The Evolution and Impact of Hospital Price Transparency in North Carolina

Christine Ward, Tim Reeder

BACKGROUND Health care costs are on the rise and causing financial burden for many patients. Price transparency has been proposed as a tool to control health care costs. New federal legislation requires all hospitals to publish their chargemasters, or price lists, on their websites as of January 1, 2019.

METHOD All general acute care hospitals in North Carolina were contacted in 2017 to request price information. After mandatory chargemaster publication was in effect in 2019, all hospitals previously contacted had their websites evaluated for chargemaster availability. Price information collected in 2019 was compared to information collected in 2017.

RESULTS Zero percent of hospitals provided access to chargemasters in 2017, and 72% provided access in 2019. Average price per queried item decreased from 2017 to 2019. Price variability also decreased. However, there was no statistical significance when comparing price means.

LIMITATIONS In 2017, price data was limited due to low hospital participation when queried for prices. In 2019, this study’s definition of “access to chargemaster” inadvertently excluded some North Carolina hospitals from qualifying as providing price access.

CONCLUSION After mandated chargemaster publication, consumer access to hospital price lists greatly increased in North Carolina. Price data, although limited, reveals decreased mean prices and decreased price variability for queried procedures after chargemaster publication was required.

Electronically published March 2, 2020.
Address correspondence to Christine Ward, Department of Surgery, HSC T-19 030, Stony Brook Medicine, Stony Brook, NY 11794 (christineward.stonybrookmedicine.edu).

NC Med J. 2020;81(2):95-99. ©2020 by the North Carolina Institute of Medicine and The Duke Endowment. All rights reserved. 0029-2559/2020/81202
Carolina chargemaster access before and after the Public Health Service Act was implemented.

**Methods**

In 2017, all hospitals listed as “general acute care” on the North Carolina Healthcare Association (NCHA) member directory were called using the phone number listed. All calls were made during July and August 2017 during business hours (M-F, 8-5) and caller asked for access to the chargemaster. If access to the chargemaster was denied, caller asked for prices of four inpatient labs and procedures and provided Current Procedural Terminology (CPT) codes if prompted. Caller requested price information for complete blood count with differential (CBC, CPT 85025), basic metabolic panel (BMP, CPT 80049), 2D limited view echocardiogram (echo, CPT 93308), and diagnostic lumbar puncture (LP, CPT 62270). Data recorded included access to chargemaster, price information, how many transfers were needed until information was obtained, if and when any voicemails were left, and if messages were returned.

In 2019, all hospitals previously called were evaluated for online chargemaster access during the months of February and March. Hospital websites listed in the NCHA directory were visited, and the following queries were searched in sequence using the hospital homepage search feature: “chargemaster,” “charge,” “price list,” and “cost.” After each query was searched, the total number of results was recorded, and results were surveyed for links to price information. Relevant links were clicked, and often included key words like “finance,” “billing,” and “transparency.” The search was terminated if a query resulted in chargemaster access. If the chargemaster link was found, the chargemaster was downloaded. Any price information obtained from 2017 was complemented with a chargemaster search for 2019 prices.

“Online access to chargemasters” was defined as having the hospital homepage search feature result in a link to a downloadable and searchable price list after the queries “chargemaster,” “charge,” “price list,” and “cost” were used sequentially.

Data collection was completed on March 4, 2019. All hospitals listed as having no chargemaster access were reevaluated on March 31, 2019 to ensure accuracy of this designation.

**Results**

**2017**

One hundred twelve hospitals were called. Zero percent provided chargemaster access. Eighteen percent provided 1-3 requested prices. Less than 1% provided all four requested prices (Table 1.1). Fourteen hospitals provided CBC pricing, seven provided BMP pricing, nine provided 2D echo pricing, 16 provided diagnostic LP pricing. CBC prices ranged from $58 to $7,528 with 12,879% variation; BMP prices ranged from $153 to $481 with 214% variation; 2D echo prices ranged from $220 to $14,461 with 6,473% variation; and LP prices ranged from $419 to $81,000 with 19,231% variation (Table 2).

**2019**

One hundred ten hospital websites were accessed. Two hospitals closed since initial data collection (Our Community Hospital and Davie Medical Center-Mocksville). Seventy-two percent provided chargemaster access on their website (Table 1.2). CBC prices ranged from $72 to $258 with 258% variation; BMP prices ranged from $157 to $245 with 56% variation; 2D echo prices ranged from $401 to $1365 with 240% variation; and LP prices ranged from $170 to $1969 with 1,058% variation (Table 2).

2017 versus 2019

A paired sample t-test was used to compare mean prices from 2017 and 2019 for each requested item (Table 4). There was no significant difference in CBC price means between 2017 (mean = 722.85, SD = 2046.74) and 2019 (mean = 130.79, SD = 45.46), t = 1.04, df = 12, P = .318. There was no significant difference in BMP price means between 2017 (mean = 206.67, SD = 47.49) and 2019 (mean = 194.33, SD = 28.65), t = .76, df = 5, P = .482. There was no significant difference between 2D echo price means between 2017 (mean = 2,691.56, SD = 4,773.59) and 2019 (mean = 877.34, SD = 536.48), t = 1.03, df = 7, P = .338. There was no significant difference in LP price means

### Table 1.1.
**2017 Access to Hospital Chargemaster and Prices**

| Provided CDM Access | Provided 1-3 prices | Provided all (4) requested prices |
|---------------------|---------------------|---------------------------------|
| Hospitals (N = 112) | 0                   | 20                              | 1 |

### Table 1.2.
**2019 Access to Hospital Chargemaster and Prices**

| Access to Chargemaster | No Access to Chargemaster |
|------------------------|----------------------------|
| Hospitals (N = 110)    | 79                         | 31                            |

### Table 2.
**2017 vs. 2019 Price Range and Variation**

| Procedure | 2017 Price Range & Percent Variation | 2019 Price Range & Percent Variation |
|-----------|--------------------------------------|--------------------------------------|
| CBC       | $58 - $7,528 12.879%                 | $72 - $258 258%                      |
| BMP       | $153 - $481 214%                     | $157 - $245 56%                      |
| Echo      | $220 - $14,461 6,473%                | $401 - $1,365 240%                  |
| LP        | $419 - $81,000 19.231%               | $170 - $1,969 1,058%                |
between 2017 (mean = 11,536.63, SD = 25,221.53) and 2019 (mean = 991.68, SD = 536.74), t = 1.551, df = 13, P = .145 (Table 3, Table 4).

With such wide price variation, comparing price mean differences from 2017 to 2019 was insignificant. However, each item experienced a mean price decrease from 2017 to 2019 (Table 5) and reduced variation in prices (Table 2). See appendices for complete price data. Data was analyzed using SPSS software.

Discussion

Hospital price information access in North Carolina did increase after the implementation of the Public Health Service Act. However, price data was too minimal—due to low hospital participation when requesting prices in 2017—and too variable to derive any statistical significance. In order to properly evaluate the impact of price transparency on price trends, prices need to be followed over a longer period of time while accounting for other aspects of health care outcomes. For example, observing North Carolina insurance reimbursement rates and insured patient hospital bills over time, recording patient selection of hospital facility due to price information, and trending chargemaster prices over years while controlling confounding factors would provide more accurate relationships between price changes and their correlation with consumer access to price data.

During this study’s 2019 search for chargemasters, “online access to chargemasters” was defined as having the hospital homepage search feature result in a link to a downloadable and searchable price list after the queries “chargemaster,” “charge,” “price list,” and “cost” were used sequentially. Due to this definition, some hospitals may have been incorrectly labeled as providing “no access” to chargemasters. For example, UNC Health Care web pages for Caldwell (caldwellmemorial.org), Chatham (uncchatham.org), Johnston (johnstonhealth.org), Lenoir (uncelenoir.org), Rex (rexhealth.com), and Rockingham (uncrockingham.org) hospitals did not have search results that led back to UNC Health Care’s central chargemaster page, excluding them from qualifying as providing access to chargemasters. Two hospitals (Alleghany Memorial and Columbus Regional) did not have homepage search features, which excluded them from the study’s definition of price access, although on further investigation Columbus Regional did provide access to the chargemaster under a financial link (Appendix 1). This study’s “access” definition was designed with consumer-friendliness in mind. Future studies can evaluate chargemaster access using a broader definition to include hospitals with the aforementioned circumstances.

Some hospital systems had each individual hospital web page link easily to a centralized website that contained chargemaster links. Vidant and Mission were examples of this. Other hospital systems, like Cone Health and FirstHealth, have one chargemaster that is applicable to all their hospital locations. Some hospitals require consumers to view disclaimers before accessing the chargemaster. Most disclaimer language explains that the price lists are

### APPENDIX 1.
2019 Hospitals Without Chargemaster Access as Defined by This Study

This appendix is available in its entirety in the online edition of the NCMJ.

---

### TABLE 3.
Paired Sample Statistics

| Items       | Mean ($) | N  | Std. Deviation | Std. Error Mean |
|-------------|----------|----|----------------|-----------------|
| 2017 CBC    | 722.8469 | 13 | 2046.7384 | 567.6631 |
| 2019 CBC    | 130.79   | 13 | 45.463      | 12.609 |
| 2017 BMP    | 206.667  | 6  | 47.4907     | 19.3880 |
| 2019 BMP    | 194.33   | 6  | 28.654      | 11.698 |
| 2017 Echo   | 2691.56  | 8  | 4773.5920   | 1687.7196 |
| 2019 Echo   | 877.3375 | 536.48135 | 189.67480 |
| 2017 LP     | 11536.63 | 14 | 25221.5309  | 6740.7376 |
| 2019 LP     | 991.68   | 14 | 536.737     | 143.449 |

---

### TABLE 4.
Paired Sample t-test Data

| Paired Differences | Mean ($) | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference |
|--------------------|----------|----------------|-----------------|-----------------------------------------|
| Mean ($) | Std. Deviation | Std. Error Mean | Lower | Upper | t | df | Sig. (2-tailed) |
| Pair 1: 2017 mean CBC price - 2019 CBC mean price | 592.05615 | 2047.53590 | 567.88428 | -645.25741 | 1829.36971 | 1.043 | 12 | .318 |
| Pair 2: 2017 mean BMP and 2019 BMP mean price | 12.3333 | 39.7815 | 16.2407 | -29.4148 | 54.0814 | .759 | 5 | .482 |
| Pair 3: 2017 Echo and 2019 Echo mean price | 1814.2250 | 4989.7153 | 1764.1307 | -2357.2839 | 5985.72890 | 1.028 | 7 | .338 |
| Pair 4: 2017 LP and 2019 LP mean price | 10544.9529 | 25434.4243 | 6797.63583 | -4140.4465 | 25230.3523 | 1.551 | 13 | .145 |
not reflections of what patients will be billed, do not factor in insurance or financial assistance, and do not include physician and provider fees. Disclaimers frequently encourage use of price estimator tools and discourage use of the chargemaster.

Hospitals may be offering price estimator tools and explicitly discouraging the use and validity of the published chargemaster, but there is an argument that estimated prices are not useful in decluttering the complex culture of health care pricing. Relying on estimator tools and price experts further muddles health care costs by keeping list prices obscured and relying on aggregate data and consumer reporting. This shifts the focus from the hospital and increases reliance on redundant health care third parties.

Although this study did not investigate chargemasters for compliance with the Public Health Service Act, doing so would be warranted in a subsequent study. The law requires chargemasters to include all billable options including medications, biologics, and DRG prices. Some hospitals, like Onslow Memorial (onslow.org), only provide a list of “average prices” for about 100 labs and procedures, but no medications or biologics are included. New Hanover Regional Medical Center has “average low” and “average high” price and is not downloadable. Martin General Hospital directly quotes its pledge to the Public Health Service Act and instructs patients to call for price information, but provides no online access. The Novant hospital system does not provide a downloadable price list, only a tool where items in question must be searched one by one. These hospital systems are examples of noncompliance with the Public Health Service Act.

Critics are eager to point out that chargemaster prices seem unrelated to billing and are an inappropriate mechanism to target cost control [11]. However, studies have shown that chargemasters are indeed relevant to what patients pay [12], and that hospitals use the chargemaster strategically as a revenue-seeking function [13]. Chargemasters may be the foundation of hospital pricing, for the uninsured and insured alike, and therefore deserve attention and scrutiny.

Most hospitals in North Carolina do comply with this law designed to be “consumer-friendly” by providing access to their chargemasters. However, accessing standard hospital prices is only a small step toward a transparent health care price system. Detangling the influence of insurance company price contracts with hospitals is another challenge in the quest for health care transparency. Transparency initiatives could ultimately declutter the billing process. As it currently stands, health care prices are rising and simple information about price tags is still elusive overall. Hospitals are the focus of transparency efforts now, and we can hope the transparency movement continues—whether it be by legislation or pressure from consumers and physicians—with the end goal of empowering patients with basic information about health care costs.

Christine Ward, MD general surgery resident, Stony Brook University Hospital, Stony Brook, New York.
Tim Reeder, MD MPH associate professor and vice chair of clinical operations, Department of Emergency, Brody School of Medicine, East Carolina University.

Acknowledgments
We thank Dr. Kori Brewer for the long-term oversight of the students in the Research Distinction Track at the Brody School of Medicine at East Carolina University and for providing guidance throughout the entire life of this study, and Professors Hugh Lee and Maria Clay for their mentorship and support.

Potential conflicts of interest. The primary author was a medical student at Brody School of Medicine at East Carolina University and for providing guidance throughout the entire life of this study, and Professors Hugh Lee and Maria Clay for their mentorship and support. The secondary author is employed by East Carolina University, which is partnered with Vidant Medical Center, while conducting this study.

References
1. Anderson G. From ‘Soak the Rich’ To ‘Soak the Poor’: Recent Trends in Hospital Pricing. Health Affairs. 2007; 26(3):780-789.

---

**Table 5.**
*2017 vs. 2019 Mean Prices and Difference*

| Procedure | Avg 2017 Price | Avg 2019 Price | Difference in Mean from 2017 to 2019 |
|-----------|---------------|---------------|-------------------------------------|
| CBC       | $675.36       | $130.79       | -$544.57                            |
| BMP       | $245.86       | $194.33       | -$51.53                             |
| Echo      | $2,866.07     | $942.24       | -$1,923.83                          |
| LP        | $10,920.20    | $1,000.35     | -$9,919.85                          |

**APPENDIX 2.1.**
Raw Price Data for CBC

This appendix is available in its entirety in the online edition of the NCMJ.

**APPENDIX 2.2.**
Raw Price Data for Basic Metabolic Panel (BMP)

This appendix is available in its entirety in the online edition of the NCMJ.

**APPENDIX 2.3.**
Raw Price Data for Echocardiogram

This appendix is available in its entirety in the online edition of the NCMJ.

**APPENDIX 2.4.**
Raw Price Data for Lumbar Puncture (LP)

This appendix is available in its entirety in the online edition of the NCMJ.
2. Bureau of Labor Statistics. 2015 Consumer Price Index. United States Department of Labor. https://www.bls.gov/bls/news-release/cpi.htm. Accessed April 15, 2017.

3. Hoffman AB, Bindan AB. Varying Charges and Questionable Costs. Journal of General Internal Medicine. 2015;30(1):1579-1580.

4. Himmelstein DU, Thome D, Woolhandler S. Medical Bankruptcy in the United States, 2007, Results of a National Study. The American Journal of Medicine. 2009 Aug;122(8):741-746.

5. Hamel L, Norton M, Pollitz K, Levitt L, Claxton G, Brodie M. The Burden of Medical Debt: Results from the Kaiser Family Foundation/New York Times Medical Bills Survey. Kaiser Family Foundation. January 2016. https://www.kff.org/wp-content/uploads/2016/01/8806-the-burden-of-medical-debt-results-from-the-kaiser-family-foundation-new-york-times-medical-bills-survey.pdf. Accessed April 15, 2017.

6. 155.005 Public Access to Chargemasters. AMA-MSS Digest of Policy Actions. https://www.ama-assn.org/sites/ama-assn.org/files/corp/media-browser/public/mss/digest-of-policy-actions.pdf. Accessed September 5, 2017.

7. Frequently Asked Questions Regarding Requirements For Hospitals To Make Public A List Of Their Standard Charges Via The Internet.; 2019. https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/ProspMedicareFeeSvcPmtGen/Downloads/Additional-Frequently-Asked-Questions-Regarding-Requirements-for-Hospitals-To-Make-Public-a-List-of-Their-Standard-Charges-via-the-Internet.pdf. Accessed March 20, 2019.

8. Brantes F, Delbanco S. Report Card on State Price Transparency Laws. Catalyst For Payment Reform. July 2016. https://www.catalyze.org/wp-content/uploads/2017/04/2016-Report-Card-on-State-Price-Transparency-Laws.pdf. Accessed April 15, 2017.

9. Bai G. California’s Hospital Fair Pricing Act Reduced The Prices Actually Paid By Uninsured Patients. Health Affairs. 2015;34(1):64-70.

10. Furlow B. Skepticism about new US Government hospital pricing transparency rule. The Lancet Oncology. 2019;20(2):188.

11. Batty M, Ippolito B. Mystery of the chargemaster: Examining the role of hospital list prices in what patients actually pay. Health Aff. 2017;36(4):689-696.

12. Bai G, Anderson GF. US Hospitals Are Still Using Chargemaster Markups To Maximize Revenues. Health Affairs. 2016;35(9):1658-1664.
### APPENDIX 1.
#### 2019 Hospitals Without Chargemaster Access as Defined by This Study

| Hospital                                      | Commentary on CDM Criteria                                                                 |
|-----------------------------------------------|-------------------------------------------------------------------------------------------|
| Alleghany Memorial Hospital                  | No search feature. Home page links to "billing questions" and "FAQs" did not reveal chargemaster. |
| Caldwell UNC Health Care                      | Search results do not lead to CDM link.                                                   |
| Cape Fear Valley Hole Hospital                | No search results for any terms.                                                          |
| Cape Fear Valley Medical Center               | No search results for any terms.                                                          |
| Cape Fear Valley, Bladen Healthcare LLC       | No search results for any terms.                                                          |
| Chatham Hospital-UNC Healthcare               | Search results do not lead to CDM link.                                                    |
| Cherokee Indian Hospital                      | Search results do not lead to CDM link.                                                    |
| Columbus Regional                             | No search feature. Of note, chargemaster was accessible by clicking links from home page.   |
| Hugh Chatham Memorial Hospital-UNC Healthcare | Search results do not lead to CDM link.                                                    |
| Johnston Health-UNC Healthcare                | Search results do not lead to CDM link.                                                    |
| LifeBrite Community Hospital of Stokes        | Search results do not lead to CDM link.                                                    |
| Martin General Hospital                       | Search results do not lead to CDM link. Of note, the page references the Public Health Service Act with instructions to call. |
| Morehead Memorial Hospital-now UNC Rockingham | Search results do not lead to CDM link.                                                    |
| New Hanover Regional Medical Center           | Search results lead to price list that is not downloadable. Of note, list has "average low" and "average high" price, not a standard price. |
| North Carolina Specialty Hospital            | Search results lead to page dedicated to "required federal information." No links or price information listed. |
| Novant Health Brunswick Medical Center        | Search results lead to a "standard charges" web page. No price list is available. Must use a search feature based on clinical area to obtain prices one at a time. |
| Novant Health Forsyth Medical Center          | (see above)                                                                                 |
| Novant Health Huntersville Medical Center     | (see above)                                                                                 |
| Novant Health Kernersville Medical Center     | (see above)                                                                                 |
| Novant Health Matthews Medical Center         | (see above)                                                                                 |
| Novant Health Medical Park Hospital           | (see above)                                                                                 |
| Novant Health Presbyterian Medical Center     | (see above)                                                                                 |
| Novant Health Rowan Medical Center            | (see above)                                                                                 |
| Novant Health Thomasville Medical Center      | (see above)                                                                                 |
| Onslow Memorial Hospital                     | Search results do not lead to CDM link.                                                    |
| Pender Memorial Hospital                     | Search results lead to price list that is not downloadable, only viewable on website. List of "average low" and "average high" price. |
| UNC Lenoir Health Care                       | Search results do not lead to CDM link.                                                    |
| UNC REX HealthCare                           | Search results do not lead to CDM link.                                                    |
| Wake Forest Baptist Health - Wilkes Medical Center | Search results do not lead to CDM link.                                                    |
| Wake Forest Baptist Health - Davie Medical Center | Search results do not lead to CDM link.                                                    |
### APPENDIX 2.1.
**Raw Price Data for CBC**

| Hospitals That Gave 2017 Price Information | 2017 CBC w/Diff ($) | 2019 CBC w/Diff ($) | Price Diff, Change from 2017 to 2019 ($) |
|-------------------------------------------|---------------------|---------------------|----------------------------------------|
| Betsy Johnson                             | 168.5               | 131.5               | -37                                    |
| Blue Ridge Regional                       | 100.5               | 117                 | 16.5                                   |
| Carolina East Health System               | 108                 | 122                 | 14                                     |
| Carteret Health Care                      | 89                  | 84.35               | -4.65                                  |
| Central Harnett                           | 168.5               | 131.25              | -37.25                                 |
| Chatham Hospital                          | 115                 | 149                 | 34                                     |
| Davis Regional Medical Center             | 307                 | 258.38              | -48.62                                 |
| Iredell Health System                     | 382                 | 119.8               | -262.2                                 |
| Mission Hospital                          | 100.5               | 117                 | 16.5                                   |
| Murphy Medical Center                     | 91                  | 105                 | 14                                     |
| Novant Forsyth                            | 7528.01             | 126                 | -7402.01                               |
| Our Community Hospital (closed)           | 58                  | -                   | -                                      |
| Randolph                                  | 72                  | 72                  | 0                                      |
| The Outer Banks Hospital                  | 167                 | 167                 | 0                                      |
| **Average**                               | 675.36              | 130.79              | -592.06                                |

### APPENDIX 2.2.
**Raw Price Data for Basic Metabolic Panel (BMP)**

| Hospitals That Gave 2017 Price Info       | 2017 BMP ($) | 2019 BMP ($) | BMP Diff, Change from 2017 to 2019 ($) |
|-------------------------------------------|--------------|--------------|----------------------------------------|
| Betsy Johnson                             | 202.5        | 196          | -6.5                                   |
| Blue Ridge Regional                       | 276          | 186          | -90                                    |
| Carolina East Health System               | 153          | 157          | 4                                      |
| Central Harnett                           | 202.5        | 196          | -6.5                                   |
| Charles Cannon Memorial                   | 161          | 186          | 25                                     |
| Our Community Hospital (closed)           | 481          | -            | -                                      |
| The Outer Banks Hospital                  | 245          | 245          | 0                                      |
| **Average**                               | 245.86       | 194.33       | -12.33                                 |

### APPENDIX 2.3.
**Raw Price Data for Echocardiogram**

| Hospitals That Gave 2017 Price Info       | 2017 Echo ($) | 2019 Echo ($) | Echo Price Diff, Change from 2017 to 2019 ($) |
|-------------------------------------------|---------------|---------------|-----------------------------------------------|
| Angel Medical Center                      | 1470          | 423           | -1047                                        |
| Betsy Johnson                             | 921.24        | 1365.25       | 444.01                                       |
| Carolina East Health System               | 1393          | 1739          | 346                                           |
| Central Harnett                           | 921.24        | 1365.25       | 444.01                                       |
| Health Health System                      | 220           | 818.2         | 598.2                                        |
| McDowell Hospital                         | 760           | 451           | -309                                          |
| Murphy Medical Center                     | 1386          | 456           | -930                                          |
| Novant Forsyth                            | 14461         | 401           | -14060                                       |
| **Averages**                              | 2691.56       | 877.335       | -1814.2225                                   |

### APPENDIX 2.4.
**Raw Price Data for Lumbar Puncture (LP)**

| Hospitals That Gave 2017 Price Info       | 2017 Lumbar Puncture ($) | 2019 Lumbar Puncture ($) | LP Price Diff, Change from 2017 to 2019 ($) |
|-------------------------------------------|--------------------------|--------------------------|-----------------------------------------------|
| Angel Medical Center                      | 907                      | 879                      | -28                                           |
| Betsy Johnson                             | 944.5                    | 1279.25                  | 274.75                                        |
| Caldwell UNC Health                       | 935                      | 1174                     | 239                                           |
| CaroMont Health                           | 1605                     | 1969                     | 364                                           |
| Carteret Health Care                      | 580                      | 586                      | 6                                             |
| Central Harnett                           | 944.5                    | 1279.25                  | 274.75                                        |
| Charles Cannon Memorial                   | 581                      | 616                      | 35                                            |
| Davis Regional Medical Center             | 172714                   | -                        | -                                             |
| Duke Raleigh                              | 7130.84                  | 170                      | -6960.84                                     |
| Frye Regional Medical Center              | 5600                     | 1334                     | -4266                                         |
| Iredell Health System                     | 1470                     | -                        | -                                             |
| Murphy Medical Center                     | 720                      | 7966                     | 1246                                          |
| Novant Forsyth                            | 81000                    | 507                      | -80493                                        |
| Novant Health Thomasville                 | 59000                    | 529                      | -58471                                        |
| Randolph                                  | 1146                     | 1090                     | -56                                           |
| The Outer Banks Hospital                  | 419                      | 625                      | 206                                           |
| **Averages**                              | 10294.37                | 991.68                   | -9226.83                                      |