



## MEMORANDUM

**Attachment: QMGH CON Evaluation Report**

**Date: March 31, 2021**

**To: Pat Gerveler, Chief Financial Officer, Blessing Health System**

**Cc: Courtney Avery, Courtney Avery, Administrator  
Illinois Health Facilities and Service Review Board  
525 West Jefferson Street, 2nd Floor  
Springfield, IL 62761**

**Re: Guidehouse Research – Project #20-044**

---

Guidehouse was engaged to support Blessing Health System (“Blessing”) in evaluation of the recently filed Certificate of Need (“CON”) by the Quincy Medical Group Hospital, Inc. (“QMGH”), an affiliate of the Quincy Medical Group (“QMG”), to build an acute care hospital at the Quincy Mall. We specifically supported two areas: (1) researching and running independent volume projections and opining on the volume projection provided in the CON, and (2) running an analysis on Blessing’s charges and their reasonability relative to other markets.

Guidehouse utilized comprehensive service area utilization data for the QMGH proposed hospital service area and compared these results to state and national level data as a test for reasonability. We believe that these data points informed a more accurate picture of inpatient utilization for the next five years. Guidehouse also examined charge data and commercial allowed rates in several comparable markets to paint a more complete picture of Blessing’s current rates in relation to market peers and other sole community providers. Guidehouse prepared a detailed report (QMGH CON Evaluation Report) that is attached to this memorandum.

**Guidehouse summary findings were as follows:**

- 1) The QMGH CON application’s volume projections are too aggressive and inconsistent with generally accepted forecasting principles and assumptions.
  - The volume methodology used by the Applicant **does not represent generally accepted healthcare planning methodology**, using the recent history of inpatient volumes to generate a large annual growth rate and then applies this inflated growth rate to Blessing’s 2018 inpatient volume for a period of 10 years.
  - An examination of full market data shows that the market’s high inpatient utilization rates as well as total market volumes have been **declining in recent years**. These trends, combined with market demographic forecasts, show some aging but an **overall declining population** in the service areas, strongly suggesting that these trends will continue.
  - Guidehouse developed an inpatient bed need forecast for the market using generally accepted planning and forecast methodologies under two different scenarios. The results



of these projections strongly suggest that there is no need for additional inpatient beds in the proposed service area as inpatient volumes are projected to remain flat or even decline in coming years.

- 2) Contrary to claims made in the QMGH CON, Blessing has comparable charges to competitors in the surrounding regions and rates are within generally acceptable ranges.
- The QMGH CON claims that Blessing charges significantly more than regional competitors in the area. From a charge and cost of care perspective, Blessing is **within the market median** (50<sup>th</sup> percentile) across comparable hospitals in surrounding cities (St Louis, Springfield, Davenport).
  - Blessing does have modestly favorable commercial reimbursement rates compared to similar rural facilities in Illinois, though **not out of generally acceptable ranges** (between the 50<sup>th</sup> and 75<sup>th</sup> percentiles). ED rates are particularly reasonable despite being the sole Emergency Department in Quincy, IL. Moreover, Blessing's current commercial reimbursement levels are necessary in order to maintain financial support for the underserved populations Blessing treats as well as providing access to critical low-margin, high-need services for the community.

#### About Guidehouse

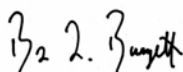
Guidehouse is a leading global provider of consulting services to the public and commercial markets with broad capabilities in management, technology, and risk consulting. We help clients address their toughest challenges and navigate significant regulatory pressures with a focus on transformational change, business resiliency, and technology-driven innovation. Across a range of advisory, consulting, outsourcing, and digital services, we create scalable, innovative solutions that prepare our clients for future growth and success. The company has more than 9,000 professionals in over 50 locations globally. Guidehouse is a Veritas Capital portfolio company, led by seasoned professionals with proven and diverse expertise in traditional and emerging technologies, markets, and agenda-setting issues driving national and global economies.

Guidehouse's Healthcare Segment serves the federal, state, local government and commercial sectors, providing clients with unparalleled access to experience and expertise from across the healthcare industry. Our clients include more than 300 health systems, including eight of the 20 "Honor Roll Hospitals" as rated by U.S. News & World Report; 36 of the 50 top pharmaceutical companies, based on 2017 data from PharmExec; and 50 percent of the largest health systems in the United States listed by Definitive Healthcare. We serve federal agencies on the forefront of national healthcare issues to help them improve both the quality and value of the healthcare purchased for, and provided by, the federal government. Our state clients include Medicaid, mental health, developmental disabilities, public health, education, and social services agencies, as well as workers compensation and state employee groups on issues such as service delivery, financing, and operations.

Sincerely,



**Christopher Kalkhof**  
Partner  
Guidehouse Inc.



**Bryan Burgett**  
Director  
Guidehouse Inc.



**Ryan Stattenfield**  
Associate Director  
Guidehouse Inc.

## **QMGH CON Evaluation Report**

### **Guidehouse Response to QMGH CON Application**

#### **Executive Summary**

The volume methodology used by Quincy Medical Group Hospital, Inc. (the “Applicant”) in the CON application does not represent a generally accepted healthcare planning methodology. In fact, the Applicant uses the recent history of inpatient volumes (2015-2018) at Blessing (not its proposed service area market totals) and then assumes high annual growth rates based on this recent history to Blessing’s 2018 inpatient volume for 10 years (out to 2027) to determine that Blessing’s need for inpatient beds will outstrip its supply in coming years. However, an examination of full market data shows that the market’s high inpatient utilization rates as well as total market volumes have been *declining in recent years*. These trends, combined with market demographic forecasts, show some aging but an overall declining population in the service areas, strongly suggesting that these trends will continue.

The growth forecasts utilized by the Applicant to reach its conclusions are simply not realistic. The Applicant suggests a 50%+ increase in inpatient bed need over the next few years in order to reach its conclusion that the need for inpatient beds in the service area will far exceed supply. To prove this point, Guidehouse developed an inpatient bed need forecast using generally accepted planning methodologies under two different scenarios. The results of these projections strongly suggest that there is no need for additional inpatient beds in the proposed service area as inpatient volumes are projected to remain flat or even decline in coming years.

In addition, the Applicant claims that Blessing Health’s charges are significantly higher than other acute care hospitals in the area. The Applicant makes this assertion based upon a basic comparison of 24 inpatient DRGs. Guidehouse examined Medicare Cost to Charge data between comparable regional hospitals to examine rates from a charge and cost to treat perspective. The Guidehouse analysis utilizes all inpatient and outpatient encounters rather than a select few. From a charge and cost of care perspective, we concluded Blessing is within the market median (50th percentile) across comparable hospitals in surrounding cities (St Louis, Springfield, Davenport). While Blessing currently holds favorable commercial reimbursement rates compared to similar rural facilities in Illinois, Blessing’s rates are within the generally acceptable ranges (between the 50th and 75th percentiles) we would expect to see. Specifically, emergency department rates are particularly reasonable despite Blessing operating the only ER in Quincy, IL.

Finally, it is important to note that commercial reimbursement rates reflect the fact that Blessing serves as a Sole Community Hospital for the large geographic area surrounding Quincy, IL. Blessing’s current commercial reimbursement levels are necessary in order to maintain financial support for the underserved populations Blessing treats as well as providing access to critical low-margin, high-need services for the community.

#### **Comment on Projection Methodology Used in Application**

The Applicant uses an improper methodology to estimate future inpatient bed need in its proposed service area. In its application, the Applicant uses four years of historical inpatient volume (discharges and days) from Blessing Hospital 2015-2018 performance, calculating an annual average growth rate based on that volume and then applying that annual compounded growth rate to forecast volume to the years 2020, 2025, and 2027.

This methodology results in a stated growth rate in the application of 5.5% per year for inpatient volume, days, and bed need, resulting in the following table (taken directly from the original application).

	Actual				Forecast		
	2015	2016	2017	2018	2020 Projected	2025 Projected	2027 Projected
Admissions	7,921	8,691	9,594	9,515	10,834	14,989	17,068
Average Daily Census	105.9	115.9	122.69	123.9	137.3	179.5	199.8

Percentage growth from 2018 (last year of actual data in application) to 2025 Projected  
Admissions 57.5%

Comparing the volume from 2018 (the last actual year of data in the application) to the forecasted volume in 2025 **results in an inpatient volume gain of 57.5%.**

In Guidehouse's opinion, this is a wildly optimistic view of the anticipated growth expected in the inpatient market as we discuss in the next section. Furthermore, the Applicant's "analysis" does not use sound health care planning methodologies, including volume projections by payor mix (Medicare, Medicaid, Commercial, etc.).

A reasonable, more defensible, approach to forecasting inpatient market volumes will start with a normalized recent history of inpatient utilization in the market as a whole (based on the residents of that area) and would not simply focus on the performance of a single provider. Trends in utilization rates are considered and made part of a forecast. Projected demographic changes are also factored in and a forecast is made based on those various data. The Applicant does not use anything like this approach. Applying generally accepted methods of volume forecasting used in healthcare planning, we estimate fewer inpatient beds will be necessary in the market, directly refuting the Applicant's claim that future demand for inpatient beds will exceed the current supply.

### **Appropriate Forecasting Methodology**

#### **Demographics**

Guidehouse uses the proposed service area provided by the client for its inpatient forecast. This consists of the following ZIP codes (all located in IL). The total service area population is estimated at 68,394 in 2020:

ZIP	City	2020 Population	County	State
62343	Hull	624	Pike County	IL
62360	Payson	1,648	Adams County	IL
62345	Kinderhook	364	Pike County	IL
62365	Plainville	596	Adams County	IL
62312	Barry	2,097	Pike County	IL
62301	Quincy	32,070	Adams County	IL
62305	Quincy	18,160	Adams County	IL
62376	Ursa	1,277	Adams County	IL
62351	Mendon	1,723	Adams County	IL
62379	Warsaw	1,918	Hancock County	IL
62348	Lima	-	Adams County	IL
62347	Liberty	2,321	Adams County	IL
62338	Fowler	1,328	Adams County	IL
62359	Paloma	178	Adams County	IL
62325	Coatsburg	465	Adams County	IL
62320	Camp Point	2,180	Adams County	IL
62349	Loraine	607	Adams County	IL
62339	Golden	838	Adams County	IL
<b>Service Area Total</b>		<b>68,394</b>		

Demographic Data provided by Claritas

Demographic projections for the service area fit an “Aging in Place” profile where there is some growth forecast in the older age cohorts, but overall service area population is projected to decrease over the next 5 years.

### Proposed Service Area Population Projections

Service Area Population by Age Cohort	2020	2025	5 Year Growth		
			No.	Percent	CAGR
Age 0-17	15,322	15,092	(230)	-1.5%	-0.3%
Age 18-44	21,530	21,167	(363)	-1.7%	-0.3%
Age 45-64	17,301	15,797	(1,504)	-8.7%	-1.8%
Age 65-84	11,833	13,025	1,192	10.1%	1.9%
Age 85+	2,408	2,453	45	1.9%	0.4%
<b>Service Area Total</b>	<b>68,394</b>	<b>67,534</b>	<b>(860)</b>	<b>-1.3%</b>	<b>-0.3%</b>
<b>Female Age 15-44</b>	<b>11,938</b>	<b>11,756</b>	<b>(182)</b>	<b>-1.5%</b>	<b>-0.3%</b>

*Demographic projections provide by Claritas*

These demographic forecasts (limited growth in the older cohorts, overall negative population growth) do not support the types of increases projected in the Applicant's analysis.

### **Recent Inpatient Utilization History in the Proposed Service Area**

The table below shows the actual inpatient volume for residents of the proposed service area for FY18-FY20 (October/September Fiscal year). Total market inpatient volume has decreased over this time period, not increased as the Applicant forecasts (at 5.5% annually). Obviously FY20 is anomalous due to COVID impacts, but the trend is clearly down over this time period.

Both total market volume and inpatient utilization rates decreased from FY18 to FY19 and FY19 to FY20. Of note, is the relatively high inpatient utilization rate in the service area 153 discharges per 1,000 population in FY18, 147 in FY19 and 137 in FY20. This is noteworthy as the national average is approximately 105 discharges per 1,000 while the Illinois State average is 107 (Kaiser State Health Facts, 2018). Realizing the volumes forecast by the Applicant would require an already-high inpatient utilization rate to increase 50%+ over the next several years.

### **Proposed Service Area Inpatient Market Volume- Recent History (Actuals)**

	FY18	FY19	FY20
	Discharges	Discharges	Discharges
<b>Total Inpatient Market Discharges</b>	<b>11,079</b>	<b>10,577</b>	<b>9,814</b>
Med/Surg	8,190	7,586	6,981
OB/Newborns	1,663	1,689	1,595
Other	1,226	1,302	1,238
<b>Normal Newborns</b>	<b>440</b>	<b>442</b>	<b>420</b>
<b>Total without Normal Newborns</b>	<b>10,639</b>	<b>10,135</b>	<b>9,394</b>
<b>Service Area Total Population</b>	<b>69,691</b>	<b>69,025</b>	<b>68,394</b>
<b>Service Area Inpatient Utilization Rate</b>	<b>152.7</b>	<b>146.8</b>	<b>137.4</b>

*Demographic data from Claritas, Inpatient Volume from Blessing Health*

### **Guidehouse Forecasted Inpatient Market Utilization and Bed Need in the Service Area**

Guidehouse developed two inpatient market projection scenarios for this response. One utilizes the Truven/IBM Watson Market Expert growth forecast for the service area. This methodology includes the impact of the anticipated demographic changes to the service area population along with recent trends in inpatient utilization. The other forecast scenario uses FY19 Utilization Rates and holds them constant (note that the utilization rate trend in the service area is lower in recent years). Because FY20 is admittedly a low-volume year due to COVID, the second model uses the FY19 inpatient data as a normalized base year (which serves to raise the baseline volumes in this scenario).

#### **Scenario 1, Part A: Truven/IBM Watson Market Forecast- Inpatient Discharge Forecast**

	FY18	FY19	FY20	Truven Market Expert Projections				
	Discharges	Discharges	Discharges	FY21 Projected	FY22 Projected	FY23 Projected	FY24 Projected	FY25 Projected
<b>Total Inpatient Market Discharges</b>	<b>11,079</b>	<b>10,577</b>	<b>9,814</b>	<b>9,753</b>	<b>9,693</b>	<b>9,633</b>	<b>9,574</b>	<b>9,515</b>
Med/Surg	8,190	7,586	6,981	6,951	6,922	6,892	6,863	6,834
OB/Newborns	1,663	1,689	1,595	1,570	1,545	1,521	1,497	1,474
Other	1,226	1,302	1,238	1,232	1,226	1,220	1,214	1,208
<b>Normal Newborns</b>	<b>440</b>	<b>442</b>	<b>420</b>	<b>413</b>	<b>407</b>	<b>401</b>	<b>394</b>	<b>388</b>
<b>Total without Normal Newborns</b>	<b>10,639</b>	<b>10,135</b>	<b>9,394</b>	<b>9,340</b>	<b>9,286</b>	<b>9,233</b>	<b>9,180</b>	<b>9,127</b>
<b>Service Area Total Population</b>	<b>69,691</b>	<b>69,025</b>	<b>68,394</b>	<b>68,221</b>	<b>68,049</b>	<b>67,877</b>	<b>67,705</b>	<b>67,534</b>
<b>Service Area Inpatient Utilization Rate</b>	<b>152.7</b>	<b>146.8</b>	<b>137.4</b>	<b>136.9</b>	<b>136.5</b>	<b>136.0</b>	<b>135.6</b>	<b>135.2</b>

This scenario results in a slightly declining total inpatient market, with 9,127 discharges (excluding normal newborns) in FY25 as compared to 9,394 actual market discharges in FY20. Inpatient utilization rates slightly decline over this period but still remain well in excess of national and state averages.

Estimated bed need in this scenario is shown in the table below (using a constant ALOS assumption and the planning benchmark of 80% occupancy).

#### **Scenario 1, Part B: Truven/IBM Watson Market Forecast- Inpatient Bed Need Forecast**

	FY18	FY19	FY20	Truven Market Expert Projections				
	Days	Days	Days	FY21 Projected	FY22 Projected	FY23 Projected	FY24 Projected	FY25 Projected
<b>Total Inpatient Market Days</b>	<b>48,311</b>	<b>44,591</b>	<b>44,640</b>	<b>43,669</b>	<b>43,432</b>	<b>43,196</b>	<b>42,961</b>	<b>42,729</b>
Med/Surg	36,075	32,354	32,286	32,149	32,012	31,876	31,741	31,606
OB/Newborns	4,373	3,963	4,168	4,103	4,038	3,975	3,913	3,851
Other	7,013	7,443	7,455	7,418	7,381	7,344	7,308	7,271
<b>Normal Newborns</b>	<b>850</b>	<b>831</b>	<b>731</b>	<b>720</b>	<b>708</b>	<b>697</b>	<b>686</b>	<b>675</b>
<b>Total without Normal Newborns</b>	<b>47,461</b>	<b>43,760</b>	<b>43,909</b>	<b>42,950</b>	<b>42,723</b>	<b>42,498</b>	<b>42,275</b>	<b>42,053</b>
<b>ADC Withouth Normal Newborns</b>	<b>130.03</b>	<b>119.89</b>	<b>120.30</b>	<b>117.67</b>	<b>117.05</b>	<b>116.43</b>	<b>115.82</b>	<b>115.21</b>
<b>Bed Need at 80% Capacity</b>	<b>162.54</b>	<b>149.86</b>	<b>150.37</b>	<b>147.09</b>	<b>146.31</b>	<b>145.54</b>	<b>144.78</b>	<b>144.02</b>

This scenario results in anticipated bed need of 144 inpatient beds in FY25 for the service area population, a slight decrease over the FY19 and FY20 calculated bed need for the market.



A second scenario has been created that recognizes the unusual nature of FY20 by holding utilization rates at the FY19 level for the projected years.

**Scenario 2, Part A: FY19 Constant Use Rate Forecast- Inpatient Discharge Forecast**

	FY18	FY19	FY20	Constant Use Rate Projections - FY19				
	Discharges	Discharges	Discharges	FY21 Projected	FY22 Projected	FY23 Projected	FY24 Projected	FY25 Projected
Total Inpatient Market Discharges	11,079	10,577	9,814	10,454	10,427	10,401	10,375	10,349
Med/Surg	8,190	7,586	6,981	7,498	7,479	7,460	7,441	7,422
OB/Newborns	1,663	1,689	1,595	1,669	1,665	1,661	1,657	1,653
Other	1,226	1,302	1,238	1,287	1,284	1,280	1,277	1,274
Normal Newborns	440	442	420	437	436	435	434	432
Total without Normal Newborns	10,639	10,135	9,394	10,017	9,992	9,966	9,941	9,916
Service Area Total Population	69,691	69,025	68,394	68,221	68,049	67,877	67,705	67,534
Service Area Inpatient Utilization Rate	152.7	146.8	137.4	146.8	146.8	146.8	146.8	146.8

This scenario results in market volumes well above the FY20 actual but slightly below FY19 levels (due to the overall decreasing population). FY19 ALOS is used and held constant along with the 80% occupancy benchmark.

**Scenario 2, Part B: FY19 Constant Use Rate Forecast- Inpatient Bed Need Forecast**

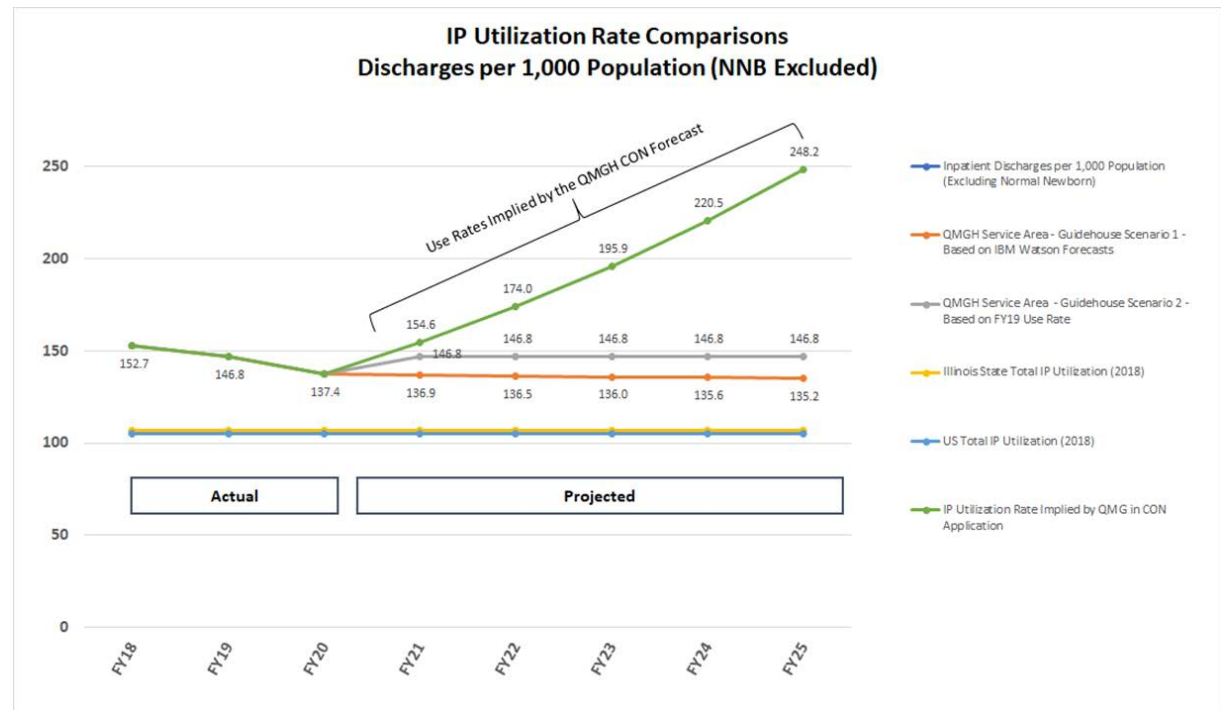
	FY18	FY19	FY20	Constant Use Rate Projections				
	Days	Days	Days	FY21 Projected	FY22 Projected	FY23 Projected	FY24 Projected	FY25 Projected
Total Inpatient Market Days	48,311	44,591	44,640	43,250	43,141	43,032	42,923	42,815
Med/Surg	36,075	32,354	32,286	31,977	31,896	31,816	31,735	31,655
OB/Newborns	4,373	3,963	4,168	3,917	3,907	3,897	3,887	3,877
Other	7,013	7,443	7,455	7,356	7,338	7,319	7,301	7,282
Normal Newborns	850	831	731	821	819	817	815	813
Total without Normal Newborns	47,461	43,760	43,909	42,429	42,322	42,215	42,108	42,002
ADC Withouth Normal Newborns	130.03	119.89	120.30	116.24	115.95	115.66	115.36	115.07
Bed Need	162.54	149.86	150.37	145.3	144.9	144.6	144.2	143.8

This scenario results in similar bed need to the Truven/IBM Watson scenario as the higher FY19 utilization rate is offset by the lower ALOS in FY19 as compared to FY20. Overall market bed need is slightly lower in FY25 than current bed need.



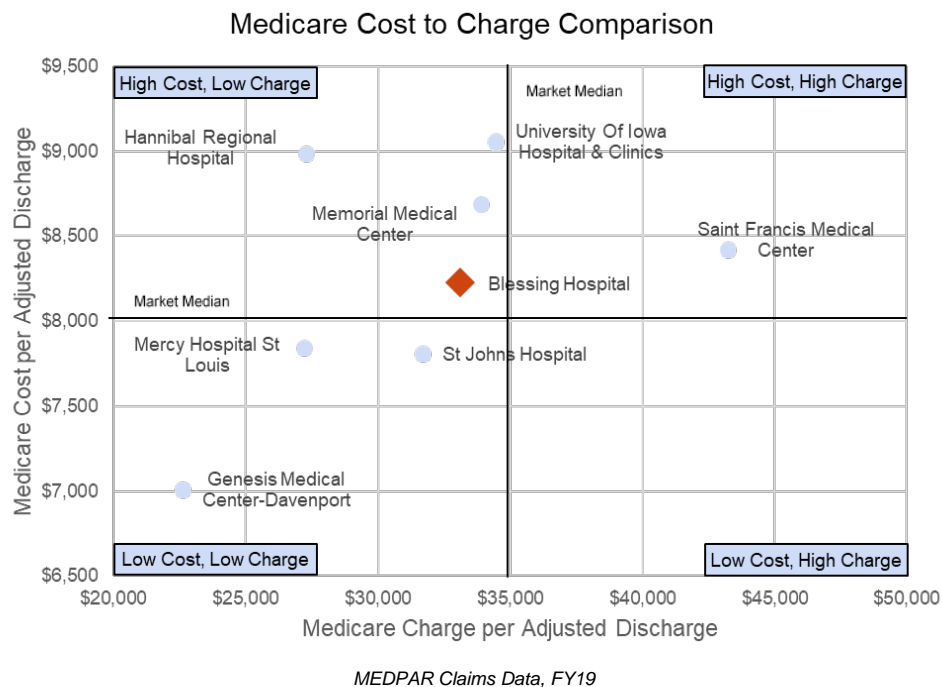
### **Applicant's Implied Inpatient Utilization Compared to Guidehouse, Regional, and National Projections**

Achieving the level of inpatient market volume growth the Applicant forecasts in its CON application would require (1) a “Hockey Stick” style increase in inpatient utilization in the service area in a time of generally flat to decreasing inpatient utilization across the country, and (2) hitting levels of IP utilization far and above what Guidehouse has seen in any market it has studied.



### **Comparing Blessing Health's Charges to Competitors in the Region**

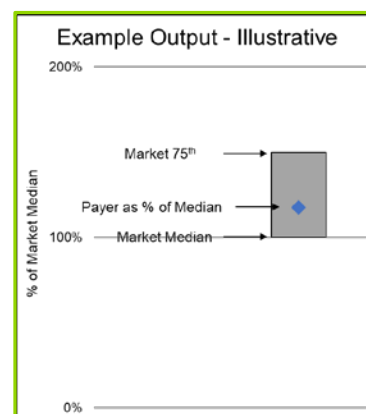
Utilizing publicly available Medicare Provider Analysis and Review (MEDPAR) data, Guidehouse compared Blessing's cost to treat as well as charges to other acute care hospitals in areas proximate to Quincy, IL. Each acute care hospital's performance is adjusted by case mix index (CMI), relative value units (RVU), and the wage index of their respective regions.



Contrary to the Applicant's claim, this analysis shows Blessing's charges are in fact below the market median, when comparing all codes and services across comparable hospitals in surrounding cities (St Louis, Springfield, Davenport).

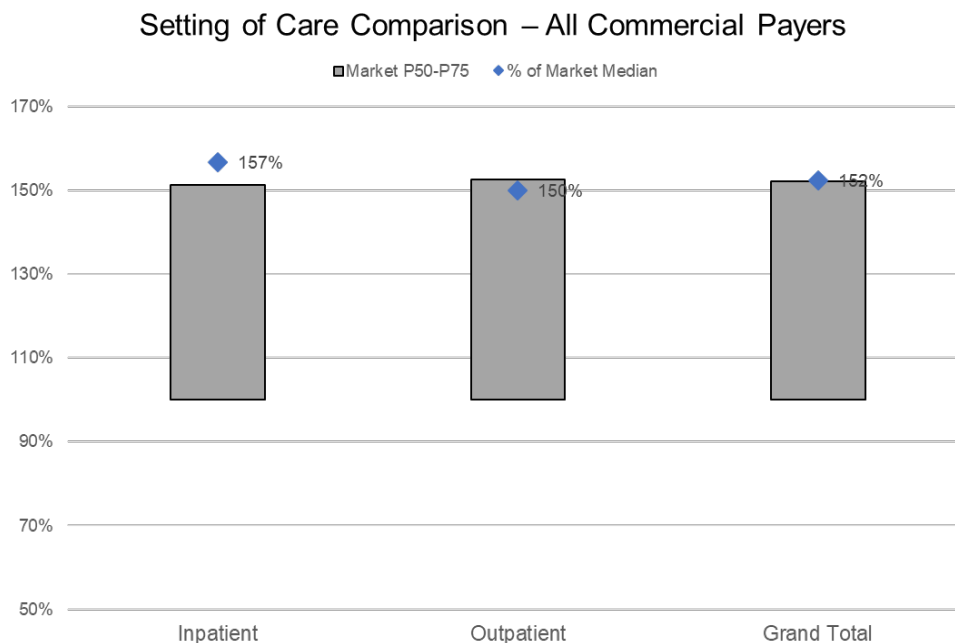
### **Guidehouse Commercial Rate Methodology**

Guidehouse incorporated both Blessing Health internal hospital-based patient level claims data and Truven MarketScan Commercial data to develop valid commercial rate comparisons. The benchmark comparisons accurately reflect Blessing Health service mix to the exact same basket of market rates in an easy-to-read percentile view. The Truven data is then segmented into metropolitan statistical areas (MSAs). Because Quincy, IL is a "micropolitan area," "Rural IL" is utilized, which is the subset of patients which originate outside of other larger MSAs within IL (i.e. Chicago, Springfield).



### **Examining Blessing Health's Commercial Rates**

Blessing Health's status as a Sole Community Provider provides validity to compare its rates to patients originating from non-MSA zip codes. Commercial rates are favorable but not unreasonably so:



*Truven MarketScan, Blessing Health System Claims Data, FY19*

### **Conclusions**

The Applicant forecasts 5.5% annual growth (for several consecutive years and irrespective of current or shifting payor mix) in inpatient volume to generate a scenario in which additional inpatient beds are needed to serve the service area population. Moreover, the forecasted annual growth does not account for industry trends (e.g. site of service shifting from inpatient to either outpatient or ambulatory) nor market disruptions (e.g. telemedicine) leading to a general decline in inpatient services. In Guidehouse's opinion, there is no evidence that supports a forecast involving that extremely high level of inpatient volume growth.

In fact, recent history and sound forecast methodology would suggest a flat to downward trend in inpatient bed need in the Applicant's market. Overall service area population is expected to go down in coming years. This is coupled with recent trends of declining market inpatient utilization to generate a forecast with a slight anticipated decline in inpatient bed need for the market.

The CON Applicant's claim that Blessing's charges are unreasonably high is based upon a selection 24 inpatient DRGs and is not supported when looking at all inpatient and outpatient services holistically. Though Blessing Health has favorable commercial rates, it is important to note that commercial rates do not tell the whole story. It is necessary to examine the full financial picture of the system as commercial rates support highly critical, needed services in the Quincy community.