APPLICANT'S RESPONSE TO JUNE 23, 2016 COMPLETENESS QUESTIONS

- 1. Your response to question 12(d) in our May 3rd completeness letter requesting a Net Present Value calculation demonstrating the cost-effectiveness of constructing the shelled space is not clear. Specifically:
 - a) How did you arrive at a discount rate of 5%?
 - b) What do the values in "Year 1," Year 2," etc. represent?
 - c) How was a project cost of \$15,468,237 for the "build later" scenario arrived at? The incremental difference between \$15,468,237 and \$16,998,237 to build an additional floor seems unrealistically small for a space that – although unfinished – represents a quarter of the total space being built.
 - d) How were the "NPVs" arrived at in each scenario (i.e., shelled vs. built later) calculated?
 - e) Explain the conclusion that "the net present value analysis demonstrates the cost effectiveness of constructing the third floor shell space as part of the project."

Applicant's Response:

a) How did you arrive at a discount rate of 5%?

<u>AAMC Response</u>: A discount factor of 5% was used in the NPV calculations. This is a commonly used discount factor and is a proxy for the opportunity cost of capital (the rate of return reasonably expected in the marketplace if we were not investing in the project). (Please note that we have also included the NPV results of using a 3% discount factor in the NPV calculations as an additional comparison).

b) What do the values in "Year 1", "Year 2", etc. represent?

<u>AAMC Response</u>: The values shown on the lines titled "Year 1 Cash Flow, Year 2 Cash Flow, etc. in the chart provided in response to question 2 (**Exhibit 22**) below represent the carrying costs associated with maintaining the shell space until ready for use.

c) How was the "build later" project cost arrived at?

<u>AAMC Response</u>: The "build later" project cost was derived by using the current cost of construction and applying adjustment factors for complexity, inflation and contingency.

<u>AAMC Response</u>: The "build later" project cost was derived by using the current cost of construction and applying adjustment factors for complexity, inflation and contingency.

Current Construction Cost	\$ 1,865,909
Adjustment for Complexity @ 100%	\$ 1,865,909
Subtotal	\$ 3,731,818
Contingency @ 5%	\$ 186,591
Inflation	\$ 282,077
Future Cost of Constructing 3rd Floor Shell	\$ 4,200,486

Definitions & Clarifications:

<u>Current Construction Costs</u>: The current construction costs estimated by a construction management company and was based upon architectural plans dated 07.19.16 design narratives for mechanical, plumbing and electrical.

<u>Adjustment for Complexity</u>: A factor of two was deemed appropriate and accounts for modifications to structural, roofing and wall systems in addition to modifying the existing mechanical, electrical and plumbing systems. An adjustment factor takes into consideration the cost of performing work above an active in use building which will require extensive planning and coordination beyond what was necessary for the initial project, joint commission and hospital requirements for constructing within an existing hospital environment, additional costs associated with reducing operational impacts, and revisions to building and energy codes.

<u>Contingency</u>: The amount of contingency for major renovation projects varies based upon the potential for change. A contingency factor of 5% is deemed to be appropriate for adding an entire floor on top of an existing in use hospital. It is not uncommon for contingency factors for this type of project to be higher; however the build will still be considered new.

<u>Inflation</u>: Inflation was calculated using the MHCC document for Determining the Threshold for Required Approval of Changes in Certificate of Need Approved Capital Cost updated 5/12/2016. The included Building Cost Indexes table only provided inflation index percentages "%MOVAVG Line" through 2018Q3 It was assumed that the inflation index percentages remain unchanged at 1.4 for all future years and quarters and was used for calculating inflation.

d) How were the "NPVs" arrived at in each scenario (i.e.: shelled vs. build later) calculated?

<u>AAMC Response</u>: We have included 2 scenarios for Net Present Value (NPV) calculations using project cost of the shell space, carrying costs (where applicable) and utilizing the Excel NPV function. Please refer to **Exhibit 22**.

Scenario 1 NPV calculation represents shell space cost of \$2,000,152, which represents the shell space cost if constructed as part of the initial project, as well as including \$21,077 of carrying costs in years 1, 2, and 3 reflecting the maintenance cost of the shell space.

Scenario 2 NPV calculation represents shell space cost of \$4,200,486. This scenario assumes the construction of the 3rd floor shell space is deferred until year 5 or 3 years after completion of the initial project. Due to the deferral of construction and escalation costs for 5 years, the shell space construction cost is projected to be \$2,200,334 greater than shell space cost if constructed as part of the initial project.

e) Explain the conclusion that "the net present value analysis demonstrates the cost effectiveness of constructing the third floor shell space as part of the project."

<u>AAMC Response</u>: There is a \$1,398,200 net present value benefit by constructing the shell space as part of the initial project. The NPV of scenario 1 which includes the construction of the shell space as part of the initial project and 3 years of carrying costs is (\$2,057,550). The NPV of scenario 2 which defers the construction of the shell space until year 4 is (\$3,455,750). Also important to note is the operational disruption of clinical services that will result if shell space construction is not completed as part of the initial full project.

2. Please complete the table below to ensure provision of the relevant information to enable the proposal to be evaluated vis a vis the shell space standard.

	Construct as part of project	Add three years later
Construction		
Contingency		
Allocated financing costs		
Inflation		
Total Project Cost (shell)		
Carrying cost - Year 1		
Interest paid - Year 1		
Carrying cost - Year 2		
Interest paid in Year 2		
Carrying cost – Year 3		
Interest paid in Year 3		
Total		
Discounted to 20xx	N/A	
20xx Net Present Value		

Applicant's Response:

Please refer to Exhibit 22 attached.

3. While the applicant has presented voluminous data intended to address the need for the proposed 16 beds, there is to date no evidence presented to suggest that 16 more beds in the shell space would be likely to be needed. Applicant should address this potential need.

Applicant's Response:

As described in the Application, through this project, the Applicant seeks to deliver a comprehensive and integrated mental health care program that will incorporate both inpatient psychiatric care and outpatient, community based mental health care programs to meet the needs of its community. The shell space will enable the Applicant to offer a comprehensive network of community-based outpatient services as well as inpatient care at a single location that will promote continuity of care and improve access to care.

As updated, the building in which the new mental health hospital will be located includes 3,400 square feet of shell space on the first floor, and approximately 12,000 square feet of shell space on the third floor (representing the entire third floor). This shell space will enable the Applicant to develop new and expanded programs to meet the mental health needs of the Anne Arundel County population, needs that are already evident and are expected to grow. AAMC does not have the physical space to provide these services on its current campus. Once the new building is constructed and a comprehensive program model is in place at that location, the Applicant will be better positioned to expand and effectively coordinate services to respond to the mental health needs of the community.

Specifically, the Applicant plans to utilize the shell space on the first floor and the third floor for the outpatient mental health programs described in more detail below. However, in the event that the State is granted a waiver or other relief from the IMD exclusion, the alternative likely use for approximately one-half of the third floor is an eight-bed inpatient psychiatric unit for adolescents (subject to the CON requirement), with the remainder of the third floor (and the shell space on the first floor) being used for outpatient programs. The likely need for these eight beds is also described below.

a. Outpatient Programs

The following is a description of the outpatient programs for which the Applicant plans to use the shell space if the State is not granted relief from the IMD exclusion. Additional information about each program is provided in **Exhibit 23**.

i. Outpatient clinic services

AAMC currently operates an outpatient mental health clinic off-campus, in leased space on the south side of Riva Road (2.4 miles from the AAMC campus). The clinic offers care for diverse mental health needs for adults and children ages 3 and older. Services are provided by a team of psychiatrists and other licensed clinical professionals. Treatment options include mental health evaluations, medication management, psychotherapy, and family and group therapy. This clinic opened in September 2014 with capacity for 8 clinicians to work simultaneously, and within one year of opening the demand for services well exceeded its capacity. In our first 22 months we have served 2,000 patients. The clinic has extended operations into evening and weekend hours but still has a 2month waiting list for new patients. As a result, patients and families in Anne Arundel County must seek professional help elsewhere, where other programs can have similar wait times, or do without timely services.

This lack of timely access to these services is of great concern, particular with regard to the need for additional outpatient mental health services for children and adolescents in Anne Arundel County. Accordingly, the Applicant plans to move outpatient mental health clinic services for children and adolescents out of the leased space to the new mental health hospital building, allowing this program and the adult program (in the leased space) to grow to meet demonstrated community need. Specifically, within three years of the completion of the building, AAMC plans to relocate child and adolescent outpatient clinic mental health services to the shell space on the first floor. The AAMC outpatient mental health clinic currently has one child psychiatrist and one psychotherapist devoted to this patient population, but additional child therapists are needed to effectively support the work of the psychiatrist, and to reduce the waiting time for a new patient appointment.

Following the relocation of child and adolescent clinic services to the mental health hospital building, the adult outpatient clinic will have additional space to grow to meet the demonstrated community need in the leased space. After the lease expires (in 2021), the Applicant plans to relocate the adult outpatient clinic to the shell space on the third floor of the new building.

ii. Intensive outpatient clinic services for adolescents and children

The Applicant seeks to meet the mental health service needs for children and adolescents in our area in expanded and more easily accessible outpatient care, as well as in a growing menu of intensive outpatient services. Towards that end, in a portion of the shell space on the third floor of the new building, the Applicant plans to establish an afterschool intensive outpatient program for children ages 12 and under, and for those adolescents (ages 13 and older) with disorders of opposition/defiance or acting out behaviors. These patients are being referred to AAMC's partial hospitalization program that opened earlier this year, but AAMC cannot treat them because they cannot appropriately be combined with anxious, depressed and suicidal adolescents in the partial hospitalization program. These behaviors are best addressed through behavioral management training which involves intensive involvement of parents and guardians (thus the after-school, after-work program schedule). No such intensive outpatient program is currently available in the community, and the need for one has been identified by the Anne Arundel County Board of Education as well as by providers in the AAMC Emergency Department and mental health outpatient clinic.

As described in the Application, AAMC's partial hospitalization program--which will be relocated from leased space to the first floor of the new building as part of this project-also serves adolescents. The partial hospitalization program is a distinct program from the intensive outpatient clinical program for adolescents that is planned for the shell space. The partial hospitalization program is a nonresidential treatment program that provides services on a level of intensity equal to an inpatient program, but on less than a 24-hour basis. As such, it provides care during the day for 6 or more hours daily, 5 days a week. This is in contrast to the intensive outpatient program to enable the necessary involvement of parents and guardians.

Typical problems treated in the partial hospital setting include depression, anxiety, suicidal thoughts and exacerbations of psychotic disorders. In contrast, the intensive outpatient program planned for the shell space will focus on disorders of opposition/defiance or acting out behaviors, which are best addressed through behavioral management training involving intensive involvement of parents and guardians.

iii. New outpatient program for pain management

As demonstrated by the heroin and opioid addiction crisis, there is an urgent need to respond to the problems of patients with chronic pain who would be best served by an integrated approach to pain management. Current treatment settings for pain management fall short in that they fail to incorporate psychotherapy intervention and substance use intervention, while mental health and substance use settings do not incorporate and therefore effectively integrate the somatic management of chronic pain. The failure to adequately respond to community need in this area continues to lead to tragic outcomes, including the high rates of overdose on prescribed and illicit opiates. AAMC has the opportunity to provide an integrated program incorporating specialists in pain management, mental health and addictions interventions. This program model will be designed to provide relief to patients, tackle the often intertwined syndromes underlying pain problems, and support long-term emotional and physical well-being. The Applicant plans to locate this program in space on the third floor of the new building.

b. Adolescent inpatient unit

The Applicant is committed to promoting a community-based mental health care model through treatment in the partial hospitalization, intensive outpatient, and traditional outpatient settings, and through integration of community-based supports. At the same time, we recognize that there will continue to be a segment of the population that will require inpatient care. There is no adolescent inpatient unit in Anne Arundel County, so adolescent patients from Anne Arundel County must go out of the County for inpatient care. This results in the same challenges to continuity in mental health care as it does with our adult patients, and makes family engagement more difficult, as described in the Application. Accordingly, if the State is granted a waiver or other relief from the IMD exclusion, the alternative likely use of a portion of the shell space on the third floor is an eight-bed adolescent inpatient unit.¹

In FY2015, a total of 526 mental health discharges were reported for Anne Arundel County adolescent residents (ages 10-17 years). These discharges were excluded from the Applicant's need analysis in the Application. Nearly 30% of these discharges originated at AAMC's Emergency Department. With no child or adolescent unit in Anne Arundel County for admissions from the ED at Baltimore Washington Medical Center, these admissions must also leave Anne Arundel County.

• In FY2015, nearly 90% of these Anne Arundel County adolescent patients were admitted to Sheppard Pratt, but this arrangement is associated with approximately 1 hour's drive for Anne Arundel County families, and poses challenges to the effective coordination of aftercare with community providers.

AAMC will continue to monitor and quantify the demand for inpatient services and the need for an adolescent inpatient unit. At this time, using highly conservative assumptions, the following indicators present themselves in an assessment of potential need:

- Assuming a 20% reduction in adolescent age discharges - through greater reliance on partial hospital, intensive outpatient, and traditional outpatient service settings:
- \circ 526 discharges x 80% = 421 discharges
- Assuming 90% of Anne Arundel County adolescent admissions are served at AAMC
- \circ 421 discharges x 90% = 379 discharges
- Assuming average length of stay of 7 days²
- \circ 379 discharges x 7 days = 7.3 occupied beds
- Assuming a unit that operates at 90% occupancy = 8 bed unit for adolescents

This data demonstrates a potential need for an adolescent inpatient unit in Anne Arundel County, and the shell space on the third floor would enable the Applicant to meet this need. If the State is granted a waiver or other relief from the IMD exclusion, and subject to the CON requirement, approximately half of the shell space on the third floor of the new building could be devoted to an eight-bed inpatient adolescent unit to meet this need. This would mean that, rather than relocate the adult outpatient clinic to the third floor shell space at the end of the lease of the Riva Road location, the adult outpatient clinic would remain at that location under a renewed lease, with just the shell space on the first

¹ Although the IMD exclusion prohibits Medicaid reimbursement only for adult admissions to an IMD, all of a facility's beds are counted in determining whether the facility is an IMD.

² Current length of stay for adolescents residing in Anne Arundel County = 9 days

floor and the remaining shell space on the third floor being used for the other outpatient programs as described above.

c. Timing

The portion of the third floor slated for the relocation of the adult outpatient clinic (or a potential eight-bed adolescent inpatient unit if the IMD exclusion is resolved) is proposed as shell space in order to allow for the expiration of the lease (in 2021) for the space in which the clinic is currently operated. The remainder of the space on the third floor and the portion of the first floor slated for the child and adolescent outpatient clinic, the intensive outpatient program, and the pain management clinic is proposed as shell space in order to allow the Applicant to pursue an orderly and efficient phase-in of these programs over 3-5 years rather than strain resources in attempt to implement these programs at the same time as the new inpatient unit is established and the partial hospitalization program is relocated to the new building.



2001 Medical Parkway Annapolis, Md. 21401 443-481-1000 TDD: 443-481-1235 askAAMC.org

AFFIRMATION

I hereby declare and affirm under penalties of perjury that the facts stated in the

Applicant's Response to June 23, 2016 Completeness Questions are true and correct to the best

of my knowledge, information and belief.

to Willin

Victoria W. Bayless President & Chief Executive Officer Anne Arundel Medical Center



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Bob Reilly

Chief Financial Officer Anne Arundel Medical Center

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Barbara Jacobs, RM Chief Nursing Officer Anne Arundel Medical Center Jul. 28. 2016 4:52PM

No. 1506 P. 2

AFFIRMATION

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Applicant's Response to June 23, 2016 Completeness Questions are true and correct to the best

of my knowledge information and belief.

X Har

Dawn Hurley O Executive Director of Behavioral Health Anne Arundel Medical Center

AFFIRMATION

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Lucas Klock Director, Capital Projects Anne Arundel Medical Center

AFFIRMATION

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Applicant's Response to June 23, 2016 Completeness Questions are true and correct to the best

of my knowledge information and belief.

Miriam Suldan

Senior Managing Consultant Berkeley Research Group, LLC

EXHIBIT 22

Prepared by Luke Klock

	\$ 3,455,750		\$ 2,057,550	All Cost Net Present Value
	\$ 3,455,750			NPV of Project Cost (Shell)
	Ş		\$ 57,398	NPV of Carrying Costs
	\$- 1		Ş 63,231	Total Carrying Costs
	N/A	N/A	Ş	Interest paid - Year 3
	N/A	Utility costs associated with heating/cooling and minimum lighting	\$ 21,077	Carrying cost - Year 3
	N/A	N/A	\$	Interest paid - Year 2
	N/A	Utility costs associated with heating/cooling and minimum lighting	\$ 21,077	Carrying cost - Year 2
	N/A	N/A	÷S-	Interest paid - Year 1
	N/A	Utility costs associated with heating/cooling and minimum lighting	\$ 21,077	Carrying cost - Year 1
Construction cost for shell only	\$ 4,200,486 (Construction cost for shell only	\$ 2,000,152	Total Project Cost (Shell)
Inflation for 5 yrs @ 1.4%	\$ 282,077	Calculated to midpoint in construction per MHCC reqs.	\$ 40,947	Inflation
Funded from Cash	\$	Funded from Cash	\$	Allocated financing costs
5% of construction cost	\$ 186,591	5% of construction cost	\$ 93,295	Contingency
2x Current construction cost as an adjustment for complexity	\$ 3,731,818	Construction cost only	\$ 1,865,909	Construction
Notes	3 Years After Completion	Notes	Construct as part of project	

Net Present Value Difference

(1,398,200)

\$

Scenario 1 NPV: Construct shell space as part of initial project

NPV of Carrying Costs:

NPV of Project Cost (Shell):

NPV using discount rate of 5%	Year 5 Cash Flow	Year 4 Cash Flow	Year 3 Cash Flow	Year 2 Cash Flow	Year 1 Cash Flow	Investment / Full Proj Cost	Discount Rate	
	Ś	Ś	Ŷ	\$	Ś	ŝ		
(\$57,398)	ŧ	,	(21,077)	(21,077)	(21,077)	ı	5.0%	
NPV using discount rate of 5%	Year 5 Cash Flow	Year 4 Cash Flow	Year 3 Cash Flow	Year 2 Cash Flow	Year 1 Cash Flow	Investment / Full Proj Cost	Discount Rate	
	s	ŝ	ŝ	ŝ	ŝ	ŝ		
(\$2,000,152)	ŀ		1		•	(2,000,152)	5.0%	

Scenario 2 NPV: Defer construction of shell space until year 4

NPV of Project Cost (Shell):

NPV using discount rate of 5%	Year 5 Cash Flow	Year 4 Cash Flow + Shell Space Cost	Year 3 Cash Flow	Year 2 Cash Flow	Year 1 Cash Flow	Investment / Proj Cost less Shell	Discount Rate
	ŝ	\$	\$	Ś	\$	ŝ	
(\$3,455,750)	1	(4,200,486)		3	÷		5.0%

EXHIBIT 23

Exhibit 23

1st floor shell space = 3400 square feet

Outpatient clinic (child and adolescent)= 3400 square feet

- 3 restrooms
- 2 medical triage rooms
- 8 staff offices
- Conference/group therapy room
- *Waiting room and reception area shared with partial hospitalization program

*Staff kitchen and lunch area shared with partial hospitalization program

3rd floor Shell Space = 11,908 sq. ft.

Outpatient clinic (adult) = 6600 square feet

- 2 Conference/group rooms
- Waiting room
- 4 restrooms (two of which should be off waiting room)
- Kitchen area/staff lunch area*
- 3 medical triage rooms
- 14 clinical (therapist/prescriber) offices
- 1 office for Practice manager/Nurse navigator
- Receptionist/front desk area (six staff seats)*

Intensive outpatient program (child and adolescent) =2600 square feet

Waiting room

- 2 restrooms
- 2 group therapy rooms
- 4 staff offices
- Reception/front desk area (2 staff seats)

Pain Management clinic = 2700 sq. feet

- 4 staff offices
- 1 medical exam room
- 2 group therapy rooms
- 2 restrooms

*Waiting room and reception areas will be shared among third-floor programs

*Staff kitchen and lunch area will be shared among third-floor programs