

May 7, 2018

Ms. Ruby Potter
ruby.potter@maryland.gov
Health Facilities Coordination Officer
Maryland Health Care Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Re: University of Maryland St. Joseph Medical Center, LLC
Replacement and Consolidation of Perioperative Services Facilities

Dear Ms. Potter:

On behalf of applicant University of Maryland St. Joseph Medical Center, LLC, I am submitting four copies of its response to the additional information questions dated April 25, 2018. WORD and PDF versions will be provided to Commission Staff under separate cover.

I hereby certify that a copy of this submission has also been forwarded to the appropriate local health planning agency noted below.

Sincerely,



MMR:blr
Enclosures

cc: Kevin McDonald, Chief, Certificate of Need
Paul Parker, Director, Center for Health Care Facilities Planning & Development, MHCC
Suellen Wideman, Esq., Assistant Attorney General, MHCC
William Chan, Health Policy Analyst, HSP&P/CON
Gregory Branch, Health Officer, Baltimore County Health Department
Paul Nicholson, Senior VP/CFO, UM St. Joseph Medical Center
Craig Carmichael, Senior VP Operations, UM St. Joseph Medical Center
Walter Furlong, VP Strategy/Business Development, UM St. Joseph Medical Center
Matthew M. McGovern, Program Manager, UM St. Joseph Medical Center
Andrew L. Solberg, A.L.S. Healthcare Consultant Services
Thomas C. Dame, Esq.

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**University of Maryland St. Joseph Medical Center
Replacement of Operating Rooms
Matter No. 18-03-2415**

Responses to Additional Information Questions Dated April 25, 2018

1. Regarding your response to Question #19, please respond to the following:

- a. Clarify the discrepancy in the difference reported in the historical surgical volumes for (non-cardiac) inpatient Table 10, cardiac inpatient (Table 11) and outpatient surgical volumes (Table 12) for FY 2017 and FY 2018 (on p. 54 of CON application) with the numbers provided in Table 27 (p. 17 of responses).**

Applicant Response:

The volumes shown in Tables 10, 11 and 12 of the CON application represent the baseline surgical cases at UM SJMC prior to any adjustments. The FY 2017 baselines are comprised simply of surgical cases recognized in the FY 2017 Maryland state data tapes and are projected forward through FY 2025 with population growth by age cohort, and no other assumptions. Table 13 in the CON application shows the adjustments utilized to calculate the adjusted FY 2017 cases and subsequent year projections. The adjusted FY 2017 and FY 2018 projection volumes in Table 13 of the CON match what is shown in Table 27 of the completeness responses.

As noted on page 17, in the response to completeness question 19 related to the FY 2018 cardiac inpatient volumes, a reduction of 20 cases was applied in order to account for the projected shift of cases to the hybrid operating room setting. Table 11 in the CON application shows the baseline of 571 Cardiac Inpatient surgical cases in FY 2018. The result of the reduction of 20 cardiac inpatient surgical cases in FY 2018, for a total of 551 cases, is shown in the FY2018 column of Table 27 from the completeness responses below.

These tables appear below for ease of reference.

FY 2017 and population-based surgical case projection baselines shown in the CON application:

Table 10
Inpatient Surgical Cases

Cohort	Inpatient								
	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Ages 0-17	24	24	24	24	24	24	24	24	24
Ages 18-64	1,908	1,904	1,900	1,896	1,892	1,888	1,884	1,881	1,877
Ages 65-74	1,207	1,257	1,310	1,364	1,421	1,480	1,541	1,606	1,672
Ages 75+	906	925	943	963	982	1,002	1,023	1,044	1,065
Total	4,045	4,110	4,177	4,247	4,320	4,395	4,473	4,554	4,639

Table 11
Cardiac Surgical Cases

Cohort	Cardiac								
	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Ages 0-17	0	0	0	0	0	0	0	0	0
Ages 18-64	242	242	241	241	240	240	239	239	238
Ages 65-74	207	216	225	234	244	254	264	275	287
Ages 75+	112	114	117	119	121	124	126	129	132
Total	561	571	582	593	605	617	630	643	657

Table 12
Outpatient Surgical Cases

Cohort	Outpatient								
	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Ages 0-17	332	333	333	334	335	336	336	337	338
Ages 18-64	4,813	4,803	4,793	4,783	4,773	4,763	4,754	4,744	4,734
Ages 65-74	1,516	1,579	1,645	1,713	1,785	1,859	1,936	2,017	2,101
Ages 75+	1,155	1,179	1,203	1,227	1,252	1,278	1,304	1,331	1,358
Total	7,816	7,893	7,974	8,058	8,145	8,236	8,330	8,428	8,530

[FY 2017 and projection period surgical case baselines with adjustments \(shown in the CON application\):](#)

Table 13
Projected Surgical Volume Adjusted for DDC

Cases	Inpatient								
	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Cases	4,045	4,110	4,177	4,247	4,320	4,395	4,473	4,554	4,639
Population Growth	-	0.4%	0.4%	0.5%	0.5%	0.5%	0.5%	0.5%	0.6%
DDC Adjustment Cases	(229)	(233)	(236)	(240)	(245)	(249)	(253)	(258)	(263)
Adjusted Cases	3,816	3,877	3,941	4,007	4,075	4,146	4,220	4,296	4,376

Cases	Outpatient								
	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Cases	7,816	7,893	7,974	8,058	8,145	8,236	8,330	8,428	8,530
Population Growth	-	0.4%	0.4%	0.5%	0.5%	0.5%	0.5%	0.5%	0.6%
DDC Adjustment Cases	(2,876)	(2,905)	(2,934)	(2,965)	(2,997)	(3,030)	(3,065)	(3,101)	(3,139)
Adjusted Cases	4,940	4,989	5,040	5,093	5,148	5,205	5,265	5,327	5,392

Surgical case adjusted volumes shown in completeness responses:

Table 27
UM SJMC Surgical Volumes FY 2015 through FY 2018 Projected

	FY2015 ⁽¹⁾	FY2016	FY2017	FY2018
(Non-Cardiac) Inpatient	3,797	3,683	3,816	3,877 ⁽²⁾
Cardiac Inpatient	551	527	561	551 ⁽²⁾
Outpatient Surgical	4,941	4,640	4,940	4,989 ⁽²⁾
Hybrid OR Cases	-	-	-	30 ⁽³⁾

Notes:

- (1) FY2015 Annualized based on 9 months of OpTime data
- (2) FY2018 Non-Hybrid cases Projected based on population growth
- (3) FY2018 Hybrid OR cases based on FY2018 UM SJMC budget

- b. If the historical volumes for FY 2017 and FY 2018 in Table 27 are accurate, then please incorporate these numbers in Table 20 for General Operating Room Need and Table 21 Cardiac Operating Room Need (on pp. 58 and 59 of CON application) to show the need for operating rooms after full implementation of proposed project in FY 2025.**

Applicant Response:

The FY 2017 non-cardiac inpatient and outpatient surgical case volumes shown in Table 27 of the completeness responses match the volumes shown in the “FY 2017 Excl. DDC” column of Table 20 in the CON application.

Additionally, The FY 2017 cardiac inpatient case volumes shown in Table 27 of the completeness responses also match the volumes shown in the “FY 2017 Baseline” and “FY 2017 Excl DDC” columns of Table 21 in the CON application, as well as in the updated version of that table in the completeness responses, Table 28.

Table 20 from the CON application and Tables 27 and 28 from the completeness responses have been included below for ease of reference.

Table 20
General Operating Room Need

	FY2017 Baseline	DDC Removal	FY2017 Excl. DDC	Pop. Growth	Pop. Adjusted	Phys Recruit.	Phys Recruit. Adjusted	Shift IP to OP	Shift IP to OP Adjusted	ASC Impact	FY2025 Projected
Surgeries											
Inpatient	4,045	(229)	3,816	560	4,376	340	4,716	(700)	4,016	(100)	3,916
Ages 0-17	24										
Ages 18-64	1,908										
Ages 65-74	1,207										
Ages 75+	906										
Outpatient	7,816	(2,876)	4,940	452	5,392	187	5,578	700	6,278	(558)	5,720
Ages 0-17	332										
Ages 18-64	4,813										
Ages 65-74	1,516										
Ages 75+	1,155										
Total	11,861	(3,105)	8,756	1,012	9,768	527	10,295	-	10,295	(658)	9,637
Avg Surg Min per Case											
Inpatient	132.82	88.79	135.46	135.46	135.46	139.54	135.75	99.41	142.09	99.41	143.18
Outpatient	60.87	24.36	82.12	82.12	82.12	90.14	82.39	99.41	84.29	82.39	84.47
Total	85.41	29.11	105.37	111.65	106.02	122.02	106.84	-	106.84	84.98	108.33
Surgical Minutes											
Inpatient	537,244	(20,333)	516,911	75,859.19	592,770	47,452	640,222	(69,590)	570,632	(9,941)	560,690
Outpatient	475,748	(70,068)	405,680	37,079.19	442,759	16,851	459,610	69,590	529,200	(45,974)	483,227
Total	1,012,992	(90,401)	922,591	112,938	1,035,529	64,303	1,099,832	-	1,099,832	(55,915)	1,043,917
Turn Around Time											
Inpatient	101,125	(5,725)	95,400	14,000	109,400	8,502	117,902	(17,500)	100,402	(2,500)	97,902
Outpatient	195,400	(71,900)	123,500	11,288	134,788	4,673	139,461	17,500	156,961	(13,950)	143,011
Total	296,525	(77,625)	218,900	25,288	244,188	13,175	257,363	-	257,363	(16,450)	240,913
Total Minutes											
Inpatient	638,369	(26,058)	612,311	89,860	702,171	55,954	758,124	(87,090)	671,034	(12,441)	658,592
Outpatient	671,148	(141,968)	529,180	48,367	577,547	21,524	599,071	87,090	686,162	(59,924)	626,238
Total	1,309,517	(168,026)	1,141,491	138,227	1,279,718	77,478	1,357,195	-	1,357,195	(72,365)	1,284,830
Operating Rooms											
General OR	11.5	(1.5)	10.0	1.2	11.2	0.7	11.9	-	11.9	(0.6)	11.3

Table 27
UM SJMC Surgical Volumes FY 2015 through FY 2018 Projected

	FY2015 ⁽¹⁾	FY2016	FY2017	FY2018
(Non-Cardiac) Inpatient	3,797	3,683	3,816	3,877 ⁽²⁾
Cardiac Inpatient	551	527	561	551 ⁽²⁾
Outpatient Surgical	4,941	4,640	4,940	4,989 ⁽²⁾
Hybrid OR Cases	-	-	-	30 ⁽³⁾

Notes:

- (1) FY2015 Annualized based on 9 months of OpTime data
- (2) FY2018 Non-Hybrid cases Projected based on population growth
- (3) FY2018 Hybrid OR cases based on FY2018 UM SJMC budget

Table 28
Cardiac Operating Room Need

	<u>FY2017 Baseline</u>	<u>Shift to Hybrid OR</u>	<u>FY2017 After Hybrid OR Shift</u>	<u>Pop. Growth</u>	<u>FY2025 Projected</u>
Surgeries					
Cardiac Inpatient	561	(39)	522	89	611
<i>Ages 0-17</i>	-				
<i>Ages 18-64</i>	242				
<i>Ages 65-74</i>	207				
<i>Ages 75+</i>	112				
Avg Surg Min per Case					
Cardiac Inpatient	314.99	314.99	314.99	314.99	314.99
Surgical Minutes					
Cardiac Inpatient	176,709	(12,381)	164,328	28,125	192,453
Turn Around Time					
Cardiac Inpatient	14,025	(983)	13,042	2,232	15,275
Total Minutes					
Cardiac Inpatient	190,734	(13,364)	177,370	30,357	207,727
Operating Rooms					
Cardiac Inpatient	1.7	(0.1)	1.6	0.3	1.8

c. Using the surgical volumes reported in table 27 of your responses for your need projections, how will these lower historical utilization volumes impact the need for 14 ORs at UM SJMC upon project completion?

Applicant Response:

As indicated in Tables 20 and 28 above, the projections based on Table 27 result in an operating room need of 11.3 (11) general surgery operating rooms, 1.8 (2) cardiac inpatient surgery operating rooms, and 1 special purpose hybrid operating room. Please see Tables 20 and 28 below for ease of reference. Based on the responses above, there are no adjustments to these projections of OR need.

Table 20
General Operating Room Need

	FY2017 Baseline	DDC Removal	FY2017 Excl. DDC	Pop. Growth	Pop. Adjusted	Phys Recruit.	Phys Recruit. Adjusted	Shift IP to OP	Shift IP to OP Adjusted	ASC Impact	FY2025 Projected
Surgeries											
Inpatient	4,045	(229)	3,816	560	4,376	340	4,716	(700)	4,016	(100)	3,916
Ages 0-17	24										
Ages 18-64	1,908										
Ages 65-74	1,207										
Ages 75+	906										
Outpatient	7,816	(2,876)	4,940	452	5,392	187	5,578	700	6,278	(558)	5,720
Ages 0-17	332										
Ages 18-64	4,813										
Ages 65-74	1,516										
Ages 75+	1,155										
Total	11,861	(3,105)	8,756	1,012	9,768	527	10,295	-	10,295	(658)	9,637
Avg Surg Min per Case											
Inpatient	132.82	88.79	135.46	135.46	135.46	139.54	135.75	99.41	142.09	99.41	143.18
Outpatient	60.87	24.36	82.12	82.12	82.12	90.14	82.39	99.41	84.29	82.39	84.47
Total	85.41	29.11	105.37	111.65	106.02	122.02	106.84	-	106.84	84.98	108.33
Surgical Minutes											
Inpatient	537,244	(20,333)	516,911	75,859.19	592,770	47,452	640,222	(69,590)	570,632	(9,941)	560,690
Outpatient	475,748	(70,068)	405,680	37,079.19	442,759	16,851	459,610	69,590	529,200	(45,974)	483,227
Total	1,012,992	(90,401)	922,591	112,938	1,035,529	64,303	1,099,832	-	1,099,832	(55,915)	1,043,917
Turn Around Time											
Inpatient	101,125	(5,725)	95,400	14,000	109,400	8,502	117,902	(17,500)	100,402	(2,500)	97,902
Outpatient	195,400	(71,900)	123,500	11,288	134,788	4,673	139,461	17,500	156,961	(13,950)	143,011
Total	296,525	(77,625)	218,900	25,288	244,188	13,175	257,363	-	257,363	(16,450)	240,913
Total Minutes											
Inpatient	638,369	(26,058)	612,311	89,860	702,171	55,954	758,124	(87,090)	671,034	(12,441)	658,592
Outpatient	671,148	(141,968)	529,180	48,367	577,547	21,524	599,071	87,090	686,162	(59,924)	626,238
Total	1,309,517	(168,026)	1,141,491	138,227	1,279,718	77,478	1,357,195	-	1,357,195	(72,365)	1,284,830
Operating Rooms											
General OR	11.5	(1.5)	10.0	1.2	11.2	0.7	11.9	-	11.9	(0.6)	11.3

Table 28
Cardiac Operating Room Need

	FY2017 Baseline	Shift to Hybrid OR	FY2017 After Hybrid OR Shift	Pop. Growth	FY2025 Projected
Surgeries					
Cardiac Inpatient	561	(39)	522	89	611
Ages 0-17	-				
Ages 18-64	242				
Ages 65-74	207				
Ages 75+	112				
Avg Surg Min per Case					
Cardiac Inpatient	314.99	314.99	314.99	314.99	314.99
Surgical Minutes					
Cardiac Inpatient	176,709	(12,381)	164,328	28,125	192,453
Turn Around Time					
Cardiac Inpatient	14,025	(983)	13,042	2,232	15,275
Total Minutes					
Cardiac Inpatient	190,734	(13,364)	177,370	30,357	207,727
Operating Rooms					
Cardiac Inpatient	1.7	(0.1)	1.6	0.3	1.8

2. **Regarding your response to Question #23, please provide the calculations regarding projected need for the General and Cardiac operating rooms for FY 2023 thru FY 2024 taking into account the historical utilization reported in Table 27 for FY 2017 and FY 2018.**

Applicant Response:

To calculate operating room need, cases and minutes were projected through FY 2025 for inpatient (non-cardiac), outpatient and cardiac surgery. FY 2017 actual data is used as the base period.

Inpatient General Operating Room Need Methodology and Calculations:

The first step was to calculate a baseline of cases by year utilizing the growth rates of service area population at the age cohort level. From the baseline, several adjustments impacted the total number of cases by year, including a Digestive Disease Clinic adjustment, physician recruitment adjustment, inpatient to outpatient shift and ambulatory surgical center impact. The Digestive Disease Clinic, inpatient to outpatient shift and ambulatory surgical center adjustments were treated as reductions to the baseline, while the physician recruitment adjustment was treated as an increase to the baseline.

Using FY 2017 experience, an adjustment for Digestive Disease Clinic cases begins in FY 2017, with an actual reduction of 229 cases from the baseline. Using the percent change by year in total inpatient surgical cases at UM SJMC, this adjustment was projected from FY 2017 through FY 2025, at which point it is projected to reach a total reduction of 263 cases.

The physician recruitment adjustment, which will begin in FY 2019, reflects an increase of 333 cases spread over the three years FY 2019 through FY 2021. Beyond FY 2021, the physician recruitment adjustment is projected to grow by year with the rate of service area population growth, to 340 cases in FY 2025.

The inpatient to outpatient shift will begin in FY 2019 with a reduction of 679 cases, and is projected to grow by year with the rate of service area population growth, to a reduction of 700 cases in FY 2025.

The ambulatory surgical center impact will begin in FY 2019 with a reduction of 97 cases. This reduction is also projected to grow by year with the rate of service area population growth, to a reduction of 100 cases in FY 2025.

These adjustments were applied to the baseline inpatient numbers, by year, to calculate the total number of projected cases by year through FY 2025. Please see Table 30 below.

Table 30
Inpatient Surgical Case Projections by Year

Inpatient Cases	Actual	Projected							
	2017	2018	2019	2020	2021	2022	2023	2024	2025
Baseline	4,045	4,110	4,177	4,247	4,320	4,395	4,473	4,554	4,639
Digestive Disease Clinic	(229)	(233)	(236)	(240)	(245)	(249)	(253)	(258)	(263)
Physician Recruitment	-	-	110	221	333	335	336	338	340
IP to OP Shift	-	-	(679)	(682)	(685)	(689)	(692)	(696)	(700)
ASC Impact	-	-	(97)	(97)	(98)	(98)	(99)	(99)	(100)
Total	3,816	3,877	3,275	3,448	3,625	3,694	3,765	3,839	3,916

In order to calculate total inpatient surgical minutes, the number of cases in each of the inpatient case categories (baseline, DDC, physician recruitment, inpatient to outpatient shift and ASC impact) was multiplied by the average minutes per case associated with their respective cases. The result is shown in Table 31 below.

Table 31
Inpatient Surgical Minutes Projections by Year

Inpatient Surgical Minutes	Actual	Projected							
	2017	2018	2019	2020	2021	2022	2023	2024	2025
Baseline	537,244	545,856	554,797	564,079	573,715	583,720	594,107	604,891	616,087
Digestive Disease Clinic	(20,333)	(20,659)	(20,997)	(21,349)	(21,713)	(22,092)	(22,485)	(22,893)	(23,317)
Physician Recruitment	-	-	15,416	30,827	46,463	46,695	46,937	47,189	47,452
IP to OP Shift	-	-	(67,502)	(67,814)	(68,140)	(68,480)	(68,835)	(69,205)	(69,590)
ASC Impact	-	-	(9,643)	(9,688)	(9,734)	(9,783)	(9,834)	(9,886)	(9,941)
Total	516,911	525,197	472,071	496,055	520,591	530,060	539,890	550,096	560,690

In addition to the average inpatient surgical minutes per case, operating room turnaround time, 25 minutes per case, was included to reach the total minutes projections. Please see Table 32 below for the resulting totals.

Table 32
Inpatient Total Operating Room Minutes Projections by Year

Inpatient Total Minutes	Actual	Projected							
	2017	2018	2019	2020	2021	2022	2023	2024	2025
Baseline	638,369	648,602	659,226	670,255	681,705	693,593	705,935	718,749	732,053
Digestive Disease Clinic	(26,058)	(26,476)	(26,909)	(27,360)	(27,827)	(28,312)	(28,816)	(29,339)	(29,882)
Physician Recruitment	-	-	18,178	36,350	54,788	55,061	55,346	55,644	55,954
IP to OP Shift	-	-	(84,476)	(84,867)	(85,275)	(85,701)	(86,145)	(86,608)	(87,090)
ASC Impact	-	-	(12,068)	(12,124)	(12,182)	(12,243)	(12,306)	(12,373)	(12,441)
Total	612,311	622,126	553,950	582,254	611,208	622,398	634,014	646,073	658,592

In order to calculate inpatient operating room need, the total number of inpatient operating room minutes in each year of the projection period was divided by 114,000 minutes, as set forth in the State Health Plan. Please see Table 33 below for inpatient general operating room need by year.

Table 33
Inpatient Total Operating Room Need by Year

General OR Need Inpatient	Actual	Projected								
	2017	2018	2019	2020	2021	2022	2023	2024	2025	
	5.4	5.5	4.9	5.1	5.4	5.5	5.6	5.7	5.8	

Outpatient General Operating Room Need Methodology and Calculations:

As with the inpatient projections above, for the outpatient projections the first step was to calculate a baseline of cases by year utilizing the growth rates of service area population at the age cohort level. From the baseline, several adjustments impacted the total number of cases by year, including a Digestive Disease Clinic adjustment, physician recruitment adjustment, inpatient to outpatient shift and ambulatory surgical center impact. The Digestive Disease Clinic and ambulatory surgical center adjustments were treated as reductions to the baseline, while the physician recruitment adjustment and inpatient to outpatient shift were treated as an increase to the baseline.

Using FY 2017 experience, an adjustment for Digestive Disease Clinic case adjustment begins in FY 2017, with an actual reduction of 2,876 cases from the baseline. Using the percent change in total outpatient surgical cases at UM SJMC, this adjustment was projected from FY 2017 through FY 2025, at which point it is projected to reach a total reduction of 3,139 cases.

The physician recruitment adjustment, which will begin in FY 2019, reflects an increase of 183 cases spread over the three years FY 2019 through FY 2021. Beyond FY 2021, the physician recruitment adjustment is projected to grow by year with the rate of service area population growth, to 187 cases in FY 2025.

The inpatient to outpatient shift will begin in FY 2019 with an increase of 679 cases, and is projected to grow by year with the rate of service area population growth, to an increase of 700 cases in FY 2025.

The ambulatory surgical center impact will begin in FY 2019 with a reduction of 541 cases. This reduction is projected to grow by year with the rate of service area population growth, to a reduction of 558 cases in FY 2025.

These adjustments were applied to the baseline outpatient numbers, by year, to calculate the total number of projected cases by year through FY 2025. Please see Table 34 below.

Table 34
Outpatient Surgical Case Projections by Year

Outpatient Cases	Actual	Projected							
	2017	2018	2019	2020	2021	2022	2023	2024	2025
Baseline	7,816	7,893	7,974	8,058	8,145	8,236	8,330	8,428	8,530
Digestive Disease Clinic	(2,876)	(2,905)	(2,934)	(2,965)	(2,997)	(3,030)	(3,065)	(3,101)	(3,139)
Physician Recruitment	-	-	61	121	183	184	185	186	187
IP to OP Shift	-	-	679	682	685	689	692	696	700
ASC Impact	-	-	(541)	(544)	(546)	(549)	(552)	(555)	(558)
Total	4,940	4,989	5,238	5,353	5,470	5,529	5,590	5,654	5,720

In order to calculate total outpatient surgical minutes, the number of cases in each of the outpatient case categories (baseline, DDC, physician recruitment, inpatient to outpatient shift and ASC impact) was multiplied by the average minutes per case associated with their respective cases. The result is shown in Table 35 below.

Table 35
Outpatient Surgical Minutes Projections by Year

Outpatient Surgical Minutes	Actual		Projected						
	2017	2018	2019	2020	2021	2022	2023	2024	2025
Baseline	475,748	480,464	485,370	490,473	495,782	501,304	507,047	513,020	519,231
Digestive Disease Clinic	(70,068)	(70,763)	(71,485)	(72,237)	(73,019)	(73,832)	(74,678)	(75,557)	(76,472)
Physician Recruitment	-	-	5,475	10,947	16,500	16,582	16,668	16,757	16,851
IP to OP Shift	-	-	67,502	67,814	68,140	68,480	68,835	69,205	69,590
ASC Impact	-	-	(44,594)	(44,800)	(45,016)	(45,240)	(45,475)	(45,719)	(45,974)
Total	405,680	409,701	442,267	452,197	462,388	467,294	472,398	477,706	483,227

In addition to the average outpatient surgical minutes per case, operating room turnaround time, 25 minutes per case, was included to reach the total minutes projections. Please see Table 36 below for the resulting totals.

Table 36
Outpatient Total OR Minutes Projections by Year

Outpatient Total Minutes	Actual		Projected						
	2017	2018	2019	2020	2021	2022	2023	2024	2025
Baseline	671,148	677,800	684,721	691,921	699,411	707,201	715,303	723,729	732,491
Digestive Disease Clinic	(141,968)	(143,375)	(144,839)	(146,362)	(147,946)	(149,594)	(151,308)	(153,090)	(154,944)
Physician Recruitment	-	-	6,993	13,983	21,076	21,181	21,290	21,405	21,524
IP to OP Shift	-	-	84,476	84,867	85,275	85,701	86,145	86,608	87,090
ASC Impact	-	-	(58,125)	(58,394)	(58,675)	(58,968)	(59,273)	(59,592)	(59,924)
Total	529,180	534,425	573,226	586,015	599,140	605,520	612,157	619,059	626,238

In order to calculate outpatient operating room need, the total number of outpatient operating room minutes in each year of the projection period was divided by 114,000 minutes, as per the state health plan. Please see Table 37 below for inpatient general operating room need by year.

Table 37
Outpatient Total Operating Room Need by Year

General OR Need Outpatient	Actual		Projected						
	2017	2018	2019	2020	2021	2022	2023	2024	2025
	4.6	4.7	5.0	5.1	5.3	5.3	5.4	5.4	5.5

For your convenience, total general operating room need projections through FY 2025 are provided below in Table 38.

Table 38
Total General Operating Room Need by Year

General OR Need	Actual	Projected								
	2017	2018	2019	2020	2021	2022	2023	2024	2025	
Inpatient	5.4	5.5	4.9	5.1	5.4	5.5	5.6	5.7	5.8	
Outpatient	4.6	4.7	5.0	5.1	5.3	5.3	5.4	5.4	5.5	
Total	10.0	10.1	9.9	10.2	10.6	10.8	10.9	11.1	11.3	

Cardiac Inpatient Operating Room Need Methodology and Calculations:

The baseline case projections for cardiac inpatient surgery were calculated utilizing the growth rates of service area population at the age cohort level. An adjustment to this cardiac inpatient case projection includes a 20 case reduction in both FY 2018 and FY 2019 due to expected shift of cases to the hybrid operating room setting.

Surgical minutes were calculated by multiplying the average minutes per cardiac surgical case by the number of projected cardiac surgery cases. Total cardiac inpatient operating room minutes were then calculated by adding turnaround minutes by year, calculated by multiplying 25 minutes by the number of cases, to the surgical minutes by year.

Operating room need was calculated by dividing the number of projected total operating room minutes by year by 114,000 minutes, as per the state health plan. The cardiac inpatient projection is included in Table 39 below.

Table 39
Cardiac Inpatient Operating Room Need by Year

Cardiac Inpatient	Actual	Projected							
	2017	2018 ⁽¹⁾	2019 ⁽¹⁾	2020	2021	2022	2023	2024	2025
Cases	561	551	542	552	563	574	586	598	611
Surgical Minutes	176,709	173,685	170,671	173,962	177,383	180,936	184,629	188,466	192,453
Total Minutes	190,734	187,470	184,216	187,769	191,461	195,297	199,283	203,424	207,727
OR Need	1.7	1.6	1.6	1.6	1.7	1.7	1.7	1.8	1.8

Note (1): FY 2018 and 2019 cases include a 20 case reduction due to hybrid operating room shift of cases.

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