



# Minnesota's Most — and Least — Expensive Hospitals

*Version 1.0*



# PRIMARY FINDINGS

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## MINNESOTA ECONOMY AND HEALTHCARE EXPENDITURES

- Healthcare in general, and hospitals in particular, are a growing proportion of the Minnesota economy.
- Health expenditures more than tripled (205 percent) over 20 years (1997-2016), faster than the overall economy.
- Hospital health expenditures account for the single largest portion of health expenditures.
- Hospital health expenditures grew even faster with growth of 243 percent.
- Minnesota hospitals have done very well financially over the last 20 years. From 1997 through 2016 Minnesota hospitals' net income totaled \$14.3 billion.

## RISING HOSPITAL PRICES

- Data from the Bureau of Labor Statistics reveals an almost three-fold increase in both inpatient and outpatient hospital service prices between 1997 and 2016.

## CHARGE-TO-COST RATIO AND PROFITS IN MINNESOTA

- Minnesota hospitals had an average charge-to-cost ratio (CCR) of 212 percent for 2016. This means that for every \$100 in costs to provide care, patients were charged \$212. There is wide variation in the CCRs for Minnesota hospitals, ranging from a low of 108 percent to a high of 383 percent.
- The average Minnesota CCR in 1997 was 142 percent compared to 212 percent in 2016, indicating that hospital charges have increased 50 percent faster than costs in the last 20 years.
- The higher the CCR, the higher the net income. For those hospitals in the lowest third of CCRs, the average net income was \$968,993. For those hospitals in the highest third of CCRs, the average net income was \$30,707,127.
- The main characteristics of those hospitals with the highest CCRs include: located in large and medium-sized urban metropolitan area, the hospitals are larger with more beds and discharges, and the hospitals are members of a hospital system.
- The Minneapolis-St. Paul area has the most hospitals with the highest CCRs.
- Two hospital systems, Allina Health and Fairview Health Services, each have 10 hospitals in the grouping with the highest CCRs. These two systems account for more than half the hospitals with the highest CCRs. Eighty-six percent of hospitals with the highest CCRs are members of systems.
- Over the last 20 years Minnesota hospital markets have become highly concentrated through mergers and acquisitions.

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# INTRODUCTION

Hospitals are vital to the provision of care, whether it be due to an emergency or a routine procedure. They are an integral part of the social fabric of the community. Some of life's major milestones often take place in hospitals—the birth of a child, mending a broken bone, witnessing a loved one's declining health. Indeed, life can begin, be saved, and end in a hospital. Just as importantly, hospitals are an essential part of a community's economic fabric. They provide well-paying, often meaningful jobs by hiring local workers and contractors. Moreover, they serve to augment the larger local economy through purchases, rentals, and indirect commerce to local businesses. According to data from IMPLAN, a leading data provider for economic analysis, every dollar spent by hospitals results in \$2.81 of economic activity.<sup>1</sup> And yet, despite their prominence and importance to the community, in recent decades hospitals have shifted their focus from their social responsibility

as anchor institutions in their communities to building up their financial wealth and assets by growth in market share and consolidation to become powerful, large, multi-million dollar corporations.

While hospitals in Minnesota and around the country regularly pull in large profits,<sup>2,3</sup> Americans are faced with a deteriorating health care system. Health care costs continue to rise out of the reach of millions of Americans to unsustainable levels: health insurance premiums are rising faster than both inflation and wage increases,<sup>4</sup> copay and deductible price hikes are forcing people to delay or forgo needed care,<sup>5</sup> and an opaque and convoluted hospital pricing system leads to frustration and financial insecurity.<sup>6</sup> In fact, in the recent Kaiser Health Tracking Poll, 71 percent of respondents stated that “a major reason why people's health care costs have been rising” is that “hospitals charge too much.”<sup>7</sup> Added to this are millions of uninsured—a number on the rise in Minnesota. In 2017, the number of uninsured individuals increased to 349,000.<sup>8</sup> And yet, despite spending more than any other country on

Hospitals...  
have shifted  
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increasing  
profits.

1 | IMPLAN Group LLC, IMPLAN System, data for 2015. [www.Implan.com](http://www.Implan.com)

2 | Bai, Ge and Anderson, Gerard F. “A More Detailed Understanding of Factors Associated with Hospital Profitability.” *Health Affairs*, 35(5):889-897. 2016.

3 | Herman, Bob. “Hospitals are Making a Fortune on Wall Street.” *Axios*. December 7, 2017. Retrieved September 17, 2018. <https://www.axios.com/hospitals-are-making-a-fortune-on-wall-street-1513388345-1b7e1923-e778-4627-8fcc-bfab39e2d5c4.html>

4 | Kaiser Family Foundation. “Employer Health Benefits: 2018 Annual Survey.” October 2018. <https://www.kff.org/health-costs/report/2018-employer-health-benefits-survey/>

5 | Cox, Cynthia and Sawyer, Bradley. “How does cost affect access to care?” Peterson-Kaiser Health System Tracker. January 1, 2018. <https://www.healthsystemtracker.org/chart-collection/cost-affect-access-care/#item-start>

6 | Nakhjiri, Anahita. “If Prices are Kept Hidden, Consumers Can't Take More Responsibility for Their Health Care Costs.” *STAT*. September 5, 2017. <https://www.statnews.com/2017/09/05/health-care-costs-consumers/>

7 | Kirzinger, Ashley; Wu, Bryan; Muñana, Cailey; and Brodie, Mollyann. “Kaiser Health Tracking Poll— Late Summer 2018: The Election, Pre-Existing Conditions, and Surprises on Medical Bills.” September 5, 2018. Retrieved September 16, 2018. <https://www.kff.org/health-reform/poll-finding/kaiser-health-tracking-poll-late-summer-2018-the-election-pre-existing-conditions-and-surprises-on-medical-bills/>

8 | Minnesota Department of Public Health. “Minnesota's Uninsured Rate Jumps in 2017 Despite Strong Economy.” February 20, 2018. <http://www.health.state.mn.us/news/pressrel/2018/uninsured022018.html>

9 | Schneider, Eric C., et al. “Mirror, Mirror 2017: International Comparison Reflects Flaws and Opportunities for Better U.S. Health Care.” *Commonwealth Fund*. July 14, 2017. <https://www.commonwealthfund.org/publications/fund-reports/2017/jul/mirror-mirror-2017-international-comparison-reflects-flaws-and>

health care, Americans have awful health outcomes.<sup>9</sup> Hospitals, for their part, have shifted their focus from patient care to making money for the sake of increasing profits. But what is lost in all this are the patients and their families who suffer.

Against this backdrop, this paper demonstrates that hospitals in Minnesota have become large, powerful corporations capable of manipulating the health care system to their advantage. Instead of creating healthier and more vibrant communities, hospitals are forcing individuals and families to pay larger and larger amounts of their income for hospital services. The first part of this report will place spending on hospitals and health care in general in the context of the overall Minnesota economy. From there, this paper will show that hospital prices have increased twice as fast as the overall inflation rate. Finally, this paper will show how CCRs have changed in Minnesota over time and their relation to hospitals' profits.

## MINNESOTA ECONOMY AND HEALTH CARE EXPENDITURES

Minnesota's overall economy, as represented by the gross domestic product (GDP), has been steadily growing over the last two decades. As Figure 1 (below) shows, the state's GDP doubled from \$157 billion in 1997 to \$339 billion in 2016. The percentage change in GDP was 115.4 percent.

Meanwhile, Minnesota's health expenditures, a component part of the GDP, more than tripled over the last 20 years, from \$19.3 billion in 1997 to over \$59 billion in 2016 (see Figure 2). The health expenditures percentage change is 205 percent, meaning that the growth in health expenditures (205 percent) is far larger than the growth of the overall Minnesota economy as represented by the GDP (115.4 percent).

To put it more clearly, health care accounts for an increasingly larger part of the Minnesota economy.

Figure 1

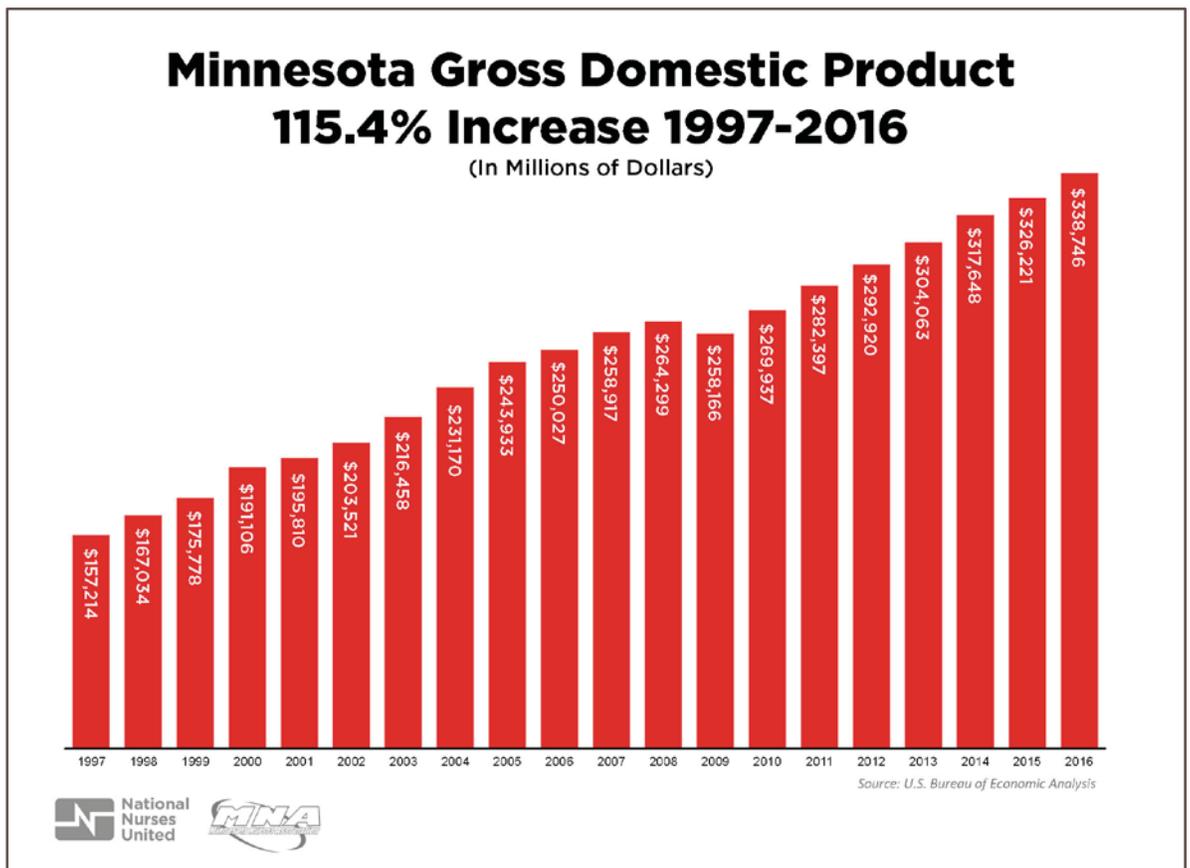


Figure 2

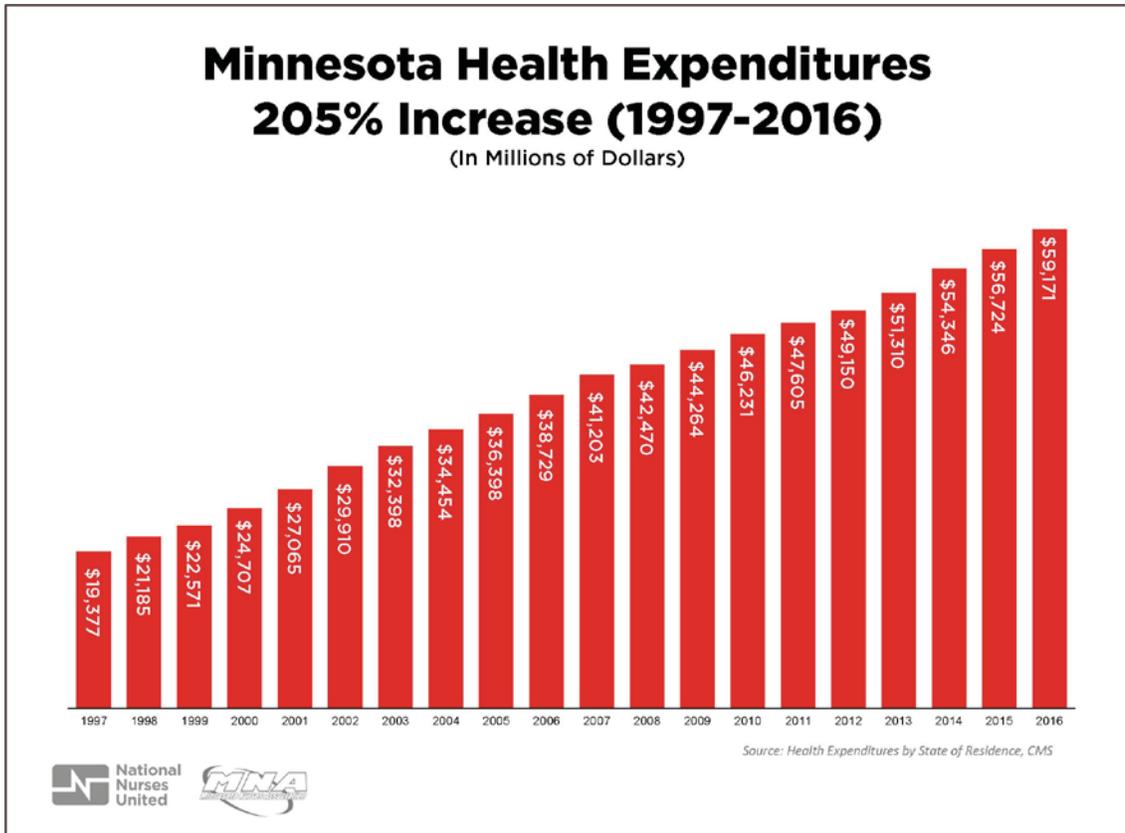


Figure 3 shows that in 1997, health expenditures, as a percentage of the GDP, were 12.3 percent. By 2016, that percentage had increased to 17.5 percent. If this rate continues, it will only be a few years before health care expenditures account for 20 percent of the state's economy. This level and growth in health expenditures is not sustainable.

Looking at health care expenditures more closely, we see that hospitals are the single largest component of those expenditures. This has been true since at least 1991, when state level data on health expenditures began to be reported.<sup>10</sup> In 2016, expenditures for hospitals were more than \$20 billion, accounting for over one-third (33.8 percent) of all health care expenditures in Minnesota. Physician and clinical services are the second largest component at 17.63 percent. These two components account for more than half of health care expenditures. It is important to note that

hospitals and hospital systems have been acquiring physician practices. The combination of these two components will inevitably strengthen the power of hospitals to bargain over reimbursements with health insurance companies.<sup>11</sup>

One key reason for the increase is due to hospital costs rising exponentially. Not only are hospitals the single largest component of health expenditures, hospital costs are rising faster than other health care expenditures. Figure 5 shows that hospital expenditures rose from just over \$5.8 billion in 1997 to over \$20 billion in 2016. This represents a 243 percent increase.

Over the last 20 years, hospital costs as a percent of health expenditures have steadily increased from a low of 27.7 percent in 1998 to 33.8 percent in 2016 (Figure 6). Hospital expenditures have grown faster than overall health expenditures.

10 | Centers for Medicare & Medicaid Services. "Health Expenditures by State of Residence, 1991–2014." <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsStateHealthAccountsResidence.html>. 2014–2016 was extrapolated using average growth rates for individual categories for the years 2011–2014 (categories Hospital Services through Durable Medical Equipment). CMS Health Expenditures by State of Residence only has data through 2014.

11 | Snowbeck, Christopher. "Medical Mergers in Minnesota are on the Rise." *Star Tribune*. December 16, 2017. Retrieved September 20, 2018. <http://www.startribune.com/medical-mergers-in-minnesota-are-on-the-rise/464467323/>

Figure 3

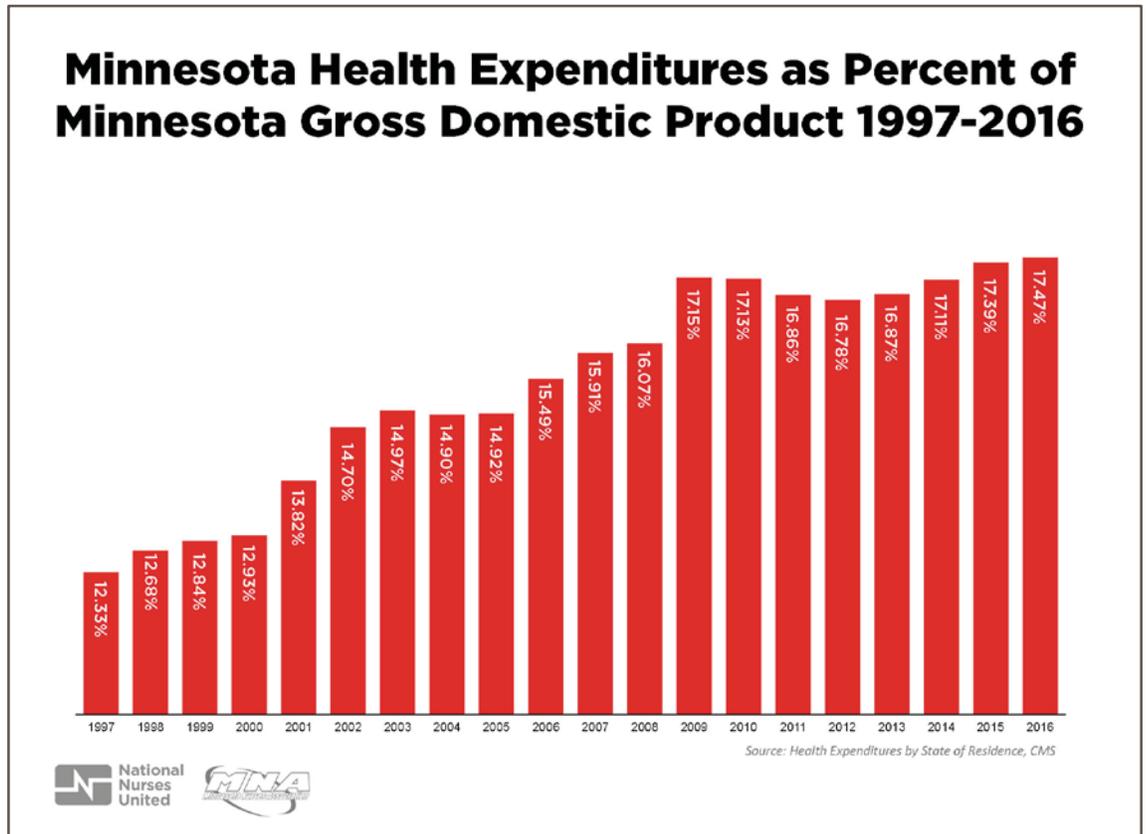


Figure 4

### Minnesota Health Expenditures Components, 2016

Personal Care	Expenditures (in \$ millions)	Percent
Hospital Services	\$20,018	33.83%
Physician and Clinical Services	\$10,434	17.63%
Drugs and Other Non-durable Products	\$5,665	9.57%
Other Health Residential and Personal Care	\$5,147	8.70%
Nursing Care Facilities and Continuing Care Retirement Communities	\$3,471	5.87%
Home Health Care	\$3,112	5.26%
Dental Services	\$2,395	4.05%
Other Professional Services	\$1,600	2.70%
Durable Medical Equipment	\$800	1.35%
Administrative and Private Insurance Profits*	\$4,977	8.41%
Public Health Activity*	\$1,551	2.62%
<b>TOTAL HEALTH EXPENDITURES »</b>	<b>\$59,171</b>	<b>100.00%</b>

*Source: National Health Expenditures by State of Residence, CMS*

\* These figures were taken from national CMS Health Expenditure data and extrapolated to be Minnesota specific by using the percentage of Minnesota's total Personal Expenditures from the CMS Health Expenditures by State of Residence file.

Figure 5

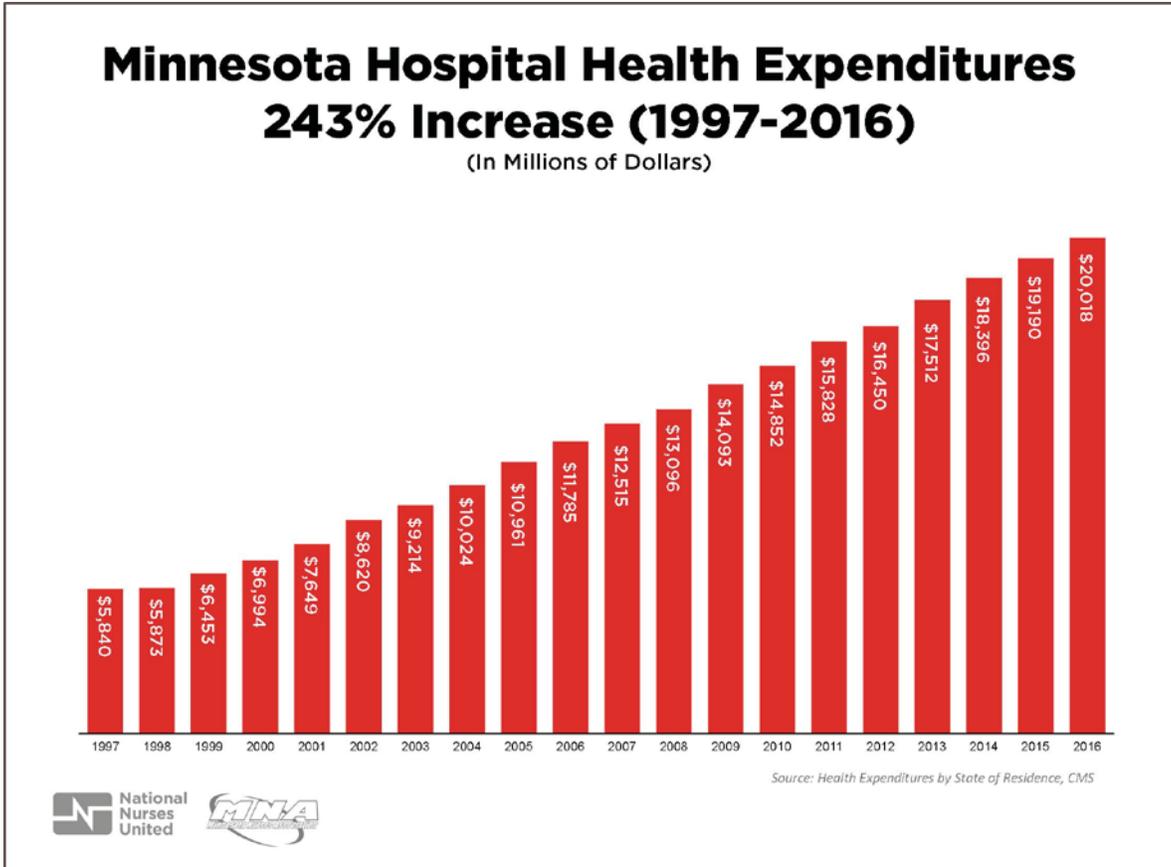
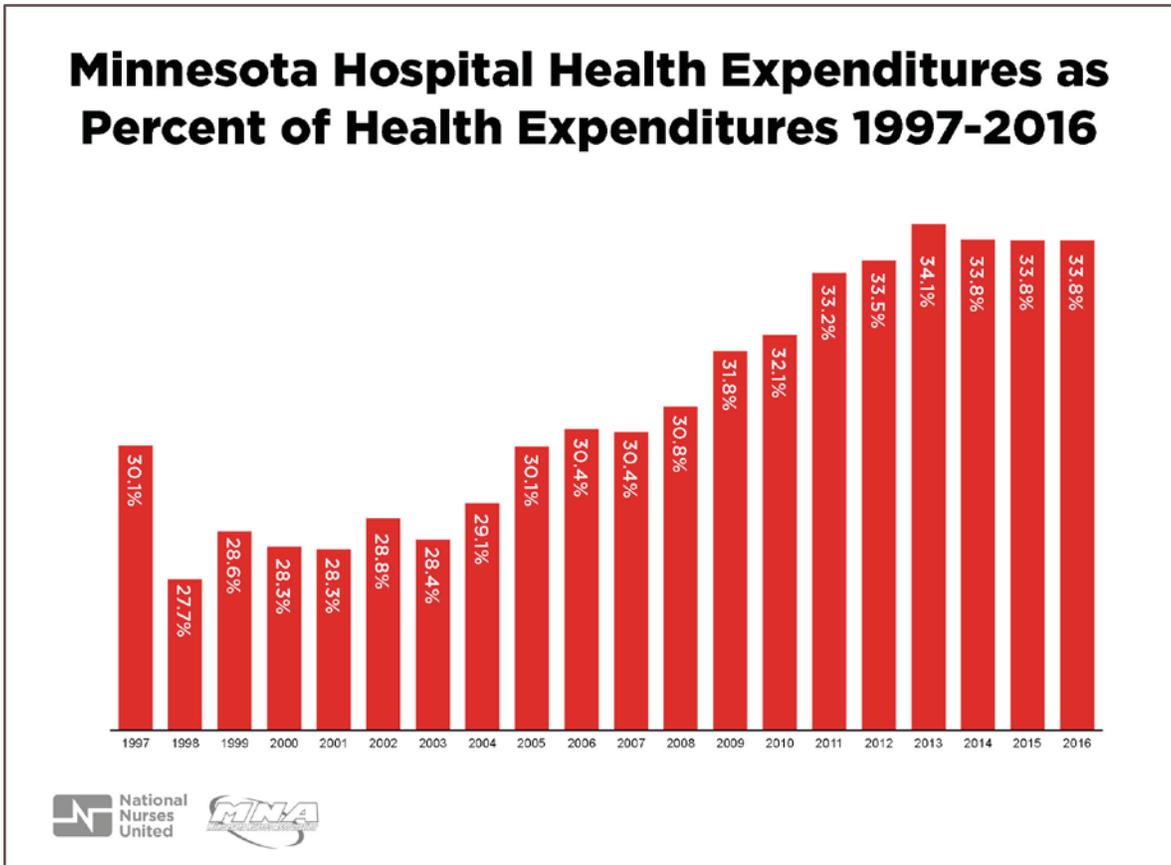


Figure 6



This means that in 2016 hospital expenditures accounted for almost 6 percent of Minnesota’s entire economy (Figure 7, below). This is an increase from 3.71 percent in 1997. (Though it may not seem large, increasing from 3.71 percent to 5.91 percent of the GDP is very significant when Minnesota’s GDP is in the hundreds of billions of dollars.)

During the 20-year period of significant growth in hospital expenditures, the hospitals in Minnesota did very well financially. As Figure 8 shows, aggregate hospital net income from 1997 through 2016 was \$14.3 billion. Other than 2008 and 2016, the net income of hospitals has steadily increased over the last 20 years.

Figure 7

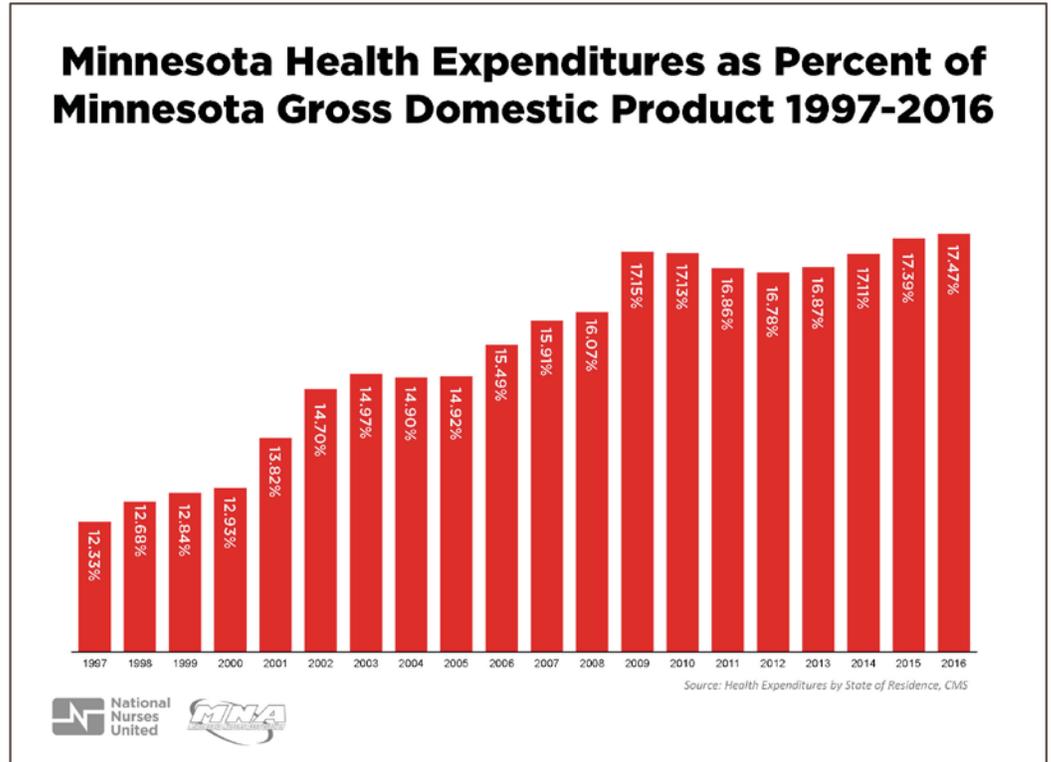
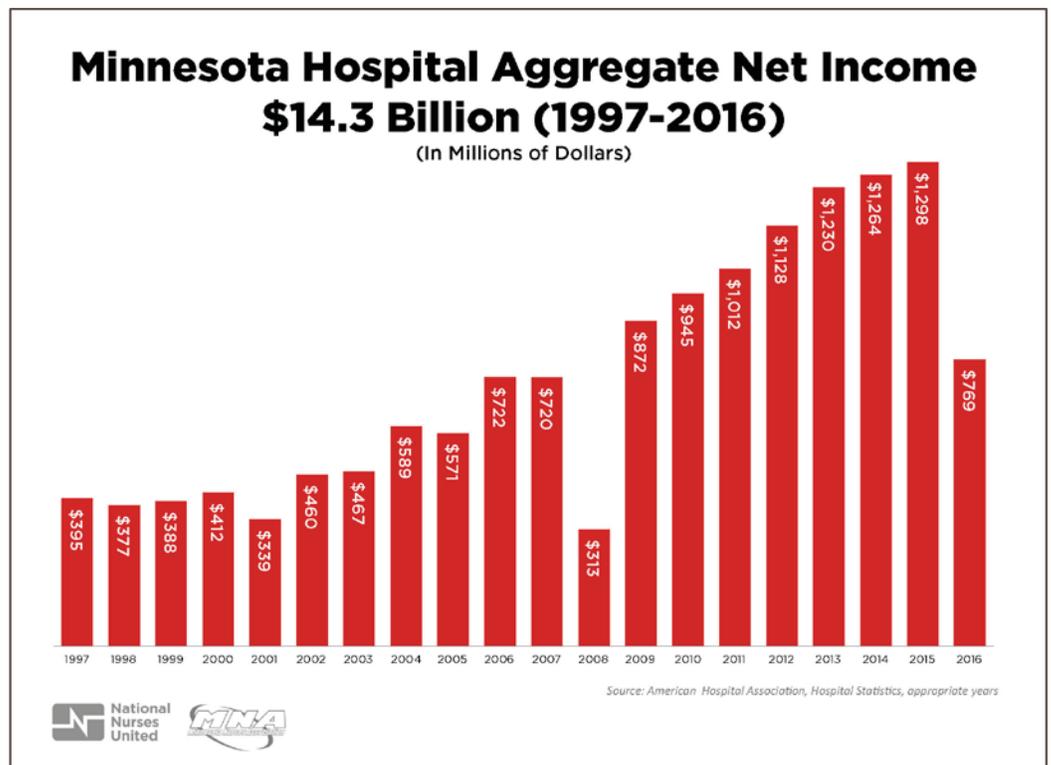


Figure 8



## RISING HOSPITAL PRICES

A key reason why health and hospital expenditures have increased so dramatically is due to rising hospital prices, particularly when compared to overall price changes. Data from the Bureau of Labor Statistics for the entire United States reveals an almost three-fold increase in both inpatient and outpatient hospital service prices between 1997 and 2016. This means that if a particular hospital service costs \$100 in 1997, that same service costs \$300 in 2016 (see blue and red lines on Figure 9 below). Moreover, as this graph shows, hospital price level increases were the largest among components of health expenditures. From 1997–2016 overall prices (depicted by

the purple line, “All Items”) increased by 50 percent, while the health care prices (depicted by the green line, “Medical Care”) doubled. *For the full list of medical care components see Appendix 1.*

It is possible that these price increases are justified if the costs to provide care are also increasing at the same rate. The next section will look into the relationship between charges and costs by focusing on the charge-to-cost ratio. While there is not a one-to-one correspondence between the price increases in Figure 9 and the charges discussed in the next section, both of these highlight that hospital charges have been building.

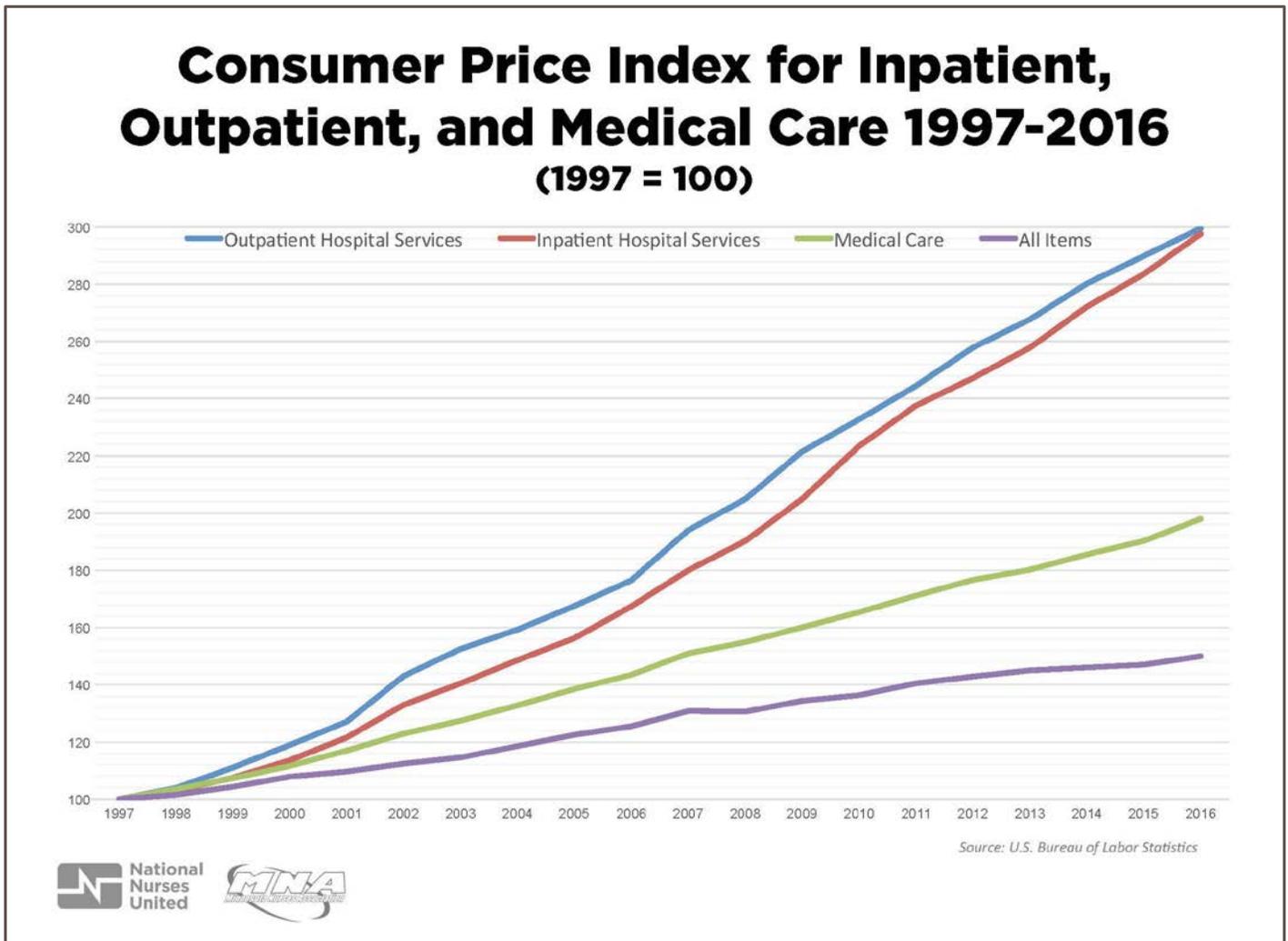


Figure 9

## CHARGE-TO-COST RATIO AND PROFITS IN MINNESOTA

To better understand rising hospital prices, we now turn to an examination of charge-to-cost ratio (CCR). Using Medicare cost reports (MCR) for fiscal year 2016–2017 from the Center for Medicare and Medicaid Services (CMS), we examine 111 acute-care hospitals in Minnesota. MCRs provide information regarding hospital charges and costs for various services, both inpatient and outpatient, provided by the hospital. These charges are known as the charge master prices. Few, if any, patients pay the charge master price. Rather, the importance of the charge master price is that it sets the starting point for negotiations between hospitals and health insurance companies over reimbursements. Hospitals' costs include not only the cost of direct labor and supplies provided to patients, but also non-care costs, such as administration and general costs, housekeeping, and nursing administration.<sup>12</sup> These non-care costs are proportionate to patient services. The CCR reveals the relationship between charges and costs: if charges are higher than costs, the CCR will be greater than 100 percent; if the charges are lower than costs, the CCR will be less than 100 percent. Importantly, the CCR allows us to see, over time, whether or not charges are increasing faster than costs. (If the CCR increases from one year to the next or over time, hospitals are increasing their charges to provide care faster than it is costing them to provide that care.)

Hospitals often maintain that the charge master price does not matter and in no way influences the

price paid for services by private insurers. To prove this point, hospitals point out that private insurers usually pay a substantially discounted price from the charge master price.<sup>13</sup> Moreover, because price negotiations between insurers and hospitals are confidential and re-imbursement data is often proprietary, we often don't know the exact price insurers pay or even what the charge master price is.<sup>14</sup> Nevertheless, the fact remains that prices continue to increase and that, more importantly, CCRs continue to climb. A number of studies have shown the relationship between charge master price and hospital revenue, specifically that higher charge master markups result in higher profits.<sup>15, 16, 17</sup> In addition, a 2017 study found a striking relationship between the charge master prices and higher prices paid by private insurers: for each additional dollar increase in a list price, private insurers paid an additional 15 cents in payment to hospitals. It thus appears that hospitals employ a strategy of increasing charge master prices to generate additional revenue.<sup>18</sup> Furthermore, testimony of hospital executives cited in a 2005 study clearly shows that charge master pricing is used as a way to generate revenue:

*"Our key goal with the charge master is to help the hospital meet its profitability and cashflow needs. We try to take advantage of those payers on a percent of charge arrangement..."<sup>19</sup>*

*"Our price updates focus on the areas that give us the 'biggest bang for the buck'."<sup>20</sup>*

Though these comments and actions are not surprising given our profit-driven health care system, it is still a

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12 | For full list see Chapter 40 – (T14) Hospital & Hospital Health Care (Form CMS-2552-10) Worksheet A. <https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/Paper-Based-Manuals-Items/CMS021935.html>

13 | Bai, Ge and Anderson, Gerard F. "U.S. Hospitals are Still Using Chargemaster Markups to Maximize Revenues." *Health Affairs*, 35 (9) Appendix Exhibit A1: Example Arguments on Irrelevant Chargemaster Price. 2016. [https://www.healthaffairs.org/doi/suppl/10.1377/hlthaff.2016.0093/suppl\\_file/2016-0093\\_bai\\_appendix.pdf](https://www.healthaffairs.org/doi/suppl/10.1377/hlthaff.2016.0093/suppl_file/2016-0093_bai_appendix.pdf)

14 | Batty, Michael and Ippolito, Benedic. "Mystery of The Chargemaster: Examining the Role Of Hospital List Prices in What Patients Actually Pay," *Health Affairs* 36(4): 689–696. April 2017. <https://www.healthaffairs.org/doi/10.1377/hlthaff.2016.0986>

15 | Institute for Health and Socio-Economic Policy (IHSP). "IHSP Hospital 200: The Nation's Most- and Least- Expensive Hospitals." 2005. <https://www.nationalnursesunited.org/sites/default/files/nnu/files/pdf/research/ihsp-hospital-200-2005.pdf>

16 | Institute for Health and Socio-Economic Policy (IHSP). "IHSP Hospital 200: Hospitals, Big Pharma, HMOs & the Healthcare War Economy." 2004. <https://www.nationalnursesunited.org/sites/default/files/nnu/files/pdf/research/ihsp-hospital-200.pdf>

17 | Bai, Ge and Anderson, Gerard F. "A More Detailed Understanding of Factors Associated with Hospital Profitability." *Health Affairs*, 35(5):889–97. 2016. <https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2015.1193>;

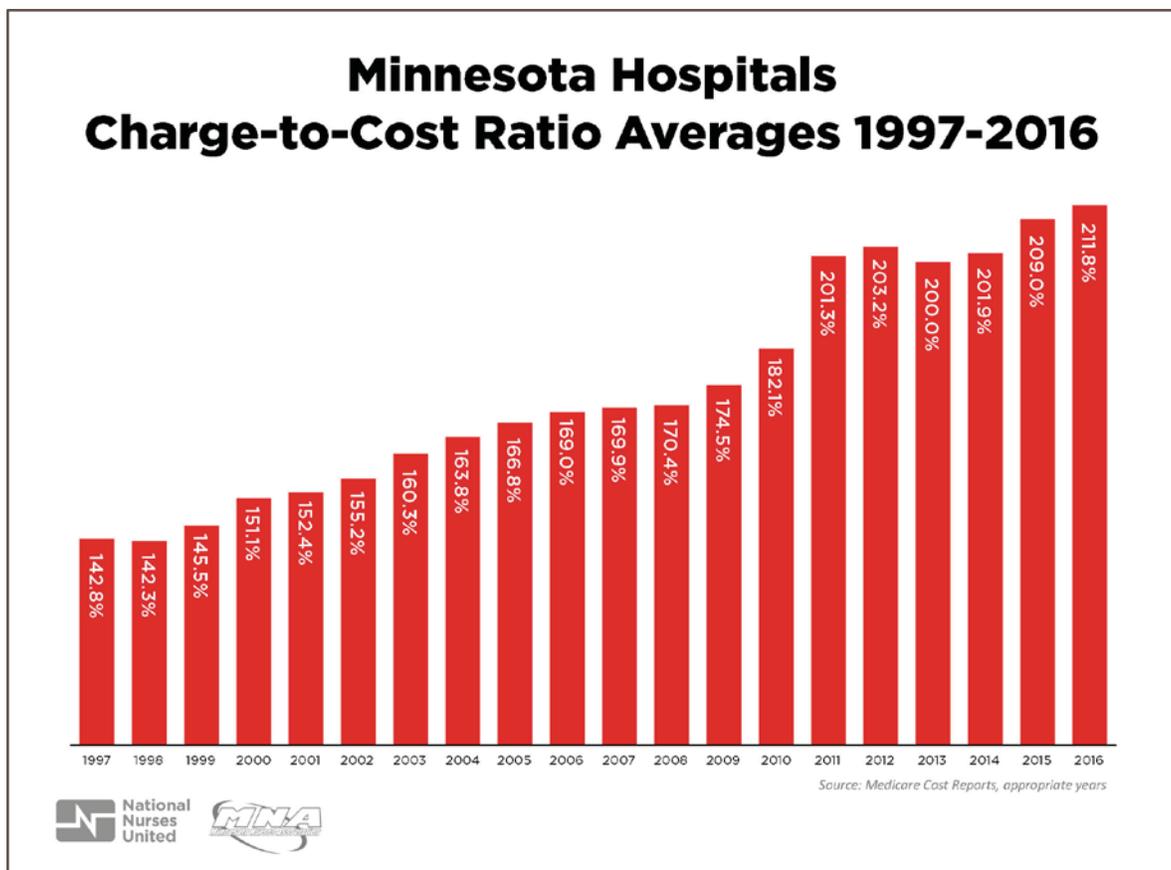
Batty, Michael and Ippolito, Benedic. "Mystery of the Chargemaster: Examining the Role of Hospital List Prices in What Patients Actually Pay." *Health Affairs*, 36(4) 689–696. 2017. <https://www.healthaffairs.org/doi/10.1377/hlthaff.2016.0986>

18 | Ibid.

19 | Dobson, Allen; DeVanzo, Joan; Doherty, Julia; and Tanamor, Myra. "A Study of Hospital Charge Setting Practices: A Study Conducted by the Lewin Group for the Medicare Payment Advisory Commission." MedPAC, 05-04, 1-18. 2005.

20 | Ibid.

Figure 10



disconcerting when you realize the goal is to extract the “biggest bang for the buck” from patients and their families when they are at their most vulnerable.

When looking at the average CCR across hospitals in Minnesota, the CCR has dramatically increased over the past two decades. In 1997 the average Minnesota CCR was 142 percent; by 2016 that number had climbed to 212 percent. In the aggregate, hospital charges have increased 50 percent faster than costs in the last 20 years.

The data in Figure 10 (above) highlights the average CCR for Minnesota hospitals. It is important to note that there is a wide variation in CCRs for individual

Minnesota hospitals. In looking at the most recent year of data available, 2016, there is a large difference between the lowest CCR and the highest CCR. As the two charts to the right show (Figures 11 and 12), the lowest CCR, North Valley Health Center in Warren, was 108 percent (meaning that for each \$100 in costs to provide care, hospitals charged patients \$108), while the highest CCR, Maple Grove Hospital in Maple Grove, was 383 percent (meaning that for each \$100 in costs to provide care, hospitals charged patients \$383). This is a huge discrepancy. *See Appendix 2 for a full list of the 111 hospitals ranked by their CCRs.*

Figure 11

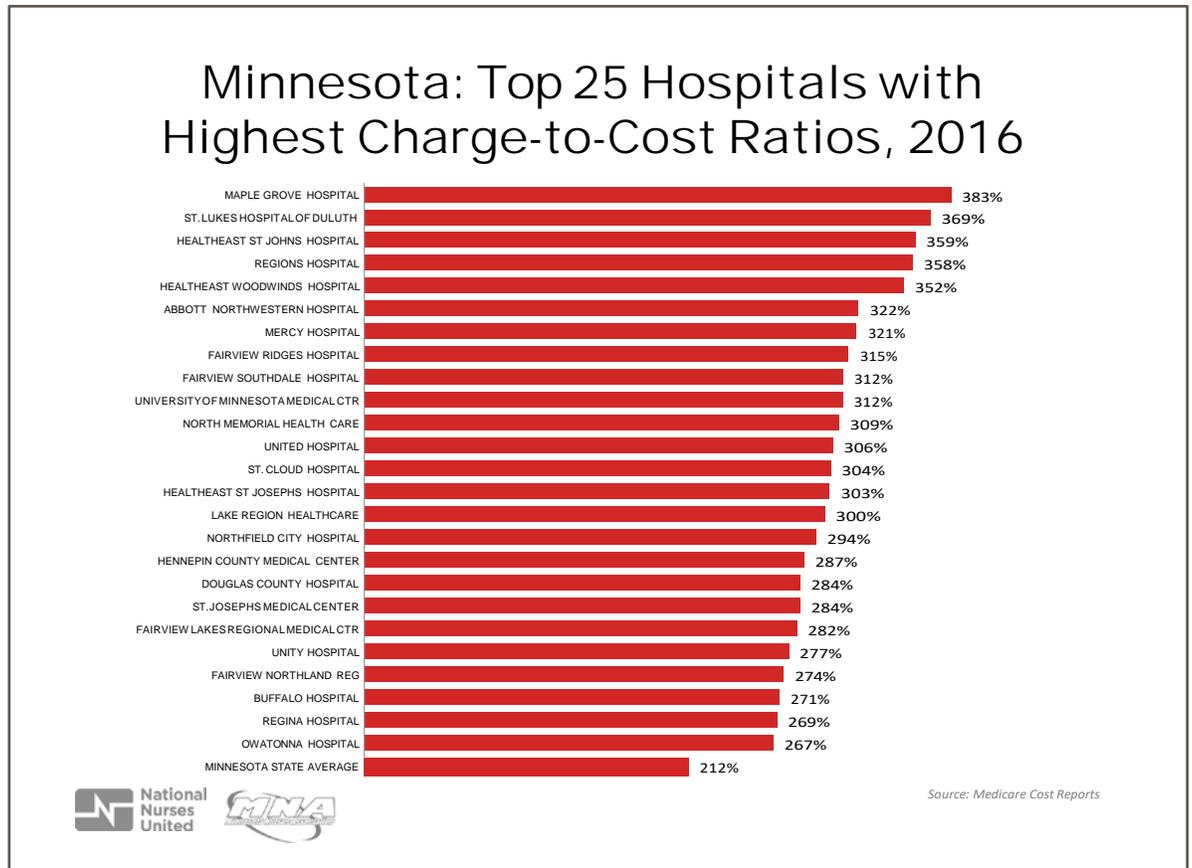
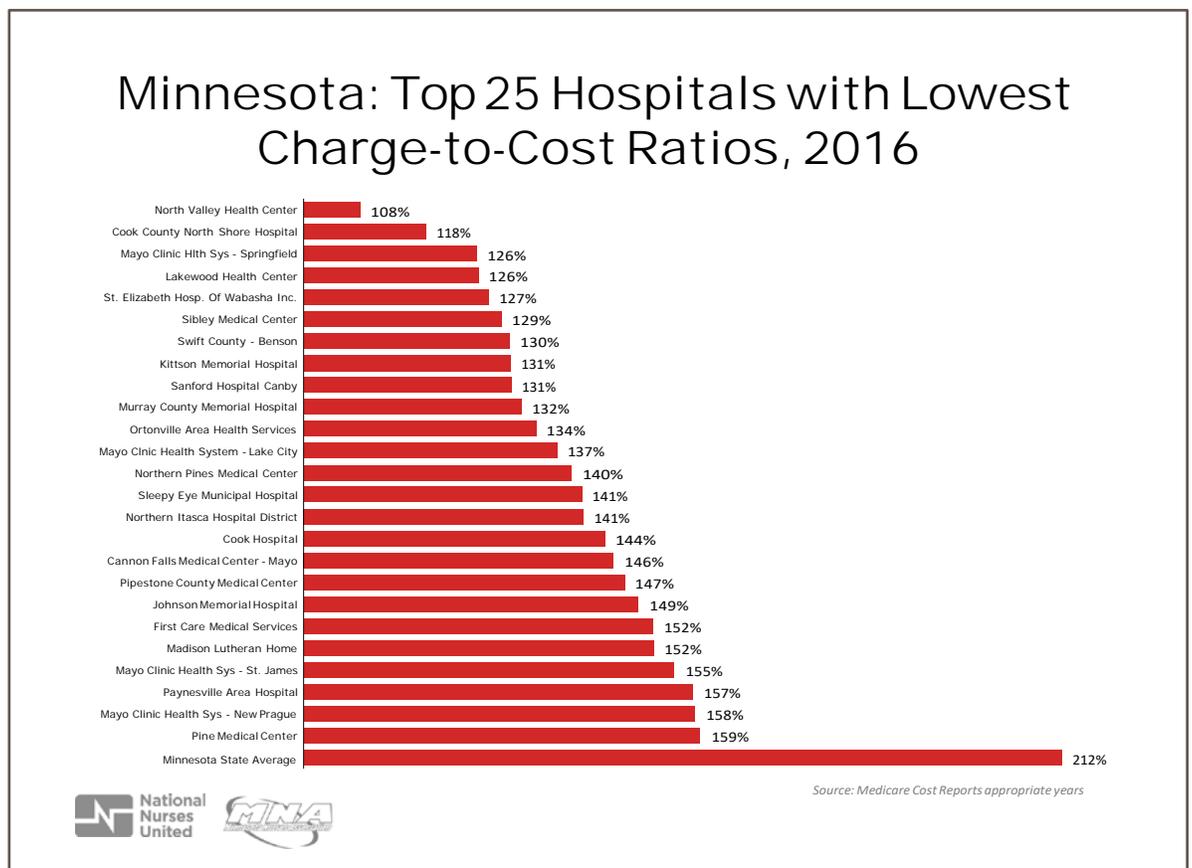


Figure 12



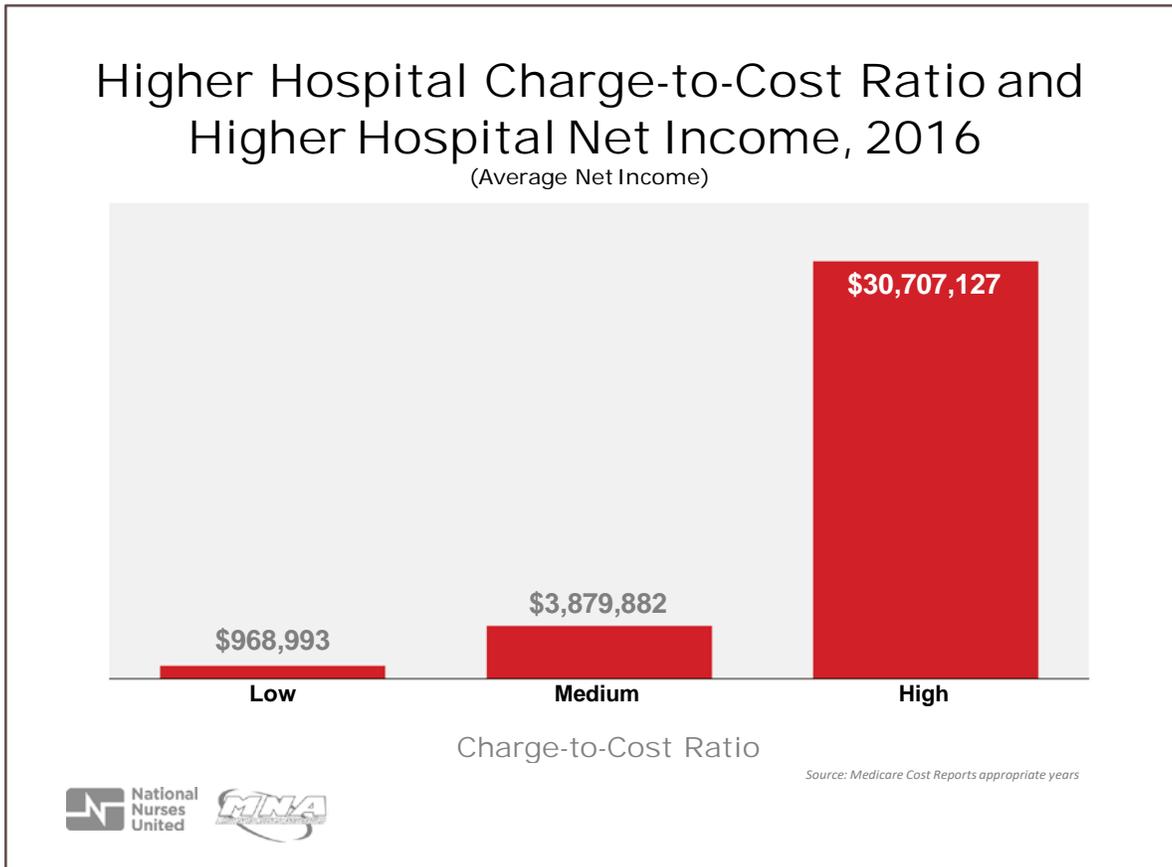
Though there is wide variation in the range of hospitals' CCRs, there are some common characteristics among hospitals with similar CCRs. Dividing the 111 hospitals into three groups of roughly equal size based on their CCRs allows further insights into these hospitals. The Low group consists of 36 hospitals with a range of CCRs from a low of 108 percent to a high of 173 percent, with an average CCR of 148 percent. The Medium groups consists of 38 hospitals, with a range of CCRs of 174 percent to 235 percent and an average CCR of 196 percent. The High group consists of 37 hospitals, with a range from 236 to 383 percent and an average CCR of 291 percent. The average CCR of the High group is almost double the CCR of the Low group.

Not surprisingly, hospitals that have higher CCRs also generally have higher net incomes. For those hospitals in the Low group of CCRs, the average net income was \$968,993. For those in the Me-

dium group of CCRs, the average net income was \$3,879,882. For hospitals in the High group of CCRs, the average net income was \$30,707,127. The High group of hospitals clearly dominates the other groups. The High group's net income is ten times larger than the Low group. The High group accounts for 86.2 percent of net income for Minnesota hospitals, while the Medium and Low groups only account for 11.2 percent and 2.6 percent respectively.

Hospitals with the highest CCRs tend to be located in large and medium-size urban, metropolitan areas, and are larger, have more discharges, and are members of hospital systems. In the High group 35 out of 37 hospitals are located in either a large or medium-size metropolitan area with only two located in a rural setting. Compare this to 21 in the rural setting for the Low group. The Minneapolis-St. Paul metropolitan area has the most hospitals (57 percent) in the High group.

Figure 13



The High group of hospitals is much larger than the other two groups. The High group has an average of 196 beds with 10,493 inpatient discharges. The Medium group averages 52 beds with 2,121 inpatient discharges and the Low group averages 20 beds with 306 discharges.

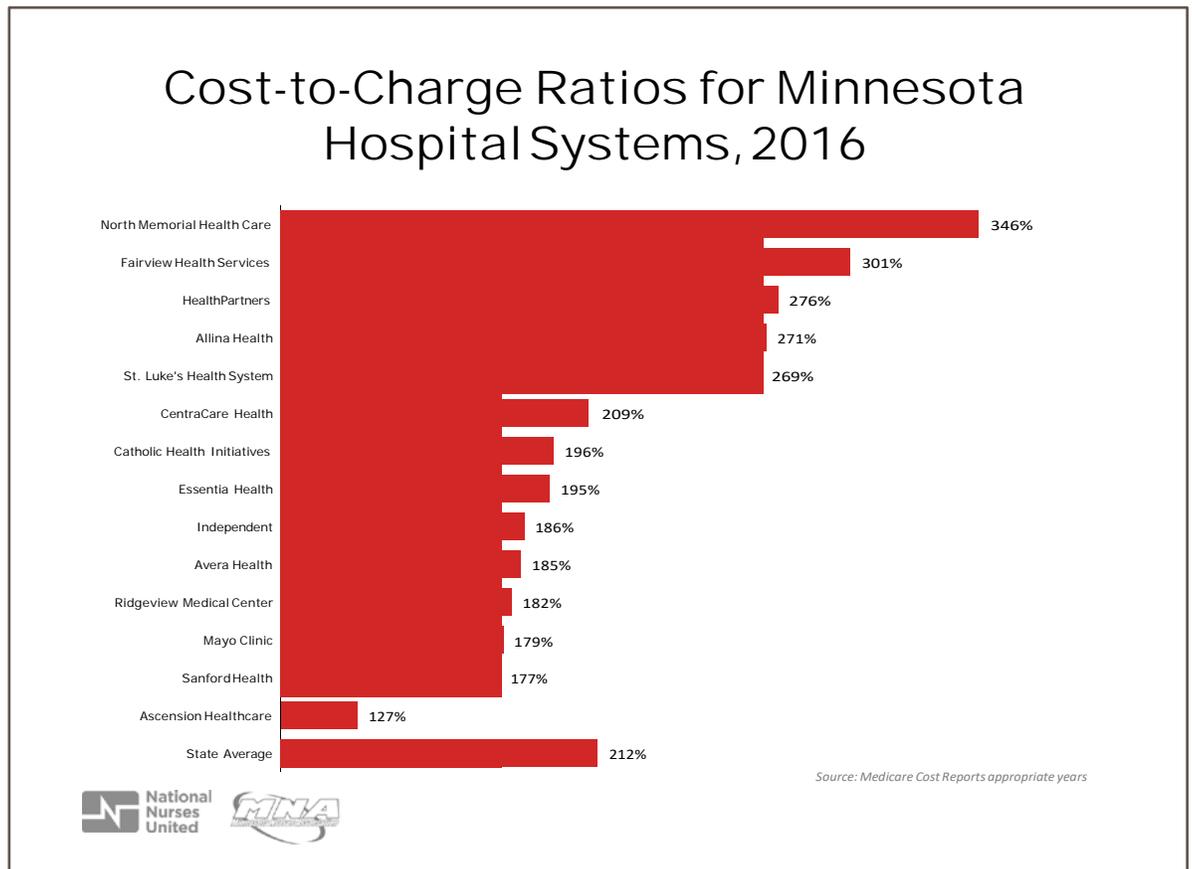
In the High group of hospitals 32 out of 37 (86.5 percent) are members of hospital systems. Specifically, two hospital systems— Allina Health and Fairview Health Services – have 10 hospitals each in the grouping with the highest CCRs. These two systems account for over half of the hospitals with the highest CCRs. The other two groups are not nearly as dominated by systems: the Medium group has 53 percent of their hospitals in systems, while the Low group has 61 percent.

The systems show wide-ranging CCRs from a low of 127 percent to a high of 346 percent. There are some

systems that are much higher than the CCR state average of 212 percent. North Memorial Health Care, Fairview Health Services, HealthPartners, Allina Health, and St. Luke’s Health System are all systems with average CCRs that are higher than the state average. For those hospitals that are independent, the average CCR was 186 percent.

Over the last 20 years, Minnesota hospitals have consolidated into hospital systems resulting in highly concentrated hospital markets. In 1997, almost one-third (32 percent) of hospitals belonged to a system and two-thirds (68 percent) were independent. By 2016, the numbers reversed, with almost two-thirds (64 percent) of hospitals belonging to systems, while only one-third remain independent. The hospitals in systems dominate patient care as they control 86 percent of beds and almost 90 percent of inpatient discharges.

Figure 14



Mergers and acquisitions of hospitals have led to highly concentrated hospital markets. A common method used to measure the competitiveness or concentration of a market is called the Herfindahl-Hirschman Index (HHI). The HHI uses market share among firms in a given market to measure the competitiveness of that market.<sup>21</sup> The range of HHI is from 0, which represents a highly competitive market, to 10,000, which represents a monopoly. According to the Federal Trade Commission and U.S. Department of Justice, markets are considered moderately concentrated if the HHI is between 1,500 and 2,500 points and are highly concentrated when the Herfindahl-Hirschman Index (HHI) is above 2,500.<sup>22</sup>

Employing the above criteria, three of the four largest hospital markets in Minnesota based on the Metropolitan Statistical Area (MSA)<sup>23</sup> are classified as highly concentrated with the four considered moderately concentrated. The hospital systems are treated as a single firm because they negotiate with health insurance firms as a system. In 2016, the Minneapolis-St. Paul-Bloomington MSA had an HHI of 2,467, just

shy of the 2,500 cutoff for a highly-concentrated market. The Duluth MSA's HHI is 4,345, the Rochester MSA's HHI is 8,932, and the St. Cloud MSA's HHI was 10,000. All four of these markets are considered highly concentrated. Such markets are not unique to Minnesota as a recent study found that in 2016 90 percent of all U.S. MSAs had highly concentrated hospital markets.<sup>24</sup>

Highly concentrated hospital markets allow hospitals and systems to gain negotiating power relative to health insurance companies over hospital charges and reimbursements. The justification forwarded by hospitals for consolidation is that doing so will reduce their costs. Studies have found that mergers result in small cost savings.<sup>25, 26</sup> Yet there is no evidence that any savings are passed along to patients in lower charges. Rather, numerous studies have found mergers and acquisitions result in higher reimbursements for hospitals after a merger.<sup>27</sup> This has been found for both consolidation within hospital markets<sup>28</sup> and across hospital markets.<sup>29, 30</sup>

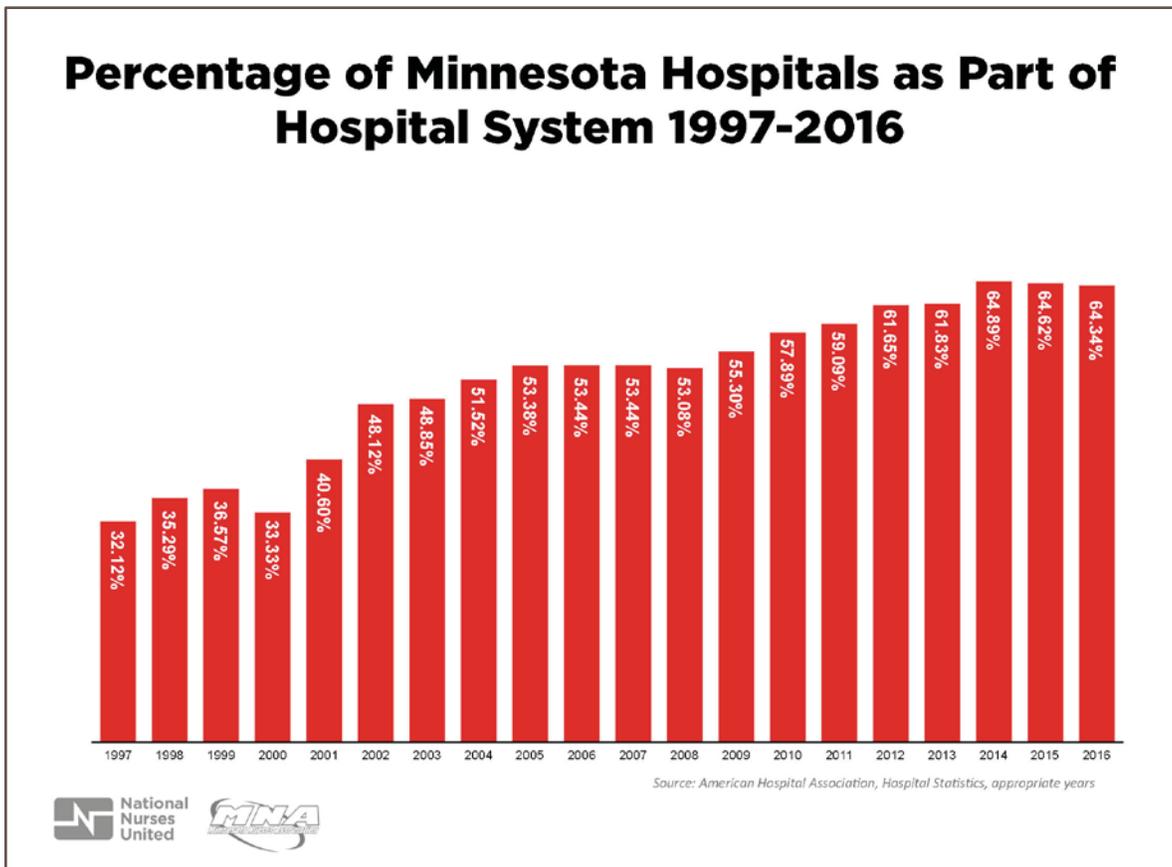


Figure 15

The overall impact has been that in highly concentrated markets, hospital charges and reimbursements are higher than less concentrated markets. In a recent study comparing a more concentrated area (Northern California) to a less concentrated area (Southern California), prices in the more concentrated were 70 percent higher for inpatient prices and 17 to 55 percent higher for outpatient prices.<sup>31</sup>

It is clear that consolidation has contributed to hospitals' ability to increase their power relative to health insurance companies. The hospitals are able to manipulate their pricing strategies through the CCRs for their own benefit at the expense of patients. As shown in Figure 15, those hospitals in the High group that gained power through consolidation have benefited the most.

## CONCLUSION

Hospitals, institutions on which we rely on for so much and that anchor our communities in so many ways, have become powerful corporations interested in making the largest profit. With little to no community accountability or stakeholder representation, hospitals are able to use their economic power and take advantage of their social importance to distort pricing systems. As has been shown, CCRs have dramatically increased across Minnesota hospitals and hospital systems over the last two decades. Profits have climbed. All the while, the public has been left with unaffordable treatment options. It's time for hospitals to stop focusing on the bottom-line and start focusing on patient well-being and safety.

Stop focusing on the bottom line and start focusing on patient well-being and safety.

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- 21 | The Herfindahl-Hirschman Index is calculated by squaring the market share of each firm competing in a market and then summing up the resulting numbers. For example, if there are four firms that have equal market share (25%) the formula would be  $25^2 + 25^2 + 25^2 + 25^2 = 2,500$
- 22 | See Herfindahl-Hirschman Index. <https://www.justice.gov/atr/herfindahl-hirschman-index>
- 23 | According to the U.S. Census Bureau, "The general concept of a metropolitan statistical area is that of a core area containing a substantial population nucleus, together with adjacent communities having a high degree of economic and social integration with that core... Each metropolitan statistical area must have at least one urbanized area of 50,000 or more inhabitants." Retrieved September 15, 2018. <https://www.census.gov/programs-surveys/metro-micro/about.html>
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- 30 | It has been suggested that merger studies are underestimating the effects of the consolidation as not only are merged hospitals increasing their prices, but non-merging rivals in the same market are also increasing their prices. See Dafney, Leemore. "Estimation and Identification of Merger Effects: An Application to Hospital Mergers." *Journal of Law and Economics*, 52(3): 523-550. 2009.
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**APPENDIX I**

**Consumer Price Index for Medical Care 1997-2016 (1997 = 100)**

Year	All Items	Medical Care	Inpatient Hospital Services	Outpatient Hospital Services	Physicians' Services	Dental Services	Prescription Drugs	Nursing Homes and Adult Services
1997	100	100	100	100	100	100	100	100
1998	101.6	103.4	102.8	104.0	103.3	104.5	104.9	104.3
1999	104.3	107.2	107.4	110.9	106.0	109.4	111.3	109.1
2000	107.9	111.7	113.5	118.9	110.1	114.2	115.3	114.5
2001	109.6	117.0	121.4	126.9	114.0	118.7	122.2	119.6
2002	112.4	122.9	133.0	143.0	117.6	124.0	127.7	124.9
2003	114.6	127.4	140.5	152.4	120.4	129.5	130.9	132.1
2004	118.5	132.8	148.5	159.3	125.1	136.0	135.5	136.8
2005	122.4	138.5	156.4	167.5	129.0	143.7	141.4	141.6
2006	125.5	143.4	167.3	176.5	131.1	151.0	144.1	148.7
2007	130.7	150.8	180.1	194.1	136.3	159.6	148.9	155.9
2008	130.7	154.8	190.3	204.9	140.2	165.2	151.1	160.8
2009	134.3	160.1	204.8	221.6	143.7	170.3	157.7	166.6
2010	136.3	165.3	223.6	232.8	148.5	174.9	164.1	171.8
2011	140.4	171.1	237.5	244.4	152.5	178.8	170.9	176.9
2012	142.9	176.6	247.2	257.9	155.5	183.9	174.1	183.3
2013	145.1	180.1	257.9	267.8	158.3	189.1	175.6	188.8
2014	146.0	185.5	272.2	280.2	160.6	192.6	186.8	194.3
2015	147.0	190.2	283.6	289.8	164.4	198.1	191.3	200.6
2016	150.1	198.0	297.6	299.6	170.7	203.4	203.3	207.5

*Source: Bureau Labor Statistics*

## APPENDIX 2

### Minnesota Hospitals: Charge-to-Cost Ratio – High Group

State Rank	Hospital Name	City	System	Charge-to-Cost Ratio	Net income (or loss)	Area Type
1	Maple Grove Hospital	Maple Grove	North Memorial Health Care	383%	\$20,775,457	Metro
2	St. Lukes Hospital Of Duluth	Duluth	St. Luke's Health Care System	369%	\$7,150,015	Metro
3	St Johns Hospital	Maplewood	Fairview Health Services	359%	\$29,386,382	Metro
4	Regions Hospital	St Paul	HealthPartners	358%	\$26,878,248	Metro
5	Woodwinds Hospital	Woodbury	Fairview Health Services	352%	\$26,979,760	Metro
6	Abbott Northwestern Hospital	Minneapolis	Allina Health	322%	(\$5,489,613)	Metro
7	Mercy Hospital	Coon Rapids	Allina Health	321%	\$43,274,795	Metro
8	Fairview Ridges Hospital	Burnsville	Fairview Health Services	315%	\$31,298,448	Metro
9	Fairview Southdale Hospital	Edina	Fairview Health Services	312%	\$37,422,371	Metro
10	University Of Minnesota Medical Ctr	Minneapolis	Fairview Health Services	312%	\$56,660,264	Metro
11	North Memorial Health Care	Robbinsdale	North Memorial Health Care	309%	(\$78,606)	Metro
12	United Hospital	Saint Paul	Allina Health	306%	\$26,739,574	Metro
13	St. Cloud Hospital	St. Cloud	CentraCare Health	304%	\$148,469,124	Metro
14	St Josephs Hospital	St Paul	Fairview Health Services	303%	(\$35,838,191)	Metro
15	Lake Region Healthcare	Fergus Falls		300%	(\$230,792)	Micro
16	Northfield City Hospital	Northfield		294%	\$964,397	Micro
17	Hennepin County Medical Center	Minneapolis		287%	(\$30,974,000)	Metro
18	Douglas County Hospital	Alexandria		284%	\$7,977,065	Micro
19	St. Josephs Medical Center	Brainerd	Essentia Health	284%	\$29,523,506	Micro
20	Fairview Lakes Regional Medical Ctr	Wyoming	Fairview Health Services	282%	\$12,794,792	Metro
21	Unity Hospital	Fridley	Allina Health	277%	(\$12,864,188)	Metro
22	Fairview Northland Reg	Princeton	Fairview Health Services	274%	\$6,662,100	Metro
23	Buffalo Hospital	Buffalo	Allina Health	271%	\$9,696,709	Metro
24	Regina Hospital	Hastings	Allina Health	269%	\$4,735,884	Metro
25	Owatonna Hospital	Owatonna	Allina Health	267%	\$7,257,915	Micro
26	Cambridge Medical Center	Cambridge	Allina Health	265%	\$7,781,981	Metro
27	Sanford Bemidji	Bemidji	Sanford Health	264%	\$10,273,462	Micro
28	Lakeview Memorial	Stillwater	HealthPartners	262%	\$16,088,379	Metro
29	St. Marys Medical Center	Duluth	Essentia Health	261%	\$63,057,552	Metro
30	Mayo Clinic Hospital Rochester	Rochester	Mayo Clinic	261%	\$556,769,247	Metro
31	Grand Itasca Clinic And Hospital	Grand Rapids	Fairview Health Services	257%	(\$2,469,435)	Micro
32	District One Hospital	Faribault	Allina Health	254%	(\$1,723,424)	Micro
33	St. Josephs Area Health Services	Park Rapids	Catholic Health Initiatives	249%	\$6,555,802	Rural
34	Cuyuna Regional Medical Center	Crosby		247%	\$4,937,409	Micro
35	Range Regional Health Services	Hibbing	Fairview Health Services	242%	\$2,911,855	Metro
36	St. Francis Regional Medical Center	Shakopee	Allina Health	240%	\$17,972,690	Metro
37	St. Gabriels Hospital	Little Falls	Catholic Health Initiatives	238%	\$4,836,749	Rural

## APPENDIX 2

### Minnesota Hospitals: Charge-to-Cost Ratio — Middle Group

State Rank	Hospital Name	City	System	Charge-to-Cost Ratio	Net income (or loss)	Area Type
38	Mayo Clinic Health System Mankato	Mankato	Mayo Clinic	235%	(\$15,585,884)	Metro
39	Ridgeview Medical Center	Waconia	Ridgeview Medical Center	234%	\$3,918,705	Metro
40	Avera Marshall Regional Medical Ctr	Marshall	Avera Health	222%	\$5,029,464	Micro
41	Melrose Area Hospital Centracare	Melrose	CentraCare Health	218%	\$9,765,699	Metro
42	Essentia Health Virginia	Virginia	Essentia Health	215%	\$17,381,472	Metro
43	Mayo Clinic Health System - Red Wing	Red Wing	Mayo Clinic	211%	(\$3,402,892)	Micro
44	Sanford Medical Center Jackson	Jackson	Sanford Health	211%	\$1,772,416	Rural
45	CentraCare Health-Monticello	Monticello	CentraCare Health	210%	\$4,111,509	Metro
46	Rice Memorial Hospital	Willmar		209%	\$738,034	Micro
47	Park Nicollet Methodist Hospital	St. Louis Park	HealthPartners	207%	\$50,480,924	Metro
48	Community Memorial Hospital	Cloquet		206%	\$3,241,634	Metro
49	Hutchinson Health Care	Hutchinson		205%	\$2,647,150	Micro
50	Riverview Healthcare Association	Crookston		203%	\$4,101,580	Metro
51	St. Marys Regional Health Center	Detroit Lakes	Essentia Health	202%	\$11,077,388	Rural
52	Mille Lacs Hospital	Onamia		200%	(\$355,908)	Metro
53	Rivers Edge Hospital And Clinic	St. Peter		198%	\$1,531,281	Metro
54	Sanford Regional Hospital Worthingto	Worthington	Sanford Health	196%	(\$6,870,985)	Micro
55	New Ulm Medical Center	New Ulm	Allina Health	195%	\$8,157,318	Micro
56	Stevens Community Medical Center	Morris		194%	\$1,681,101	Rural
57	Sanford Thief River Falls	Thief River Falls	Sanford Health	191%	\$6,848,640	Rural
58	Tri County Hospital	Wadena		190%	\$1,025,121	Rural
59	Mayo Clinic Hlth Sys-Albrt Lea Austin	Austin	Mayo Clinic	190%	\$1,219,058	Micro
60	Olmsted Medical Center	Rochester		190%	\$22,375,124	Metro
61	Riverwood Healthcare Center	Aitkin		189%	\$3,573,154	Rural
62	Smdc Medical Center	Duluth	Essentia Health	185%	\$2,383,877	Metro
63	Renville County Hospital And Clinics	Olivia		183%	\$2,105,057	Rural
64	Perham Memorial Hospital And Home	Perham	Sanford Health	182%	\$2,428,495	Micro
65	United Hospital District	Blue Earth		182%	\$201,280	Rural
66	Mercy Hospital & Health Care Center	Moose Lake		182%	\$454,018	Metro
67	CentraCare Health - Sauk Centre	Sauk Centre	CentraCare Health	182%	\$8,342,944	Metro
68	Long Prairie Memorial Hospital	Long Prairie	CentraCare Health	182%	\$2,913,175	Rural
69	Mayo Clinic Health System-Fairmont	Fairmont	Mayo Clinic	179%	(\$10,027,012)	Micro
70	Glacial Ridge Hospital	Glenwood		179%	\$450,738	Rural
71	Lifecare Medical Center	Roseau		177%	\$5,212,708	Rural
72	Redwood Area Hospital	Redwood Falls		176%	\$1,579,142	Rural
73	Winona Health Services	Winona		175%	(\$2,943,057)	Micro
74	Windom Area Hospital	Windom	Sanford Health	173%	\$392,566	Rural
75	Chippewa County-Montevideo Hospital	Montevideo		173%	(\$519,523)	Rural

## APPENDIX 2

### Minnesota Hospitals: Charge-to-Cost Ratio – Low Group

State Rank	Hospital Name	City	System	Charge-to-Cost Ratio	Net income (or loss)	Area Type
76	St. Francis Medical Center	Breckenridge	Catholic Health Initiatives	172%	\$8,479,342	Micro
77	International Falls Memorial Hospital	International Falls		172%	\$861,031	Rural
78	Granite Falls Hospital	Granite Falls		172%	(\$156,474)	Rural
79	Ely-Bloomenson Community Hospital	Ely		171%	\$1,586,274	Metro
80	Meeker County Memorial Hospital	Litchfield		170%	\$315,117	Rural
81	Sanford Hospital Luverne	Luverne	Sanford Health	169%	\$2,711,275	Rural
82	Lake View Memorial Hospital	Two Harbors	St. Luke's Health Care System	169%	\$2,369,192	Rural
83	Sanford Bagley Medical Center	Bagley	Sanford Health	168%	\$1,880,999	Rural
84	Mayo Clinic Health System - Waseca	Waseca	Mayo Clinic	167%	\$1,808,989	Rural
85	Lakewood Health System	Staples		160%	\$1,024,282	Rural
86	Deer River Healthcare Center	Deer River	Essentia Health	159%	\$2,213,611	Micro
87	Pine Medical Center	Sandstone	Essentia Health	159%	\$608,217	Rural
88	Mayo Clinic Health Sys - New Prague	New Prague	Mayo Clinic	158%	(\$1,345,456)	Metro
89	Paynesville Area Hospital	Paynesville	CentraCare Health	157%	\$3,690,058	Metro
90	Mayo Clinic Health Sys - St. James	St. James	Mayo Clinic	155%	\$1,374,671	Rural
91	Madison Lutheran Home	Madison		152%	\$1,280,472	Rural
92	First Care Medical Services	Fosston	Essentia Health	152%	\$1,737,091	Metro
93	Johnson Memorial Hospital	Dawson		149%	\$2,216,739	Rural
94	Pipestone County Medical Center	Pipestone	Avera Health	147%	(\$319,537)	Rural
95	Cannon Falls Medical Center - Mayo	Cannon Falls	Mayo Clinic	146%	\$2,962,113	Micro
96	Cook Hospital	Cook		144%	\$1,140,827	Metro
97	Northern Itasca Hospital District	Bigfork		141%	(\$231,248)	Micro
98	Sleepy Eye Municipal Hospital	Sleepy Eye		141%	(\$476,672)	Micro
99	Northern Pines Medical Center	Aurora	Essentia Health	140%	\$1,423,416	Metro
100	Mayo Clinic Health System - Lake City	Lake City	Mayo Clinic	137%	(\$877,385)	Metro
101	Ortonville Area Health Services	Ortonville	Sanford Health	134%	\$1,057,180	Rural
102	Murray County Memorial Hospital	Slayton	Sanford Health	132%	(\$1,863,696)	Rural
103	Sanford Hospital Canby	Canby	Sanford Health	131%	\$932,746	Rural
104	Kittson Memorial Hospital	Hallock		131%	(\$628,316)	Rural
105	Swift County - Benson	Benson		130%	(\$1,072,274)	Rural
106	Sibley Medical Center	Arlington	Ridgeview Medical Center	129%	\$1,051,677	Metro
107	St. Elizabeth Hospital of Wabasha	Wabasha	Ascension Healthcare	127%	\$242,843	Metro
108	Lakewood Health Center	Baudette	Catholic Health Initiatives	126%	(\$277,389)	Rural
109	Mayo Clinic Hith Sys - Springfield	Springfield	Mayo Clinic	126%	(\$433,055)	Micro
110	Cook County North Shore Hospital	Grand Marais		118%	\$553,452	Rural
111	North Valley Health Center	Warren		108%	(\$956,348)	Rural



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