# Analysis of HCA Data Relevant to Aspects of the Affordable Care Act

April 1, 2019

# **Background and Methodology**

HCA Healthcare, Inc. ("HCA") is the largest non-governmental healthcare provider in the nation and has access to data relevant to the operation of the Affordable Care Act ("ACA"). HCA analyzed its data in order to provide information about the ACA's practical operation. All methodologies and calculations were reviewed and verified by HCA's Internal Audit department.

Hospital data were sourced from HCA's Enterprise Data Warehouse (EDW), which is updated nightly. For purposes of this Report, a snapshot of the data was taken in March 2019 and is not subject to updates. The data used in this Report are based upon claims where inpatient or outpatient services were provided at an HCA facility during the period January 1, 2018, through December 31, 2018.

For the purpose of this Report, HCA patient populations have been segmented for comparison purposes: (1) Patients who received services and demonstrated an affiliation with Exchange plans are referenced as "Exchange" patients; (2) Patients who received services but could not demonstrate any type of insurance coverage are referenced as "Self Pay" patients; (3) "Self Pay" patients who applied for and met HCA's criteria for charity care are referenced as "Charity" patients; and (4) Patients who received services and demonstrated an affiliation with a commercial managed care insurer through standard billing verification processes are referenced as "Managed Care" patients. For purposes of this Report, when an analysis includes both "Self Pay" and "Charity" patients, they are collectively referenced as "Uninsured" patients.

Information included in this document was compiled and reviewed by the following departments:

- HCA Reporting, Benchmarking & Analytics RB&A has three primary Sections: (1) Analytics & Pricing Services provides modeling and analytics for all commercial, Exchange and governmental patients; (2) Enterprise Decision Support Services maintains the cost accounting system for all acute care facilities; and (3) Financial & Employee Services supports HCA's operations and Parallon Payroll Services.
- HCA Corporate Reimbursement Corporate Reimbursement has four primary Sections: (1)
   Operations is responsible for filing cost reports and Financial Statement accuracy reviews; (2)
   Support is responsible for areas of standardization, department initiatives, peer reviews, home
   office functions, and compliance; (3) Appeals, Development, and Education is responsible for
   acquisitions and divestitures reviews, education, appeals, other special projects; and (4)
   Financial Services is responsible for Medicare Disproportionate Share reporting process and
   regulatory monitoring, including financial impacts and various Medicare reporting initiatives.
- HCA Internal Audit Internal Audit has four primary Sections: (1) Financial and Controls is
  responsible for audits of financial statements and related internal controls; (2) Revenue Cycle
  is responsible for audits of revenue cycle operations and related financial data; (3) Information
  Systems is responsible for audits of information systems and related controls; (4) Compliance is
  responsible for audits of compliance related areas.
- **Parallon Business Solutions** Parallon is a wholly owned subsidiary of HCA and provides revenue cycle, purchasing, supply chain, technology, workforce management and consulting services.
- Sarah Cannon Research Institute SCRI is a clinical research program, conducting community-



based clinical trials in oncology and cardiology through its affiliations with a network of more than 1,000 physicians in the US and UK.

• **HCA PSG Reporting & Analytics** – PSG R&A provides reporting services related to financial, operational and clinical outcomes for providers.



# Chapter 1: Who are the Patients on the Exchanges?

#### Methodology

The data below are based upon claims where inpatient or outpatient services were provided at an HCA facility from January 1, 2018 through December 31, 2018, and the patients have been segmented in accordance with the definitions provided in the Background and Methodology section.

Results

Exchange patients who previously received care from HCA prior to January 1, 2014

|   | Cases   | %    |
|---|---------|------|
| Total Exchange Patients Presenting at an HCA Facility                                     | 400,244 | 100% |
| Exchange Patients with No Previous History at an HCA Facility                             | 311,729 | 78%  |
| Exchange Patients with HCA Facility Visit History Prior to Jan 1, 2014 to an HCA Facility | 88,515  | 22%  |

For Exchange patients meeting the aforementioned criteria, a patient identifier was derived so that unique patients within the population could be identified and traced through HCA's data from January 1, 2012 until December 31, 2013. As a result, Exchange patients who presented to an HCA facility within that time period represent one cohort, while patients who could not be matched to the previous population represent a second cohort.

# Exchange patients who were previously insured vs previously uninsured

|  | Cases  | %    |
|--|--------|------|
| Exchange Patients with HCA Facility Visit History Prior to |        |      |
| Jan 1, 2014 to an HCA Facility                             | 88,515 | 100% |
| Exchange Patients Uninsured with Prior Visit to HCA        |        |      |
| Facility   | 31,269 | 35%  |
| Exchange Patients Insured with Prior Visit to HCA          |        |      |
| Facility   | 57,246 | 65%  |

For Exchange patients seen at an HCA facility within the January 1, 2012 through December 31, 2013 time period, further longitudinal studies were performed on that population to determine if those patients were previously covered by some form of insurance or met the criteria for Uninsured.



# **Exchange patients by Gender**

| Gender      | Cases   | Cases as % of Total |
|-------------|---------|---------------------|
| Female      | 267,064 | 65.9%               |
| Male        | 138,076 | 34.1%               |
| Unavailable | 142     | 0.0%                |
| Grand Total | 405,282 | 100.0%              |

For the Exchange population meeting the aforementioned criteria, a demographic analysis of the gender subset was performed to determine gender distribution within that population.

#### Female Patients: Exchange vs Uninsured

|           | Female Cases as % |  |
|-----------|-------------------|--|
|           | of Total          |  |
| Exchange  | 65.9%             |  |
| Uninsured | 50.7%             |  |

For the Exchange and Uninsured populations meeting the aforementioned criteria, the female cohort was segmented from each of their respective populations. A comparison of the percentage of female Exchange patients to total Exchange patients at HCA facilities vs the percentage of female Uninsured patients to total Uninsured patients at HCA facilities was performed.



# **Chapter 2: What Do Patients Pay For Care?**

#### Methodology

The data below are based upon claims where inpatient or outpatient services were provided at an HCA facility from January 1, 2018 through December 31, 2018, and the patients have been segmented in accordance with the definitions provided in the Background and Methodology section.

#### Results

#### **Zero Pay Cases**

|                                | % Zero Pay<br>Cases |
|--------------------------------|---------------------|
| Charity                        | 96.0%               |
| Self Pay                       | 92.3%               |
| Uninsured (Charity & Self Pay) | 93.0%               |

For the Charity and Self Pay population meeting the aforementioned criteria, an analysis of payment history was performed to determine the percentage of those patients who did not make a payment toward their responsibility as it pertains to the total Charity and Uninsured population.

#### **Exchange Patients' Personal Responsibility**

|   | Cases   | Average<br>Payment |
|---|---------|--------------------|
| Claims paid by insurer  | 296,132 |                    |
| Patients with cost-sharing obligation > zero                        | 149,103 |                    |
| Patients with cost-sharing obligation > zero that made a payment    | 84,606  |                    |
| Average payment received from those patients who had a cost sharing |         | \$513.31           |
| obligation > zero and who made a payment                            |         |                    |

For the Exchange population an analysis of payment history was performed to determine the average payment received. The average payment received is based on those patients who had a cost-sharing obligation greater than zero and who have made a payment.



# **Chapter 3: How Do Patients Access Care?**

# Methodology

The data below are based upon claims where inpatient or outpatient services were provided at an HCA facility from January 1, 2018 through December 31, 2018, and the patients have been segmented in accordance with the definitions provided in the Background and Methodology section. Emergency cases are identified by the presence of a UB04 Revenue Code 450 – 459 on the patient billing record. Non-emergency cases are those that do not contain one of these Revenue Codes on the patient billing record.

#### Results

#### **Ratio of Emergency and Non-Emergency to Inpatient**

|              | Ratio ER<br>Visits to IP | Ratio Non-ER<br>Visits to IP |
|--------------|--------------------------|------------------------------|
| Exchanges    | 3.15:1                   | 3.18:1                       |
| Managed Care | 3.21:1                   | 4.24:1                       |
| Uninsured    | 9.63:1                   | 0.7:1                        |

For the Exchange, Managed Care and Uninsured patients meeting the aforementioned criteria, a ratio analysis was performed to evaluate the relationship of each cohort as it pertains to those patients who presented at an HCA facility through the Emergency Room versus inpatient admissions and Non-Emergency Outpatient visits versus an inpatient admission.

# **Ratio by Gender**

# **Female**

|              | Ratio ER<br>Visits to IP | Ratio Non-ER<br>Visits to IP |  |
|--------------|--------------------------|------------------------------|--|
| Exchanges    | 3.38:1                   | 3.78:1                       |  |
| Managed Care | 3.13:1                   | 4.75:1                       |  |
| Uninsured    | 11.68:1                  | 0.95:1                       |  |

# Male



|              | Ratio ER<br>Visits to IP | Ratio Non-ER<br>Visits to IP |  |
|--------------|--------------------------|------------------------------|--|
| Exchanges    | 2.83:1                   | 2.32:1                       |  |
| Managed Care | 3.34:1                   | 3.44:1                       |  |
| Uninsured    | 8.15:1                   | 0.52:1                       |  |

For the Exchange, Managed Care and Uninsured patients meeting the aforementioned criteria, the populations were further segmented by gender. A ratio analysis was performed to evaluate the relationship of each cohort as it pertains to those patients who presented at an HCA facility through the Emergency Room and non-Emergency Outpatient visits versus an Inpatient admission.



# Chapter 4: What Types Of Care Are Exchange Patients Accessing?

#### Methodology

The data below are based upon claims where inpatient or outpatient services were provided at an HCA facility from January 1, 2018 through December 31, 2018, and the patients have been segmented in accordance with the definitions provided in the Background and Methodology section. Inpatient refers to accounts where a physician's admission order for inpatient care is present. Outpatient refers to treatment that does not require an inpatient stay in an acute care facility such as emergency room visits, same day surgical procedures, observation visits and therapeutic and diagnostic testing services.

#### **Oncology Care for Exchange Patients by Gender**

| Patient Type | % Female | % Male | Total  |
|--------------|----------|--------|--------|
| Inpatient    | 58.9%    | 41.1%  | 100.0% |
| Outpatient   | 83.7%    | 16.3%  | 100.0% |
| Total        | 81.7%    | 18.3%  | 100.0% |

For the Exchange patients meeting the aforementioned criteria, the population was analyzed for patients with cancer as defined by a set of ICD10 Oncology diagnosis codes. That subset was further segmented into male and female cohorts as well as Inpatient and Outpatient cohorts. Percent of totals was derived at both patient type and gender levels.

#### **Ultrasounds: Exchange vs Uninsured**

|  | % Total<br>Exchange | % Total<br>Uninsured | Ratio of<br>Exchange to<br>Uninsured |
|--|---------------------|----------------------|--------------------------------------|
| R928 - Oth abn and inconclusive findings on dx imaging of breast   | 3.2%                | 0.6%                 | 5.74:1                               |
| N630 - Unspecified lump in unspecified breast                      | 0.9%                | 0.3%                 | 2.65:1                               |
| N6310 - UNSPECIFIED LUMP IN THE RIGHT BREAST, UNSPECIFIED QUADRANT | 2.6%                | 0.7%                 | 3.76:1                               |
| N6311 - UNSPECIFIED LUMP IN THE RIGHT BREAST, UPPER OUTER QUADRANT | 0.3%                | 0.1%                 | 2.85:1                               |
| N6320 - UNSPECIFIED LUMP IN THE LEFT BREAST, UNSPECIFIED QUADRANT  | 2.6%                | 0.8%                 | 3.31:1                               |
| N6321 - UNSPECIFIED LUMP IN THE LEFT BREAST, UPPER OUTER QUADRANT  | 0.4%                | 0.1%                 | 4.96:1                               |
| Total Unspecified Lump in Breast                                   | 6.8%                | 2.0%                 | 3.39:1                               |
| Grand Total  | 10.0%               | 2.6%                 | 3.91:1                               |



The Exchange and Uninsured population was analyzed for patients with an ultrasound as defined by a UB04 Revenue Code 402. That subset was further segmented into ICD10 Diagnosis codes (R928 – Oth abn and inconclusive findings on dx imaging of breast and N630 Unspecified lump in unspecified breast, N6310 Unspecified lump in the right breast unspecified quadrant, N6311 Unspecified lump in right breast upper outer quadrant, N6320 Unspecified lump in left breast unspecified quadrant and N6321 Unspecified lump in left breast upper outer quadrant) as well as Exchange and Uninsured cohorts. Percent of totals was derived by the ICD10 Diagnosis code and the ratio is based on Exchange to Uninsured.

