MARYLAND
Department of Health

Larry Hogan, Governor · Boyd K. Rutherford, Lt. Governor · Robert R. Neall, Secretary

December 10, 2018

Hon. Edward J. Kasmeyer, Chair
Senate Budget and Taxation Committee
3 West Miller Senate Office Building
Annapolis, MD 21401

Hon. Maggie McIntosh, Chair
House Appropriations Committee
121 House Office Building
Annapolis, MD 21401

Re: Joint Chairmen's Report, p. 84—Inpatient Psychiatric Bed Capacity

Dear Chairs Kasmeyer and McIntosh:

Pursuant to the Joint Chairmen's Report, p. 84, the Maryland Department of Health respectfully submits the attached report on behalf of the Behavioral Health Administration detailing inpatient psychiatric bed capacity in Maryland.

If you have any questions regarding this report, please contact Webster Ye, Deputy Chief of Staff, at (410) 767–6480 or webster.ye@maryland.gov.

Sincerely,

Robert R. Neall
Secretary

Report on Inpatient Psychiatric Bed Capacity

Submitted by the Maryland Department of Health
December 10, 2018

2018 Joint Chairmen's Report (p. 84)

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I. Executive Summary

As evidenced in the data contained herein, psychiatric bed capacity has remained relatively stable between FY13 and FY17 in state and private hospital sectors, while there was a modest increase in psychiatric bed capacity in the acute care hospital sector of approximately 5% over this period. Bed occupancy rates varied considerably across the sectors with the state facilities operating at near 100% occupancy, while the average bed occupancy in acute general and private psychiatric hospitals was considerably lower at 61% and 69% respectively.

II. Introduction

The fiscal 2019 budget includes additional funding to expand capacity at the state-run psychiatric facilities as well as both of the Regional Institutes for Children and Adolescents (RICAs). According to p. 84 of the 2018 Joint Chairmen's Report, the committees remain concerned about the adequacy of inpatient psychiatric bed capacity for both adults as well as children and youth across all sectors (state-run, private hospitals, and acute general hospitals) as well as for both civil and forensic admissions.

As a result, the 2018 Joint Chairmen's Report requests that the Behavioral Health Administration (BHA) submit a report on inpatient psychiatric bed capacity in both private and public facilities across Maryland and provide recommendations on the appropriate inpatient psychiatric bed capacity by sector.

III. Data

The Joint Chairmen's Report specifically requests details on the (A) extent of current inpatient psychiatric bed capacity in Maryland and the changes to that capacity by sector since January 1, 2013, and (B) demand for inpatient psychiatric beds in each sector including historical data since January 1, 2013. This report compiles data from a number of sources, including the State Hospital Management Information System (HMIS), Maryland Health Care Commission (MHCC), and Health Services Cost Review Commission (HSCRC) hospital inpatient data. As of the writing of this report, the most recent complete data relating to both inpatient bed capacity and utilization of psychiatric inpatient services is FY17.

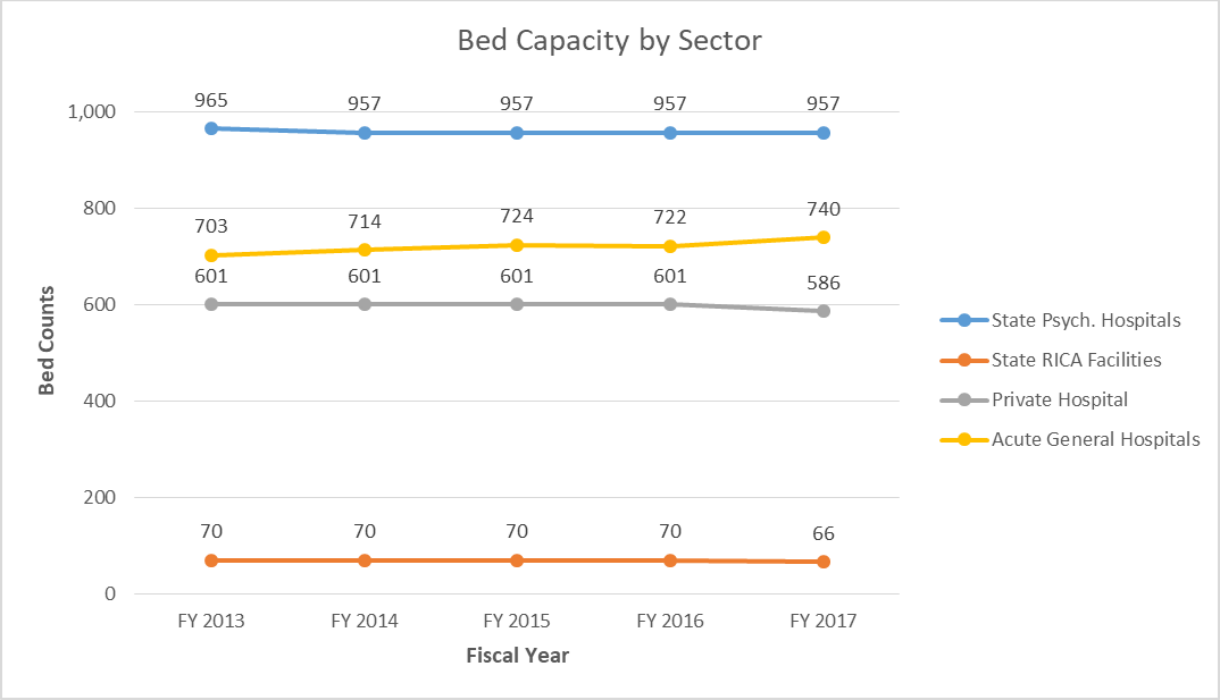
To calculate bed capacity, this report references "licensed beds" and "operational beds." For the purpose of this report, "licensed beds" are beds in a facility that are licensed and *capable of being staffed*. Licensed beds most accurately reflect the capacity at private and acute care hospitals because the facility has direct control over its ratio of beds licensed, the number of employees it hires, and where the employees work. Therefore, in a private or acute care hospital, a licensed bed without staff can become staffed through the autonomy of the facility and best reflects its true capacity.

"Operational beds" are beds in a facility that are licensed and *are staffed*. The bed capacity of a state hospital is most accurately reflected by beds that are staffed because the facility does not have independent authority over staff hiring and placement. For example, a state hospital may have beds licensed in a building that is not operational, which means the beds cannot be staffed.

Therefore, in a state facility, a licensed bed without staff is not operational and cannot reflect true capacity.

A. Inpatient Psychiatric Bed Capacity

Figure 1: Psychiatric Facilities Bed Capacity by Sector, FY13 to FY17



Source: Maryland Health Care Commission (MHCC), State Hospital Management Information System (HMIS).
Note: Bed counts for the state Psychiatric facilities include the two RICAs and reflect the operational bed capacity. The licensed bed capacity is displayed for Acute Care Hospitals and Private Psychiatric facilities. Adventist Behavioral Health Eastern Shore temporarily delicensed their 15 beds in 2016.

Figure 1 displays the number of psychiatric beds by facility type (*i.e.*, sector) between FY13 and FY17. In FY17, statewide, there were a total of 39 hospitals that provided psychiatric inpatient treatment services, of which 29 were acute care hospitals, five private psychiatric facilities, and five state psychiatric hospitals. In addition to the five state-run psychiatric hospitals, the State also operates two RICAs, which has a combined bed capacity of 66 in FY17. Of the 39 acute, private-IMD, and public inpatient facilities, 13 provided inpatient psychiatric services to children, adolescents, and adults and the remaining 26 provided inpatient services to adults only. Combined, these facilities (acute, private, and state) had a total bed capacity of 2,349 beds in FY17. Overall bed capacity increased from 2,339 in FY13 to 2,349 in FY17, representing a 10-bed increase in bed capacity across all sectors. The state facilities account for the largest proportion (43.5%) of bed capacity in FY17 while the acute care hospitals and private psychiatric hospitals account for 31.5% and 26% of bed capacity, respectively.

As shown in Figure 1, the operational bed capacity in the state-operated hospitals remained relatively stable since FY13, decreasing by a total of eight beds over this period, while State RICA facilities decreased by four beds. The bed capacity in acute care hospitals increased from 703 in

FY13 to 740 in FY17, reflecting a 5.3% increase. Over the same period, the private psychiatric hospitals had a 2.5% (15 bed) decrease from 601 in FY13 to 586 in FY17. According to the MHCC, this decrease is largely due to the temporary delicensing of 15 beds at Adventist Behavioral Health – Eastern Shore in 2016, which were later reinstituted in FY18.

State Psychiatric Facilities

As shown in Figure 1, in FY17, operational bed capacity across the state psychiatric hospitals was 957, while the two RICAs accounted for a total an additional 66 beds. The number of operational beds varied substantially across the State hospitals from a low of 60 beds at Eastern Shore Hospital to 355 at Spring Grove Hospital. (See Appendix A, Table 3).

Acute Care Hospitals[1]

A total of 29 acute care hospitals provided psychiatric treatment services across the state. As of FY17, the licensed bed capacity ranged from 6 beds (Holy Cross Germantown Hospital) to 108 beds (Johns Hopkins Hospital). See Appendix A, Table 4. Between FY13 and FY17, total bed capacity in acute care hospitals increased from 703 to 740, representing a 5.3% (37 bed) increase from FY13. This increase in bed capacity was largely driven by an increases in psychiatric beds at MedStar Franklin Square Hospital and Northwestern Hospital with both adding 16 beds since FY13. See Appendix A, Table 4.

In acute care hospitals, "licensed beds" were used in this report rather than "operational beds" in order to assess the potential capacity available at each hospital, even if all the licensed beds are not being utilized given current staffing resources. In FY17, licensed and operational bed counts for acute care hospitals did not differ substantially. In 19 out of 29 acute care hospitals, licensed and operational beds counts were either the same or operational beds were higher. Across all hospitals, there were a total of 53 more licensed beds compared to operational beds. It is recognized that using licensed beds will marginally inflate the bed capacity that is available at each of these facilities.

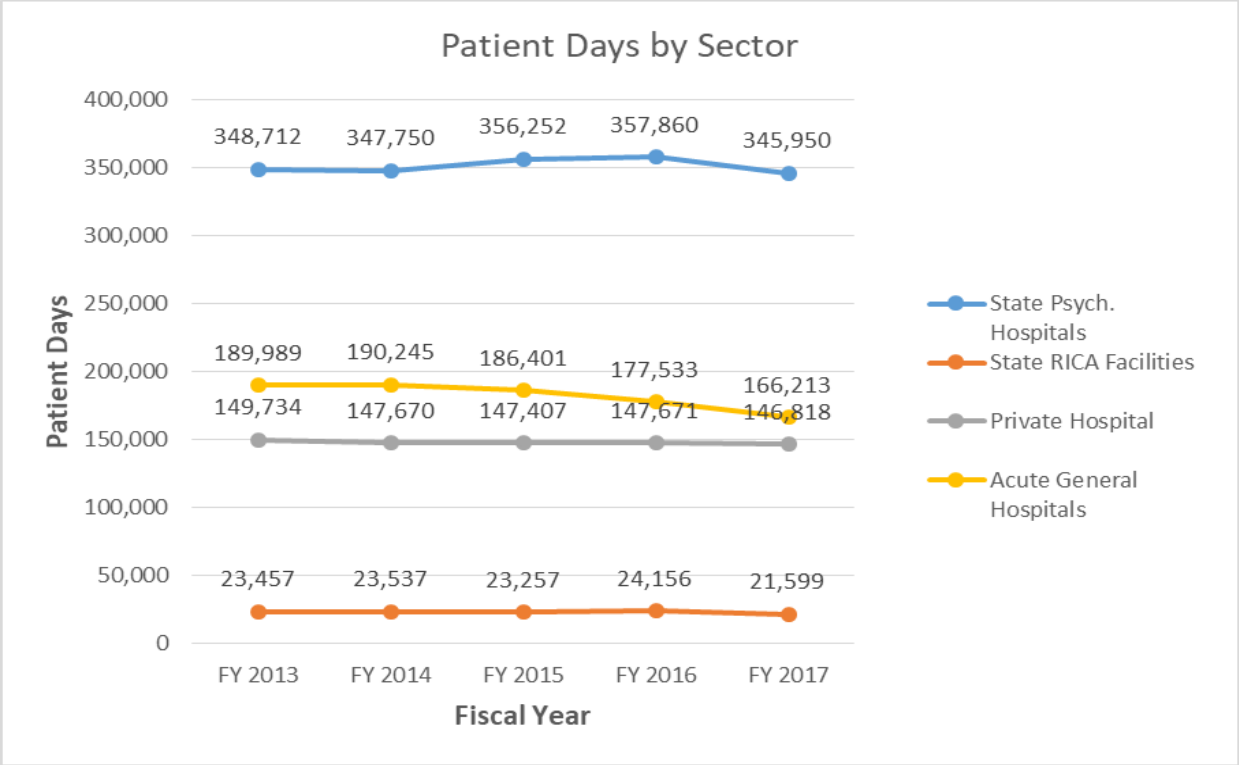
Private Hospitals

Statewide, the five private psychiatric specialty hospitals had a combined licensed bed capacity of 586 beds in FY17. Between FY13 and FY17, the number of beds declined from 601 to 586, representing a 2.5% (15 beds) decline over the time period. This decrease is a result of Adventist Behavioral Health-Eastern Shore delicensing 15 beds in 2016. In FY17, the bed capacity in the four remaining facilities ranged from 65 at Brooklane Health Services to 322 at Sheppard Pratt Hospital. See Appendix A, Table 2.

[1] The Joint Chairmen's report instructs BHA to consult with appropriate stakeholders, which are local community hospitals. Therefore, on August 7, 2018, the Deputy Secretary of Behavioral Health met with the Maryland Hospital Association to illicit input from key stakeholders on data collected for this report on acute general hospital psychiatric capacity and utilization. See Appendix A, Table 4. The Maryland Hospital Association submitted a letter on September 5, 2018. See Appendix B.

B. Demand for Inpatient Psychiatric Bed Utilization

Figure 2: Total Psychiatric Patient Days by Sector



Source: Health Service Cost Review Commission (HSCRC) Inpatient data; HMIS

In FY17, a total of 680,580 psychiatric patient days were used across all sectors. As shown in Figure 2, the state hospitals had substantially higher numbers of patient days compared to private psychiatric and acute general hospitals, which is largely driven by fewer discharges and longer average length of stays. In FY17, average lengths of stay for the state hospitals were 199 days and 149 days for the RICA facilities compared to 6 and 11 days for the acute general hospitals and private psychiatric hospitals respectively. See Appendix A, Table 1.

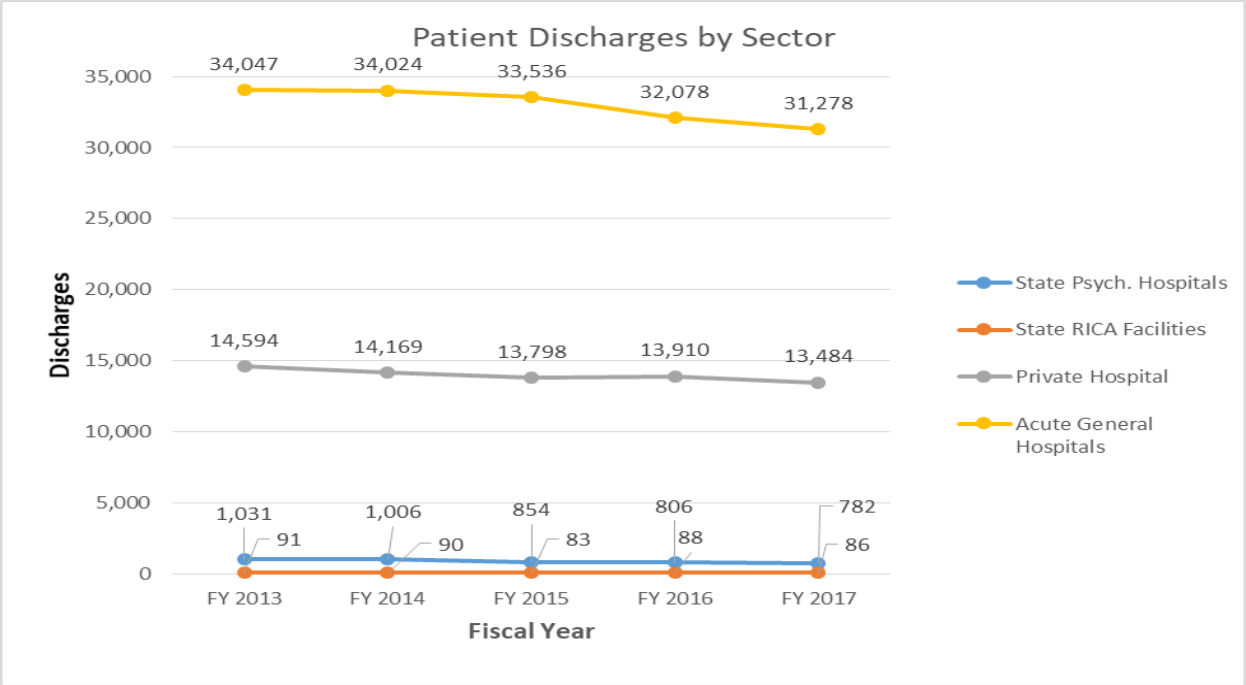
As shown in Appendix A, occupancy rates in FY17 varied across sectors and hospitals, with state hospitals and RICA Facilities maintaining almost 100% occupancy rates. Comparatively, acute general hospitals and private hospitals had average occupancy rates of 61% and 69% respectively. The average occupancy rate across all hospital sectors was 79%.

As shown in Figure 2, the number of psychiatric patient days remained relatively stable for State Psychiatric Facilities and Private Psychiatric Hospitals between FY13 to FY17, while showing a steady decline in acute care hospitals from 189,989 to 166,213 over the same period. A study on bed demand in acute care hospitals, conducted by the Maryland Hospital Association (MHA), estimated that the 29 acute care hospitals provided approximately 245,000 inpatient days, reflecting nearly 80,000 more impatient days than reported in this analysis. See Appendix B. MHA's counts of patient days are based on patients with a primary behavioral health diagnosis admitted to acute care hospitals licensed to provide psychiatric care. This approach will likely

overestimate the actual patient days since some individuals may be assigned a primary behavioral health diagnosis but not receive behavioral health treatment services. In the current report, psychiatric patient days were obtained from the HSCRC inpatient files and included all patients who were reported by the hospitals to have had one or more days of psychiatric care over a given fiscal year.

Given that the current methodology likely excludes some patients that receive psychiatric care while being treated in emergency rooms or while receiving care on non-psychiatric medical units within these hospitals, the patient days provided in this report likely represent a conservative estimate of the actual demand for psychiatric services within acute care hospitals.

Figure 3: Discharges from Psychiatric Services by Sector, FY13 to FY17



Source: HSCRC Inpatient data; HMIS

Figure 3 displays psychiatric patient discharges by hospital type (i.e., sector) between FY13 and FY17. As shown in Figure 3, the overall volume of psychiatric patients seen in the acute care hospitals was substantially higher compared to private psychiatric hospitals and state facilities. These higher discharge rates are largely a result of lower average length of stay in these facilities compared to hospitals in other sectors.

The average length of stays for the acute care hospitals was five days in FY17 compared to 11 days in private psychiatric hospitals, 199 days in state hospitals and 149 days in state RICA facilities. See Appendix A. The lower number of discharges and high average length of stays in the state hospitals is attributable to high numbers of court-ordered and forensic patients. As shown in Figure 3, the number of psychiatric discharges declined in each sector between FY13 and FY17. While the acute care hospitals and private psychiatric facilities exhibited similar declines of approximately 8%, discharges at the state facilities declined by 23% since FY13.

Recommendations

As mentioned, the 2018 Joint Chairmen's Report requests recommendations on the appropriate amount of inpatient psychiatric bed capacity by sector. Based on the discussions surrounding the appropriate accounting method for bed capacity and occupancy rate in the acute care hospital and private psychiatric hospitals, the Department must first determine whether existing bed capacity is consistently availability and utilized before making further recommendations. The Department is currently considering additional paths forward to improve bed capacity information and how those beds might be utilized as part of Maryland's overall behavioral health system.

APPENDIX A

Hospital Capacity and Utilization Detail Tables

Table 1: Statewide Sector Capacity and Utilization

	Total Number of Psych. Discharges		Total Psych. Day		Avg. Length of Stay		Beds		Occupancy Rate	
	FY13	FY17	FY13	FY17	FY13	FY17	FY13	FY17	FY13	FY17
Acute General Hospitals	34,047	31,278	189,989	166,213	5	6	703	740	74%	61%
Private Psychiatric Hospitals	14,594	13,484	149,734	146,818	10	11	601	586	68%	69%
State Psychiatric Facilities	1,122	868	372,169	367,549	184	195	1,035	1,023	99%	99%
GRAND TOTAL	**49,763**	**45,630**	**711,892**	**680,580**	**14**	**15**	**2,331**	**2,349**	**84%**	**79%**

Source: HSCRC, HMIS, and MHCC.

Table 2: Private Psychiatric Hospital Capacity and Utilization

	Total Number of Psych. Discharges		Total Psych. Day		Avg. Length of Stay		Beds		Occupancy Rate	
	FY13	FY17	FY13	FY17	FY13	FY17	FY13	FY17	FY13	FY17
Sheppard & Enoch Pratt Hospital - Ellicott	2,854	2,624	20,682	22,523	7	9	92	92	62%	67%
Sheppard & Enoch Pratt Hospital - Towson	6,878	6,015	83,006	81,811	12	14	322	322	71%	70%
Brook Lane	1,761	1,237	12,966	10,312	7	8	65	65	55%	43%
Adventist Behavioral Health - Eastern Shore*	335	101	2,976	963	9	10	15	0	54%	
Adventist Behavioral Health - Mont Co	2,766	3,507	30,104	31,209	11	9	107	107	77%	80%
GRAND TOTAL	**14,594**	**13,484**	**149,734**	**146,818**	**10**	**11**	**601**	**586**	**68%**	**69%**

Source: HSCRC, MHCC.
Notes: *Adventist Behavioral Eastern Shore temporary delicensed their 15 beds in 2016, which affected the occupancy rate.

Table 3: State Psychiatric Facility Capacity and Utilization

	Total Number of Psych. Discharges		Total Psych. Day		Avg. Length of Stay		Beds		Occupancy Rate	
	FY13	FY17	FY13	FY17	FY13	FY17	FY13	FY17	FY13	FY17
Clifton T. Perkins	93	91	87,360	92,027	364	264	238	248	100%	102%
Eastern Shore	68	52	21,458	22,305	172	196	60	60	98%	102%
Spring Grove	477	292	130,227	128,414	159	158	366	355	97%	99%
Springfield	316	284	85,010	79,612	156	199	235	228	99%	96%
Thomas B. Finan	77	63	24,657	23,592	169	180	66	66	102%	98%
RICA - Baltimore	49	42	12,900	10,956	157	154	38	34	93%	88%
RICA - Montgomery	42	44	10,557	10,643	153	144	32	32	90%	91%
GRAND TOTAL	**1,122**	**868**	**372,169**	**367,549**	**184**	**195**	**1,035**	**1,023**	**98%**	**98%**

Source: MHCC, HMIS.
Notes: Discharges reflect all discharges within each fiscal year. The average length of stay is based on those patient days used within each fiscal year divided by the total number of individuals served in the year.

Table 4: Acute General Hospital Psychiatric Capacity and Utilization[2]

	Total Number of Psych. Discharges		Total Psych. Day		Avg. Length of Stay		Beds		Occupancy Rate	
	FY13	FY17	FY13	FY17	FY13	FY17	FY13	FY17	FY13	FY17
Bon Secours Hospital	1,690	1,287	8,864	6,798	5	5	32	24	76%	78%
Calvert Health Medical Center	674	581	3,076	2,756	5	5	11	9	77%	84%
Carroll Hospital Center	1,312	857	4,603	3,855	3	5	20	20	63%	53%
Frederick Memorial Hospital	1,072	1,001	6,818	6,158	6	6	21	21	89%	80%
Holy Cross Hospital-Germantown±		393		1,557		4		6		71%
Howard County General Hospital	1,026	847	5,405	5,328	5	6	20	20	74%	73%
Johns Hopkins Bayview Medical Center	887	700	6,133	6,345	7	9	20	20	84%	87%
Johns Hopkins Hospital	2,801	2,554	32,863	32,005	12	13	108	108	83%	81%
MedStar Franklin Square	1,239	2,200	6,150	916	5	5	24	40	70%	6%
MedStar Montgomery Medical Center	1,437	1,109	4,744	-	4	4	25	20	52%	
MedStar Southern Maryland Hospital Center	1,024	1,346	4,280	-	4	5	25	25	47%	
MedStar St. Mary's Hospital	558	821	2,139	-	4	4	12	12	49%	
MedStar Union Memorial Hospital	1,971	536	7,755	1,946	4	6	26	26	82%	21%
Meritus Medical Center	1,028	1,146	4,575	5,275	4	5	18	18	70%	80%
Northwest Hospital Center	941	1,366	5,746	9,518	6	7	14	30	112%	87%
Peninsula Regional Medical Center	846	725	3,704	3,805	4	5	10	12	101%	87%
Sinai Hospital	1,327	1,170	8,055	7,375	6	6	24	24	92%	84%
Suburban Hospital	1,401	1,224	6,889	7,194	5	6	24	24	79%	82%
UM-Baltimore Washington Medical Center	986	924	5,276	4,795	5	5	14	14	103%	94%
UM-Harford Memorial Hospital	1,384	1,235	7,083	7,349	5	6	27	26	72%	77%
UM-Laurel Regional Hospital	812	770	3,512	3,608	4	5	14	18	69%	55%
UMMC Midtown Campus	1,498	1,047	9,281	7,924	6	8	28	28	91%	78%
UM-Prince George's Hospital Center	1,369	1,139	7,398	7,782	5	7	28	28	72%	76%
UM-Shore Regional Health at Dorchester	683	580	-	-	5	7	16	24		
UM-St. Joseph Medical Center	712	820	5,449	5,862	8	7	19	19	79%	85%
Union Hospital of Cecil County	734	510	-	2,411	3	5	7	11		60%
University of Maryland Medical Center	1,694	1,116	15,359	12,857	9	12	56	56	75%	63%
Washington Adventist Hospital	1,738	1,475	9,752	7,965	6	5	40	39	67%	56%
Western Maryland Regional Medical Center	1,203	1,059	5,080	4,829	4	5	20	19	70%	70%
GRAND TOTAL	**34,047**	**30,538**	**189,989**	**166,213**	**6**	**5**	**703**	**740**	**74%**	**61%**

Source: HSCRC, MHCC.
± Holy Cross Hospital – Germantown did not report data for FY2013.

[2] BHA shared this table with the Maryland Hospital Association for consultation. The Maryland Hospital Association submitted a letter in response. See Appendix B.

APPENDIX B

Maryland Hospital Association Letter

Maryland
Hospital Association

September 5, 2018

Barbara Bazron, PhD
Deputy Secretary, Behavioral Health Administration
Maryland Department of Health
201 West Preston Street
Baltimore, Maryland 21201

Dear Dr. Bazron,

On behalf of the 63 hospital and health system members of the Maryland Hospital Association, I appreciate the opportunity to provide input on inpatient psychiatric bed capacity, as required by the 2018 Joint Chairmen's Report.

The Behavioral Health Administration's analysis of Acute General Hospital Psychiatric Capacity and Utilization (attached), is limited in its ability to truly capture Maryland's behavioral health treatment capacity and demand.The analysis, which draws on Maryland Health Care Commission and Health Services Cost Review Commission data, calculates occupancy based on *licensed* beds, a method that overstates actual capacity. Any analysis of inpatient psychiatric occupancy should instead use the number of *staffed* beds available to each facility. Staffed beds, defined by the Maryland Health Care Commission, are "the number of beds regularly maintained (set up and staffed for use) for inpatients." Numerous hospitals are unable to treat patients due to staffing shortages, patient characteristics, and other factors that are unrelated to the raw number of licensed beds.

In addition, to fully measure the state's demand for treatment, any analysis must capture more than just inpatient psychiatric services, as a significant portion of treatment is now conducted in other inpatient units and outpatient settings.

MHA has conducted an internal analysis to measure demand for inpatient behavioral health services in the 29 Maryland hospitals licensed to provide inpatient psychiatric services in fiscal 2017. Claims data were used to identify patients with a behavioral health primary diagnosis, including those with substance use disorders. Through this analysis, MHA estimates that these 29 hospitals provided approximately 80,000 more inpatient days of care, bringing the total to approximately 245,000. Please note that this analysis covers all units for the 29 hospitals with inpatient psychiatric services; however, because the analysis excludes hospitals without psychiatric units that may be treating behavioral health patients admitted to the hospital through the emergency department, we believe it is still conservative.

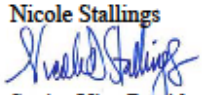
Currently, MHA is completing a study to identify the primary factors for discharge delays in inpatient psychiatric units, to better understand the behavioral health needs of Maryland's communities. We would be happy to share a preview of these findings.

6820 Deerpath Road, Elkridge, MD 21075 ▪ 410-379-6200 ▪ www.mhaonline.org

Thank you again for the opportunity to provide feedback. I look forward to continuing to work together on this important issue.

Sincerely,

Nicole Stallings



Senior Vice President, Government Affairs