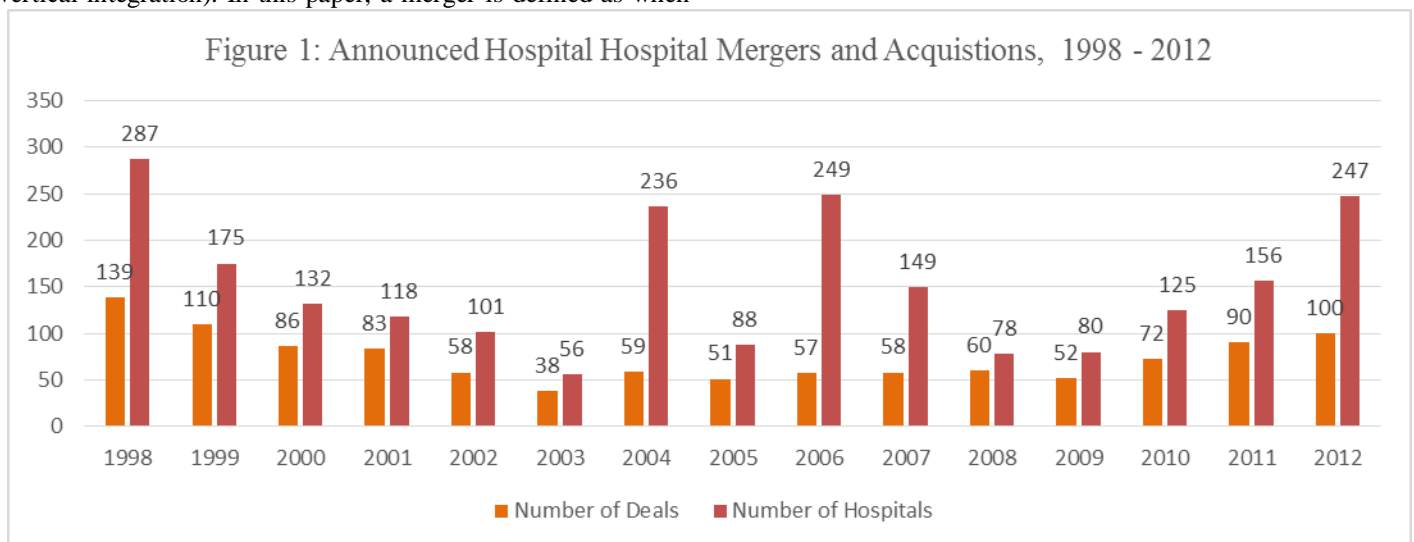
The health care landscape in the United States has undergone tremendous changes in the past two decades, notable of which is the continued trend of health systems acquiring other systems (horizontal integration) or buying up independent physician groups that are then folded into the existing network (vertical integration). In this paper, a merger is defined as when

two previously separate health institutions come together to operate under one license, and an acquisition is said to have happened when a hospital transfers ownership to a separate hospital but retains its license [1].

In 1995, only about 51% of private, acute care hospitals were part of a health system, but by 2000, this number had increased by 7 percentage points to 57% (non-public, acute care, general hospitals only) [2]. Since 1995, the number of hospitals that are not part of a health system (i.e. standalone facilities) has gradually decreased [1], the most significant decrease seems to be occurring amongst private for-profit and nonprofit hospitals, rather than government-owned hospitals.

As figure 1 below shows, the number of mergers reached a high of 249 in 2006, but promptly declined to a low of 78 and 80 in 2008 and 2009 respectively, most likely due to the financial crisis during that period. However, as the economy strengthened, the number of mergers once again picked up. In year 2012, as the provisions of the Affordable Care Act kicked in, the number of mergers also increased. The number of hospitals undergoing a merger increased by 58% from a 2011 value of 156 to 247 in 2012.

In 2013, instances of joint ventures, mergers and acquisitions amongst hospitals in the U.S. was 98, this number had decreased only slightly to 95 by 2014 [3]. In the same period, deal volume for the health care services sector rose 18%, from 637 transactions in 2013 to 752 in 2014. The dollar value of those deals grew 17%, to \$62 billion, from the 2013 value of \$52.7 billion [4].



Source: American Hospital Association (AHA) TrendWatch Chart book, 2013

## II. METHODOLOGY

Data from the American Hospital Association announcing hospital mergers and acquisitions was analyzed to generate insights. In addition, a review of government publications, journal articles, news reports, and other industry publications was conducted to determine the impact that hospital mergers have had on the three indices of concern – the prices that patients pay before and after a hospital merger, the quality of care that patients receive, and performance of the merged entity in terms of efficiency.

## III. DISCUSSION

### 4.1 Reasons for hospitals mergers

**Better coordination of patient care:** One reason hospitals have advanced for mergers is the ability to better coordinate patient care across a variety of clinical settings. They want to be able to provide everything from flu shots to complex surgeries under the umbrella of the same medical establishment. Patients want care that is convenient, comprehensive and more coordinated, undergoing a Merger or acquisition enables hospitals to provide better managed and durable service across the continuum of care for patients rather than episodic care. Managed care significantly increased market concentration for hospitals [5], and hospitals consolidated to take advantage of provider networks and achieve economies of scale [6]. In addition, it provides a lifeline for health facilities that are in financial straits or in need of investments, thereby helping them to stay open and keep on providing care in the communities that they serve [7].

**Increased negotiating power with health insurance companies:** As health insurance companies have merged, their ability to determine prices and reimbursement for procedures and the general care that patients receive has increased. This power is more pronounced in regions where health insurance companies have little competition. Small independent hospitals are not able to negotiate effectively with payers, and in order to counter this, many hospitals come together via a merger to increase their bargaining power, market share, and negotiate better reimbursement rates with health insurance companies [8].

**Shift of procedures from inpatient to outpatient:** A persistent trend of decreasing inpatient admissions, coupled with a rise in outpatient visits made possible by changes in reimbursement rules and new technologies that make it possible to carry out procedures and tests in an outpatient setting is changing the way hospitals function. Health systems are responding to this change by re-organizing and seeking partnerships that will enable them take advantage of this trend, merging with another hospital that has a strong outpatient footprint is one way of doing this.

### 4.2 Impact of Mergers on Price, Quality and Efficiency

**Prices:** The impact of hospital mergers on prices has been mixed, with a number of studies showing an overall decrease in the price paid at hospitals and others showing a slowing down in price growth. Overall, it appears that hospital consolidation results in higher prices. The effect is more pronounced in already consolidated regions. When hospitals undergo a merger in

markets with a high degree of concentration, the increase in price can be more than 20% [9]. One study found that a hospital that charged patients admitted for irregular heartbeat \$25,361 in 2011 charged them \$53,597 a year later after the hospital was acquired—more than double the price for the same care [10]. Post integration, physician prices increase by 14% on average with a quarter of the increase due to exploring payment rules. [11]. Whether they are designated as for-profit or not, large systems are in a better position to negotiate with health insurance companies for larger reimbursements. The health insurance companies in turn may raise patient premiums and co-pays [12]. There is also some evidence that mergers have helped to control prices and the cost of health care. In spite of increased hospital mergers, growth in hospital price has slowed from 2.2% in 2013 to 1.4% in 2014, which is the slowest rate in the past 16 years. In the same period, prices for home health care decreased by 0.4% while physician prices increased by only 0.2% [13]. It is estimated that as much as 55% of the reduction in hospital spending is contributed to in part by increased hospital efficiency and cost sharing [14].

**Quality:** There is no universal agreement on the quality metrics that should be followed to assess whether a merger has improved the quality of care that patients receive. Regardless, the evidence of hospital mergers on quality of patient care is mixed. “Put differently, empirical literature does not support the argument that hospital mergers always, or even generally, improve quality” [15]. One reason for this is that hospital consolidation has placed more emphasis on having greater bargaining power to negotiate with health insurance companies, with not enough attention paid to integrating the hospitals after the merger [9]. Without integration, opportunities for increasing quality in the merged entity is lost, and this may lead to a decrease in quality. Generally, hospital mergers have tended to decrease rather than increase the quality of care. Some also believe that quality tends to be higher when hospitals compete not just only on price, but also on the overall quality of care in order to attract patients [16].

**Efficiency:** One argument for hospital consolidation is that health systems are able to improve efficiency by hiring better qualified staff, investing in IT infrastructure, improving access to capital, improving hospital operations and coordinating care [17]. This points to the economies of scale that having shared resources, protocols and processes can bring to merged hospital systems. Theoretically, in the long run this should plug loopholes for wastage and improve hospital performance. However, this is not always the case. If the merged hospitals are poorly integrated, or processes are not put in place to plug wastages, the exact opposite will happen as duplication will occur, and valuable resources and employee time that could have been spent on other things are wasted on fixing errors, leading to inefficiencies in the system.

## IV. CONCLUSION

In conclusion, it appears that the net effects of a merger between two hospitals are specific to the merging entities, taking into consideration factors such as the degree of consolidation in that particular region, the market share of the merging hospitals, and the prior records of efficiency, price and quality of the

hospitals merging. Data on quality of care and prices for procedures at various hospitals are not readily made available to the public. With the increasing consumerization of healthcare, patients will need these data to compare the service they receive from different hospitals. Such data should therefore be increasingly made more accessible to the public.

Also, hospitals that undergo a merger should also place an emphasis on integrating the merged entities in order to enhance quality, and gain economies of scale that may lead to lower prices. Without a merger, quality of patient care can be improved by early and better triaging of patients to the most appropriate physicians for care, increased interoperability of electronic health records and better commitment to transparency of quality and costs amongst hospitals [18].

With the push towards value-based models of delivery, more work needs to be done to determine the factors that enable one merger to benefit patients in terms of price, quality and efficiency of care delivery, and another one to under-deliver on these indices.

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