Social Impact Research Experience (SIRE)                    Wharton Undergraduate Research

2019

# Evaluating the Impact of a Consolidated Health Care System on Low-Income Patients in Connecticut

Rachel Goldstein

# Evaluating the Impact of a Consolidated Health Care System on Low-Income Patients in Connecticut

**Abstract**

Hospitals around the country are adopting new practices and joining hospital systems. While some states have had a relatively mild rate of consolidation, others, like Connecticut, have become heavily dependent on a bifurcated hospital system. Previous papers have mainly considered prices of treatments and availability of care to the broad population. This research paper explores the ability of a consolidated health system to treat and meet UNESCO defined standards for social responsibility in the healthcare sector, particularly for low-income patients. Based on the findings in Connecticut's New London county, this paper finds that it is possible for a place with a heavily consolidated health system to not only meet UNESCO defined standards, but also to provide high levels of medical care and a variety of services to low income patients.

**Disciplines**

Business | Community Health and Preventive Medicine | Health and Medical Administration | Health Services Research

Evaluating the Impact of a Consolidated Health Care System on Low-Income Patients in Connecticut

Abstract: Hospitals around the country are adopting new practices and joining hospital systems. While some states have had a relatively mild rate of consolidation, others, like Connecticut, have become heavily dependent on a bifurcated hospital system. Previous papers have mainly considered prices of treatments and availability of care to the broad population. This research paper explores the ability of a consolidated health system to treat and meet UNESCO defined standards for social responsibility in the healthcare sector, particularly for low-income patients. Based on the findings in Connecticut's New London county, this paper finds that it is possible for a place with a heavily consolidated health system to not only meet UNESCO defined standards, but also to provide high levels of medical care and a variety of services to low income patients.

Rachel Goldstein

Prof. Djordjija Petkoski

The Wharton School

*Prepared for Wharton Social Impact Research Experience (SIRE)*

Abstract:

Hospitals around the country are adopting new practices and joining hospital systems.  While some states have had a relatively mild rate of consolidation, others, like Connecticut, have become heavily dependent on a bifurcated hospital system.  Previous papers have mainly considered prices of treatments and availability of care to the broad population. This research paper explores the ability of a consolidated health system to treat and meet UNESCO defined standards for social responsibility in the healthcare sector, particularly for low-income patients. Based on the findings in Connecticut's New London county, this paper finds that it is possible for a place with a heavily consolidated health system to not only meet UNESCO defined standards, but also to provide high levels of medical care and a variety of services to low income patients.

## I.    Introduction

The immense consolidation of hospitals and the subsequent potential for collusion amongst healthcare providers has been a point of concern for the Federal Trade Commission (FTC) since 1981.  That year, the FTC filed its first legal complaint challenging a hospital merger in Chattanooga, Tennessee.  In its complaint, the FTC stated that the Hospital Corporation of America − a large, proprietary hospital chain − had violated the seventh section of the Clayton Act by owning and managing five out of the eleven hospitals in the area (*Hospital Corporation of America v. Federal Trade Commission* 1986).  With that consolidation, the FTC feared that the remaining four hospital firms in the area would have "control over an entire market so that they would have little reason to fear a competitive reaction if they raised prices above the competitive level" (*Hospital Corporation of America v. Federal Trade Commission* 1986).

The FTC won this case and, for the remainder of the 20th century, proceeded to stop further hospital consolidation that could cause increasing prices or the potential for reduced quality of care. Alexis Gilman of the FTC's Bureau of Competition stated, "We hit a losing streak: from 1994 through 2000, the federal antitrust enforcers lost all six hospital merger cases they litigated."  Following these continued losses, in 2002, the FTC founded its Hospital Merger Retrospective Project, a joint initiative of the FTC Bureau of Competition and its Bureau of Economics (Gilman 2014).  Today, the FTC bases its approach to hospital merger enforcement on the insights it gained from this project.  Specifically, the FTC now uses (1) court-defined geographic markets to limit the physical span of hospital systems, (2) non-distinctive treatment of non-profit and for-profit hospitals in regards to market acquisition, and (3) analytic tools to assess a merged hospital's leverage and prices (Gilman 2014).

Following the March 23, 2010 passage of the Affordable Care Act (ACA), even with the work accomplished through the Hospital Merger Retrospective Project, there has been an even greater trend of hospital mergers across the United States, as compared to the pre-ACA trends. In 2011, 93 hospital mergers were announced (Kaufman Hall 2017).  This was a large spike from the average of 55 hospital mergers per year from 2002 to 2009.  Further, in 2017, there were 115 announced deals, which was a 13% increase from the previous year and the highest number of hospital mergers in American history (Kaufman Hall 2018).  While 2018 had a dip in the overall volume of announced deals (i.e., 90 transactions) as compared to 2017, a new trend of "mega-mergers" can be seen in the types of transactions that took place (Kaufman Hall 2019).  A "mega-merger" is a colloquial term for a merge or agreement between entire health systems.

Until 2016, all American hospital mergers had to be approved by antitrust agencies, and the FTC questioned or stopped only a select, few cases (Abelson 2018). In 2016, the consolidation of hospitals became a smaller area of focus for the FTC and the trend of mega-mergers rapidly began to occur throughout the country. In the state of Connecticut, the mega-merger trend rapidly came to dominate the healthcare field. Further, due to the state's small geographic size, the consolidation of hospitals has created an almost perfectly bifurcated healthcare system, with nearly every hospital in the state being a part of one of the two major systems − Hartford HealthCare (HHC) and Yale New Haven Health. Angela Mattie, Chair of Connecticut's Quinnipiac University's Department of Healthcare Management and Organizational Leadership, has said, "The standalone hospital has gone the way of the dinosaur" (Cuda 2018).

## II.     Intentions and Goals

It is important to examine how these mergers will affect cost and the productiveness of healthcare, specifically for low-income patients. Connecticut has reached the point of having only two healthcare systems much faster than many other states. Connecticut may be a model for what a heavily consolidated system of healthcare will look like in the U.S., which is what several other states will trend toward in the next decade.

The United Nations Educational, Scientific, and Cultural Organization's (UNESCO's) International Bioethics Committee on Social Responsibility and Health defines social responsibility in the healthcare sector as "A task to be shared by the private sector and States and governments, which are called to meet specific obligations to the maximum of the available resources in order to implement and progressively achieve the full realization of this right." This paper aims to contribute to the literature on the impacts of healthcare consolidation for low-income patients from both financial and qualitative standards. It also aims to analyze and determine if the consolidated healthcare system in Connecticut is capable of achieving this UNESCO-defined goal for social responsibility.

The information included in this paper is a result of an analyzation of the practices, performances, and economic data of employees from an individual hospital within one of the two large systems in Connecticut. The hospital chosen for this study was the William W. Backus Hospital in Norwich, Connecticut. Ultimately, this paper focuses on researching how the consolidated health system that is currently found in the state of Connecticut has been implemented.

**III.** **A History of Healthcare in Connecticut and the Development of Backus Hospital as a Part of the Hartford HealthCare System**

*A. Development and Origins of the Yale New Haven Health System*

In 1942, Thomas John Herbert, a Yale University Professor of Medicine, studied health care in Connecticut. Herbert observed that the State of Connecticut has had a long history of delivering healthcare. The state issued its first medical licenses in 1652, and the state's first medical society was established in 1792 (Herbert 1942). In 1723, Yale College awarded the first honorary medical degree given by any American institution of higher education to Daniel Turner. In 1813, Yale Medical School was founded, and Hartford Hospital opened in 1854 (Lorimer 2012). Today, these two hospitals are the founding members of each of their respective non-profit healthcare systems. Each healthcare system connects hospitals across the state and even into Rhode Island.

The first step toward Connecticut's hospital consolidation occurred in 1996, when Yale New Haven Hospital partnered with Bridgeport Hospital to form the Yale New Haven Health System (Pearsall 1996). Two years later, the system grew when it added Greenwich Hospital to its partnership. Yale New Haven Health System did not acquire any more hospitals until 2015, when it acquired Lawrence + Memorial Healthcare, which includes Lawrence + Memorial Hospital in New London, Connecticut and Westerly Hospital in Westerly, Rhode Island. This merger was one of state's largest-ever hospital mergers (O'Leary 2016). In addition to these two hospitals, Yale New Haven Health System now operates more than 360 locations, including several outpatient centers in both states.

Today, the Yale New Haven Health System is the largest healthcare system in the state. According to the American Hospital Directory, the system has more than 2,400 beds and 7,600 medical staff.

B. *Development and Origins of Hartford HealthCare*

Hartford HealthCare began in 1854 with the founding of Hartford Hospital (Hartford Hospital Website). Its first step toward the formation of a healthcare network occurred in 2009, when Windham Hospital of Windham, Connecticut joined Hartford HealthCare. Shortly thereafter, MidState Medical Center (Meriden,

Connecticut) joined the network.  HHC continued to expand with its 2011 acquisition of the Hospital of Central Connecticut (New Britain, Connecticut). This hospital was the result of 2006 merger between Bradley Memorial Hospital (Southington, Connecticut) and New Britain General.  With the 2011 merger, HHC also acquired the Hospital of Central Connecticut's parent company, Central Connecticut Health Alliance (Becker 2011), which specialized in providing long-term care, visiting nursing services, and rehabilitation services.  The Central Connecticut Health Alliance, much like the Hospital of Central Connecticut itself, merged with HHC and became a part of the Hartford HealthCare Corporation. The FTC approved the affiliation of these hospitals and parent companies (Blesch 2011).

The next point of major expansion for the HHC system was in 2013, when HHC acquired Backus Hospital. In the two years between the acquisition of the Hospital of Central Connecticut and Backus Hospital, HHC acquired Natchaug Hospital (Mansfield, Connecticut), a smaller mental health and addiction treatment facility. Rebecca Durham, a Regional Institute Director for Hartford HealthCare, works daily at the Backus Hospital as a leader of its East Region. Durham has stated that hospitals join the HHC system to "standardize care, utilize resources more effectively, and eventually drop the price of care."

In early 2018, Charlotte Hungerford Hospital (Torrington, CT) became the sixth acute-care hospital to join the HHC system. This is a smaller facility with 109 beds on-site.  Along with the acquisition of hospitals, HHC also acquired physician practices throughout the state.  These physician groups varied in size, scope of practice and location. Most recently, HHC acquired St. Vincent's Hospital. On August 15, 2019, the Connecticut Office of Health Strategy approved HHC's acquisition of St. Vincent's Medical Center (Bridgeport, Connecticut).  Jeffrey Flaks, President of HHC, wrote, "Obtaining the state's approval of the Certificate of Need application was a key regulatory step and allows St. Vincent's to become part of the Hartford HealthCare system" (Flaks 2019). Flaks wrote that his team expects to complete the transition of St. Vincent's into the HHC system by October 1, 2019.

Hartford HealthCare now serves over 126 towns, employs nearly 20,000 people, and offers care at 6 acute care hospitals.  Of HHC's annual 388,805 annual Emergency Department visits, Backus Hospital employees treat 73,331 people per

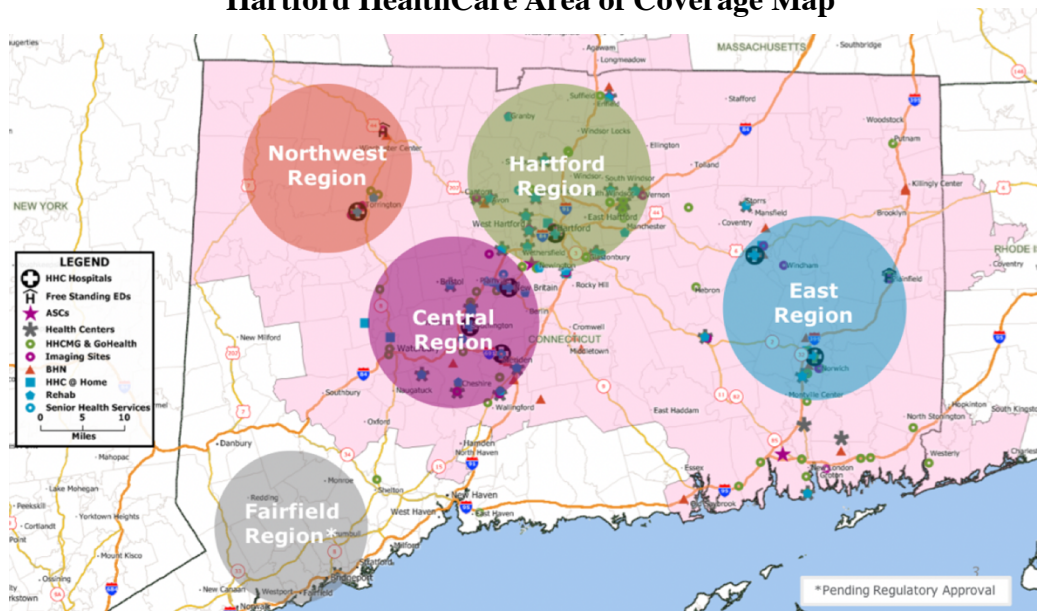year (18.86% of the HHC total) (Laabs 2019). The HHC system has readmission rates that continue to remain far below the national average of 4.2% (Hartford HealthCare Annual Report 2018).

**Figure 1**
**Yale New Haven Area of Coverage Map**



*Source: Yale New Haven Health System Annual Report 2018*

**Figure 2**
**Hartford HealthCare Area of Coverage Map**



*Source: Jason Laabs Marketing Director Hartford HealthCare (2019)*

C.  *Origins and Current State of Connecticut's Non-Affiliated Hospitals*

In 2014, in response to the growth of both Yale New Haven Health System and HHC, five healthcare systems that included seven hospitals formed the Value Care Alliance (VCA).

Christian Meagher, a communications specialist from one of the hospitals involved in the VCA, wrote, "The VCA is the largest collaboration of independent healthcare providers in the state." The members of the VCA, all of which are located in Connecticut, include Griffin Hospital (Derby), Lawrence + Memorial Hospital (New London), Middlesex Hospital (Middletown), St. Vincent's Medical Center (Bridgeport), and Western Connecticut Health Network, which is comprised of Danbury Hospital (Danbury), New Milford Hospital (New Milford), and Norwalk Hospital (Norwalk) (Meagher 2014). These hospitals hoped to remain independent and physician-led. Patrick Charmel, Chairman of the VCA and President and CEO of Griffin Hospital, said that this "new healthcare environment has resulted in individuals being personally responsible for a greater portion of the cost of care they receive. The VCA is also designed to provide healthcare consumers with a lower cost alternative to the high cost of care associated with regional referral centers."

Since 2014, several of the hospitals in the VCA have joined either Yale New Haven Health or HHC. The alliance ended when Lawrence and Memorial joined the Yale New Haven Health System.

D. *History of and Regional Information Related to Backus Hospital*

Backus Hospital is a mid-sized hospital and is the third-largest hospital in the HHC system. It is located in the HHC "East Region" (Laabs 2019). The "East Region" is an HHC-designed area comprised of Backus Hospital and Windham Hospital, a smaller facility less than 20 miles away. Due to its moderate size within the system, but its large presence in the East Region, Backus Hospital provided a unique environment for this research.

When Backus Hospital agreed to join HHC, it had recently added several new services to the facility, such as a LifeStar Helicopter stationed permanently at Backus (Laabs 2019). Additionally, Backus had recently expanded its neonatal and cardiac

care services (Bessette 2013).  Further, Backus had recently created its Preventative Medicine Institute, the mission of which is to help area residents lead healthier lives and avoid developing chronic conditions.  In addition, as Donna Handley, President of HHC's East Region, wrote in the Backus Hospital's Healthy Community Initiative Notice of 2018, "Through its affiliation with Hartford HealthCare, Backus Hospital is creating a new Heart and Vascular Center - a modern, comprehensive outpatient site which will offer a full spectrum of cardiovascular care and testing." She went on to state that  "providing both care and testing at one site will promote seamless care between specialists and primary care physicians, resulting in easier access and improved outcomes for patients." The hospital has grown since its affiliation with HHC and continues to be a major leader for healthcare services in the area.

**IV.    Community Health Assessment and the Impact of Backus Hospital**

The impact of nationwide health consolidation during the early years of the 21st century has been discussed extensively in academic literature and the media. The primary area of concern is rising costs to patients resulting from the increasing cost of prescription drugs and technological innovation.  To combat these concerns, in 2010, the Internal Revenue Service implemented the Community Health Assessment (CHA). The CHA, which is also referred to as the community health needs assessment, is a requirement for all American tax-exempt hospitals. A hospital that is a part of a chain can be considered tax-exempt, so long as it is a registered and recognized non-for-profit organization (Durham 2019). The CHA was a requirement that added as a part of the Patient Protection and Affordable Care Act (PPACA). The CHA is a data-driven method of determining the health status, behaviors, and needs of people who live in any not-for-profit hospital's area of service.

The goals of the CHA are to identify the greatest areas of concern that are immediately facing the community, improve the local residents' health statuses, lengthen their life spans, and improve their overall quality of life.  Additionally, the CHA aims to reduce the health disparities among residents of the given geographic region.  The CHA gathers information on demographics for the purpose of identifying population segments that have the highest risk of contracting certain diseases or injuries.  Another goal of the CHA is to increase access to preventative care for residents, which, if implemented properly, can potentially reduce the costs that stem from the treatment of late-stage diseases.  Each hospital must conduct a CHA every 2 years (Durham 2019).

A. *East Region Administrative Impact of Community Health Assessment*

The HHC Administrative team may also use the data collected in the CHA to inform decisions and guide efforts to improve community health and wellness. This is how Jason Laabs, the HHC East Region Director of Planning and Communications, and his team of three personnel have centered their marketing efforts. For instance, Laabs and his team developed the Backus Healthy Community Initiative in 2018, which was grounded in the findings of Backus' most recent CHA. Following that year's CHA, the East Region worked on the Expansion of the Backus Preventive Medicine Initiative (PMI) (Laabs 2019). This initiative focuses on "keeping our community healthy through prevention, expanded health screenings and education. The PMI includes important programs like Rx for Health, Safe Kids, the Mobile Health Resource Center, and the Community Care Team" (Handley, 2018).

Following the collection of data through the CHA, hospitals are required to provide a Community Health Improvement Plan (CHIP), which is an approach to addressing the public health problems identified. Hospitals within a system are allowed to provide one CHIP, which is an advantage to the administrative team. For Backus and Windham Hospitals, two not-for-profit hospitals, one additional advantage of joining a health system is that now the hospitals and their administrative teams only need to research and develop a single, coordinated plan of action in response to the findings of each of their CHA reports. Laabs said that since HHC acquired Backus Hospital, marketing the hospital and its services to the community has become easier, since his team is now "leveraging the entire health system."

B. *East Region Community Health Assessment Findings*

The overarching purpose of the CHA is to directly address a community's health needs and understand why health outcomes differ within the community. The top-priority community health needs as defined by the Backus Hospital CHA are as follows: availability of public transportation, overuse of the emergency department, substance abuse issues, mental health issues, access to healthy food, obesity, and lack of coordination among and between providers and community-based organizations (Backus CHA 2018).

The CHA report also works to analyze variations in health outcomes. One key factor that Backus Hospital identified in its CHA as a source of variation in health

outcomes is social determinants of health (Laabs 2019).  Backus Hospital defines social determinants of health as "conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks" (Backus CHA 2018).  Its assessment also states that "Resources that enhance quality of life can have a significant influence on population health outcomes."  These resources can include affordable and safe housing, access to education, availability of high-quality food, and environments free of life-threatening toxins.  **Figures 3** and **4** show some of the social determinants in the area. These two figures provide context regarding the community that Backus Hospital serves.

**Figure 3**
**Educational Levels for Backus Patients**

## Educational Atainment

| Level of Atainment | Backus Service Area | State of Connecticut Average |
|---|---|---|
| No High School Diploma | 10.60% | 9.90% |
| High School Graduate | 34.00% | 27.30% |
| Some College | 21.30% | 17.30% |
| Associate's Degree | 8.50% | 7.50% |
| Bachelor's Degree | 14.80% | 21.30% |
| Graduate Degree | 10.80% | 16.80% |
| Total | 100% | 100% |

*Source: American Community Survey*

**Figure 4**
**Poverty Metrics per Race in New London County**

## Poverty Metrics

| Percent Below Poverty Line | New London County | State of Connecticut |
|---|---|---|
| White | 8.00% | 7.80% |
| Black | 21.40% | 20.30% |
| Hispanic | 25.80% | 24.50% |
| Total / Overall | 9.90% | 10.40% |

*Source: American Community Survey*

The CHA created by Backus identifies poverty as the "top social determinant of community health issues" in the area. As shown in **Figure 4**, the percentage of people below the poverty line in the Backus CHA is slightly lower than the average of the rates found throughout the state.

C. *East Region Community Health Improvement Plan Proposals*

The East Region CHIP proposes to address the issues found in the two hospital's CHAs by addressing the "root cause" of three critical issues for the overall community. These three categories are (1) enhancement of coordinated services, (2) promotion of healthy behaviors and lifestyles, (3) and improvement of community behavioral health (Backus CHA 2019).

To enhance the coordination of services within the community, Backus and Windham Hospitals proposed to use information exchange portals to link healthcare providers with community-based organizations, to improve information technology resources that are available to the community, and to hire new and increase the use of Community Health Workers (CHWs).  This portion of the CHIP addresses issues found in the CHA, such as access to public transportation, by having HHC-funded workers, such as the CHWs, brought directly to the people in their areas, rather than relying on the limited public transportation system.

To promote healthy behaviors and lifestyles, the Backus and Windham CHIP proposed to further partnerships with food pantries and food banks, create and develop urban and community gardens, and provide vouchers for fruits and vegetables (Laabs 2019). This plan addresses several of the issues identified in the CHA, including obesity and access to healthy food. This plan was implemented in an effort to increase the prevalence of healthy lifestyles within the community and serves simultaneously as a form of preventative care (Laabs 2019).

The third root cause that the CHIP addresses is the promotion of mental and behavioral health treatment programs. To accomplish this goal, the CHIP proposed that Backus and Windham Hospitals would embed behavioral health services into primary care, recruit more mental health providers, implement an Addiction Recovery Coach Program within the Emergency Department, and enhance tele-psychiatry services to support remote patients. This portion of the CHIP addresses the CHA's issues of substance abuse, coordination of care efforts, and mental health issues.

## V.       Evaluating Recent Prices in the East Region

Often, the discussion of healthcare consolidation evaluates the cost to patients.  The central question is:  do combined hospital systems raise or lower costs for low-income patients?  Given the complexity of healthcare payments, no standard answer can be provided; through an examination of common procedures at two neighboring hospitals in competing systems, however, some numerical information can be gathered. The intention of the Affordable Care Act was to increase access to medical care and insurance and to make care more affordable, but the specific implications within growing hospital systems necessitates further research.

According to Austin Frakt, an adjunct professor at Department of Health Policy and Management at the Harvard Chan School, "Costs related to billing appear to be growing" (Frakt 2018). He also noted that "With deductibles and co-payments on the rise, more patients are facing cost sharing that they may not be able to pay, possibly leading to rising costs for providers, or the collection agencies they work with, in trying to get them to do so."

The data in **Figure 5** shows the 20 most frequent Operating Room procedures performed in American hospitals, according to the Agency for Healthcare Research and Quality (AHRQ).  From this list of common procedures, 6 were chosen at random for

**Figure 5**
**Common Procedures in the United States 2011**

| Rank | All-listed OR procedure* | Number of procedures, in thousands | Percent of all OR procedures | Rate of OR procedures per 10,000 population |
|---|---|---|---|---|
| | **All-listed OR procedures** | **15,662** | **100.0** | **502.6** |
| 1 | Cesarean section | 1,272 | 8.1 | 40.8 |
| 2 | Circumcision | 1,108 | 7.1 | 35.6 |
| 3 | Arthroplasty of knee | 718 | 4.6 | 23.1 |
| 4 | Percutaneous coronary angioplasty (PTCA) | 560 | 3.6 | 18.0 |
| 5 | Laminectomy, excision intervertebral disc | 525 | 3.4 | 16.8 |
| 6 | Spinal fusion | 488 | 3.1 | 15.7 |
| 7 | Hip replacement, total and partial | 467 | 3.0 | 15.0 |
| 8 | Cholecystectomy and common duct exploration | 449 | 2.9 | 14.4 |
| 9 | Hysterectomy, abdominal and vaginal | 389 | 2.5 | 12.5 |
| 10 | Colorectal resection | 333 | 2.1 | 10.7 |
| 11 | Appendectomy | 327 | 2.1 | 10.5 |
| 12 | Treatment, fracture or dislocation of hip and femur | 289 | 1.8 | 9.3 |
| 13 | Ligation of fallopian tubes | 274 | 1.8 | 8.8 |
| 14 | Oophorectomy, unilateral and bilateral | 268 | 1.7 | 8.6 |
| 15 | Coronary artery bypass graft (CABG) | 214 | 1.4 | 6.9 |
| 16 | Treatment, fracture or dislocation of lower extremity (other than hip or femur) | 205 | 1.3 | 6.6 |
| 17 | Debridement of wound, infection, or burn | 167 | 1.1 | 5.4 |
| 18 | Amputation of lower extremity | 140 | 0.9 | 4.5 |
| 19 | Procedures related to cardiac pacemaker or cardioverter/defibrillator | 136 | 0.9 | 4.4 |
| 20 | Heart valve procedures | 120 | 0.8 | 3.9 |

Table 3. Most frequent all-listed operating room (OR) procedures performed in U.S. hospitals, 2011

\* Clinical Classifications Software (CCS), which groups procedures into clinical categories, was used in this analysis.
Source: Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project (HCUP), Nationwide Inpatient Sample (NIS), 2011

*Source: Agency for Healthcare Research and Quality*

further research in this paper. **Figure 6** compares the prices for these procedures at Backus Hospital and Lawrence + Memorial Hospital to the national average. The Connecticut hospitals' prices come from their cost lists on their respective websites. The data on national averages prices was collected from MDSave's website. MDSave is a HIPAA-Compliant online marketplace that allows consumers to view their local costs for certain procedures.

### a. New London County Hospital Prices

**Figure 6**
**New London County Hospital Pricing Comparison**

| Procedure Type | Backus Hospital | Lawrence + Memorial | National Average |
|---|---|---|---|
| Cesarean Section | $17,205.55 | $17,317.55 | $18,612.00 |
| Circumcision | $1727.15 | $1646.43 | $2,065.00 |
| Arthroplasty of Knee | $14,670.71 | $15,001.31 | $35,487.00 |
| Spinal Fusion | $108,991.43 | $109,06.44 | $110,000.00 |
| Hysterectomy | $18,421.96 | $19207.49 | $18,256.00 |
| Non-Extensive Burn | $250.66 | $195.77 | $240.00 |

*Source: Backus Hospital Website, Lawrence and Memorial Website, MDSave Website*

The data collected from Backus Hospital's and Lawrence and Memorial Hospital's respective price lists shows that even though hospitals are combining into healthcare systems, this consolidation does not guarantee that prices will rise due to a lack of competition. These lower-than-average prices are likely a result of the fact that these hospitals, even as a part of a combined system, are still competitors, because one is a part of HHC, while the other is a member of Yale New Haven Health System. This finding shows that hospitals that choose to join healthcare systems are not removing competition from the system, so long as there is more than one healthcare system in the geographic area. For instance, in New London County, the area has had increased competition since the major hospitals in the region joined healthcare systems.

## VI. Conclusion

Following the passage of Affordable Care Act, hospitals throughout the U.S. partnered with other healthcare networks to form large-scale health systems. In Connecticut, the growth of healthcare systems was particularly rapid and widespread. This paper found through an analysis

of two hospitals in competing healthcare systems that prices for common procedures have not risen for low-income patients with the growth of those healthcare systems, and that the prices locally are below the national average for several procedures.  This finding indicates that the consolidated healthcare system in Connecticut is capable of achieving the UNESCO-defined goal for social responsibility.  Additionally, the implementation of the Community Health Assessment would not have occurred without the IRS' inclusion of this requirement in the Affordable Care Act.  The CHA is a key factor in assisting low-income patients, specifically. Collectively, healthcare consolidation has caused an increase in the access to care for low-income patients, so long as the CHIP solutions are implemented correctly for the demographic areas.

# References

- "American Hospital Directory". *American Hospital Directory - Hospital Statistics By State*. ahd.com. Retrieved 13 June 2018.

- Abelson, Reed. "When Hospitals Merge to Save Money, Patients Often Pay More." *The New York Times*, The New York Times, 14 Nov. 2018, https://www.nytimes.com/2018/11/14/health/hospital-mergers-health-care-spending.html.

- Becker, Arielle. "FTC Approves Affiliation between Hartford Hospital, Hospital of Central Connecticut." *The CT Mirror*, 16 Jan. 2014, ctmirror.org/2011/01/20/ftc-approves-affiliation-between-hartford-hospital-hospital-central/.

- Bessette, Claire. "It's Official: Backus Joins Hartford HealthCare Network." *The Day*, 25 July 2013, https://www.theday.com/article/20130724/NWS01/130729875.

- Blesch, Gregg. "FTC Lets Conn. Deal Proceed." *Modern Healthcare*, 20 Jan. 2011, https://www.modernhealthcare.com/article/20110120/NEWS/301209970/ftc-lets-conn-deal-proceed.

- Cuda, Amanda. "Healthcare Mergers and Acquisitions Hit a National High." *Connecticut Post*, Connecticut Post, 31 Mar. 2018, https://www.ctpost.com/local/article/Healthcare-mergers-and-acquisitions-hit-a-12794610.php.

- Gilman, Alexis. "Preserving Competition among Hometown Hospitals." *Federal Trade Commission*, 22 Dec. 2014, https://www.ftc.gov/news-events/blogs/competition-matters/2014/03/preserving-competition-among-hometown-hospitals.

- "HOSPITAL CORPORATION OF AMERICA, Petitioner, v. FEDERAL TRADE COMMISSION, Respondent." *807 F.2d 1381*, 18 Dec. 1986, law.resource.org/pub/us/case/reporter/F2/807/807.F2d.1381.85-3185.html.

- Kaufman Hall. "2017 In Review: The Year M&A Shook the Healthcare Landscape." *Kaufman Hall*, https://www.kaufmanhall.com/ideas-resources/research-report/2017-review-year-ma-shook-healthcare-landscape.

- Kaufman Hall. "2018 in Numbers." *Mnareview*, Kaufman Hall, 21 Aug. 2019, https://mnareview.kaufmanhall.com/the-year-in-numbers.

- Kaufman Hall. "The Growth of Mega Mergers." *Mnareview*, Kaufman Hall, 21 Aug. 2019, mnareview.kaufmanhall.com/the-growth-of-mega-mergers.

- "List of Charges Backus Hospital." *Hartford HealthCare*, July 2019, hartfordhealthcare.org/patients-visitors/patients/price-transparency/prices/bh-price-lists.

- Lorimer, Linda Koch (20 July 2012). "School of Medicine". *BULLETIN OF YALE UNIVERSITY*. 108 (6): 213–222.

- Meagher, Christian. "Independent Connecticut Healthcare Systems Announce Formation of Statewide 'Value Care Alliance.'" *Griffin Health*, 24 Sept. 2014, www.griffinhealth.org/about/news-releases/post/9572/independent-connecticut-healthcare-systems-announce-formation-of-statewide-value-care-alliance.

- Neelsen, Sven, and Owen O'donnell. "Progressive universalism? The impact of targeted coverage on health care access and expenditures in Peru." *Health economics* (2017).

- O'Donnell, O., van Doorslaer, E., Wagstaff, A. and Lindelow, M. (2008), *Analyzing Health Equity Using Household Survey Data*, Washington DC: World Bank.

- Pearsall, Susan. "A Hospital Winds Up With an Out of State Partner." *The New York Times*, The New York Times, 28 Jan. 1996, www.nytimes.com/1996/01/28/nyregion/a-hospital-winds-up-with-an-out-of-state-partner.html.

- Pilon, Matt. "CT's Independent Hospitals Form New Alliance." *Hartford Business Journal*, Sept. 2014, www.hartfordbusiness.com/article/cts-independent-hospitals-form-new-alliance.

- Singer, Stephen. "State Approves Hartford HealthCare's Acquisition of Bridgeport's St. Vincent's Medical Center." *Courant.com*, Hartford Courant, 15 Aug. 2019, https://www.courant.com/business/hc-biz-st-vincents-hartford-health-care-20190815-mmuff3ffwzhqng6rjowiv2kluu-story.html.

- Thoms, Herbert. *The Heritage of Connecticut Medicine*. New Haven, CT: Whaples-Bullis Company, 1942.

- Tsai TC, Jha AK. Hospital Consolidation, Competition, and Quality: Is Bigger Necessarily Better? *JAMA*. 2014;312(1):29–30. doi:10.1001/jama.2014.4692

- World Health Organization. 2013. "A Universal Truth: No Health without a Workforce." 2013-2-24.

- "Yale-New Haven Hospital." *American Hospital Directory - Yale-New Haven Hospital (070022) - Free Profile*, www.ahd.com/free_profile/070022/Yale-New_Haven_Hospital/New_Haven/Connecticut/.