UNIVERSITY of MARYLAND
UPPER CHESAPEAKE HEALTH

**Lyle E. Sheldon, FACHE**
President and Chief Executive Officer

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August 4, 2017

**VIA EMAIL & HAND DELIVERY**

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

*Re: Notice of Intent to Convert University of Maryland Harford Memorial Hospital to a Freestanding Medical Facility and Request for Exemption from Certificate of Need Review*

Dear Ms. Potter:

This letter serves as notice that University of Maryland Upper Chesapeake Medical Center and University of Maryland Harford Memorial Hospital, as joint applicants, intend to seek an exemption from Certificate of Need ("CON") review to convert HMH to a freestanding medical facility. Enclosed are six copies of the applicants' request for exemption from CON review, along with one set of full-size project drawings. Also enclosed is a CD containing electronic versions of the exemption application (WORD) and tables (EXCEL), and searchable PDF files of the application and exhibits.

If you have questions about the information provided above, please contact UM Upper Chesapeake Health System's legal counsel at your convenience:

James Buck
Gallagher, Evelius & Jones LLP
218 North Charles Street, Suite 400
Baltimore, Maryland 21201
410-347-1353
jbuck@gejlaw.com

UM Upper Chesapeake Health System looks forward to working with the Maryland Health Care Commission, the Maryland Institute for Emergency Medical Services Systems, the Health Services Resources Cost Review Commission, and other interested stakeholders to

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effectuate a new and innovative model of health care delivery for the residents of Harford and Cecil Counties.

Please sign and return to our waiting messenger the enclosed acknowledgment of receipt.

Sincerely,

Lyle E. Sheldon, FACHE
President and Chief Executive Officer
UM Upper Chesapeake Health System, Inc.

Enclosures

CC:

Ben Steffen, Executive Director, Maryland Health Care Commission
Richard L. Alcorta, M.D., FACHE, MIEMSS Acting Co-Executive Director
Patricia S. Gainer, J.D., MIEMSS Acting Co-Executive Director
Paul Parker, Director, Center for Health Care Facilities Planning and Development
Kevin McDonald, Chief, Certificate of Need Program
Suellen Wideman, Esq., Assitant Attorney General
Joseph E. Hoffman III, Executive Vice President and Chief Financial Officer, UM UCHS
Robin Luxon, Vice President, Corporate Planning, Marketing and Business Development, UM UCHS
Aaron Rabinowitz, Esq., Vice President and General Counsel, UM UCHS
Alison G. Brown, MPH, Senior Vice President and Chief Strategy Officer University of Maryland Medical System
Andrew L. Solberg, A.L.S. Healthcare Consultant Services
James Buck, Gallagher, Evelius & Jones LLP

| | | |
|---|---|---|
| IN THE MATTER OF CONVERSION | * | |
| OF UNIVERSITY MARYLAND | * | BEFORE THE |
| HARFORD MEMORIAL HOSPITAL | * | MARYLAND HEALTH CARE |
| TO A FREESTANDING MEDICAL | * | COMMISSION |
| FACILITY | * | |

* * * * * * * * * * * * * *

**REQUEST FOR EXEMPTION**
**FROM CERTIFICATE OF NEED REVIEW FOR THE**
**CONVERSION OF UNIVERSITY OF MARYLAND HARFORD MEMORIAL**
**HOSPITAL TO A FREESTANDING MEDICAL FACILITY**

University of Maryland Upper Chesapeake Medical Center, Inc. ("UCMC") and University of Maryland Harford Memorial Hospital, Inc. ("HMH") as joint applicants, by the undersigned counsel, seek approval from the Maryland Health Care Commission (the "Commission") to convert HMH to a freestanding medical facility. For the reasons set forth more fully below, UCMC and HMH respectfully request that the Commission grant an exemption from Certificate of Need ("CON") Review for the conversion of HMH to a freestanding medical facility and for associated capital expenditures.

**BACKGROUND**

HMH is an acute care hospital with fifty-seven (57) licensed MSGA beds and twenty-nine (29) licensed psychiatric beds located in Havre de Grace. UCMC is a 171-bed licensed acute care hospital, with 160 MSGA beds, 10 obstetrics beds, and 1 pediatric bed located in Bel Air. HMH and UCMC are the sole acute general hospitals located in Harford County. Both HMH and UCMC are owned and operated by the University of Maryland Upper Chesapeake Health System ("UM UCH"), a community based, not-for-profit health system. UM UCH is

dedicated to maintaining and improving the health of the people in the communities it serves through an integrated health delivery system that provides the highest quality of care to all. UM UCH has been affiliated with the University of Maryland Medical System ("UMMS") since 2009, and in late 2013, UM UCH formally merged into UMMS in order to continue its commitment to the growing northeast Maryland area with expanded clinical services, programs and facilities, and physician recruitment. In addition to HMH and UCMC, UM UCH consists of the: (1) Patricia D. and M. Scot Kaufman Cancer Center (an affiliate of the University of Maryland Marlene and Stewart Greenebaum Cancer Center) located on the campus of UCMC; and (2) Senator Bob Hooper House, a residential hospice facility in Forest Hill.

HMH was constructed in phases between 1943 and 1972. Although UM UCH has been committed to maintaining the facility and has undertaken capital expenditures to make infrastructure, clinical equipment, and information technology improvements, the existing physical plant has outlived its useful life. As discussed more fully herein, renovation of the facility is not cost-effective and the nine (9) acre site in downtown Havre de Grace is surrounded by existing developed parcels, limiting a practical opportunity for renovation or expansion. Relocation of HMH as acute general hospital was considered but determined not to be cost effective and was viewed disfavorably by the Commission Staff and the staff of the Health Services Cost Review Commission.

Consistent with local and national healthcare trends and to best promote access to convenient and quality care for the population it serves, UM UCH proposes to transition portions of HMH to a multi-service facility to be located on an approximate ninety-seven (97) acre property known as the Upper Chesapeake Health Medical Campus at Havre de Grace ("UC Medical Campus at Havre de Grace"), approximately three miles from the existing HMH

campus and conveniently located off of Interstate 95. In accordance with recently enacted legislation and regulatory changes, UCMC and HMH, as joint applicants, seek to convert HMH to a freestanding medical facility ("FMF") to be developed at the UC Medical Campus at Havre de Grace. As described in this application, the proposed project resulting from the conversion of HMH to an FMF is referred to as "UC FMF." UM UCH has also filed an application for CON to establish a forty (40) bed special psychiatric hospital to be located on the UC Medical Campus at Havre de Grace, which will be connected to and located below UC FMF. Contemporaneous with this Request for Exemption from CON review, HMH and UCMC, as joint applicants, have also sought a Request for Exemption to relocate MSGA beds from HMH to UCMC as part of a merger and consolidation of these two facilities.

**DISCUSSION**

For some time, certain acute general hospitals in Maryland have been exploring options to reconfigure and modernize facilities in the face of aging physical plants, declining utilization for acute inpatient admissions, while recognizing the continued need to provide high quality and effective care to the communities they serve. Through recently enacted legislation, Chapter 420, Acts of 2016 (Senate Bill 707), the General Assembly elected to use the FMF as the preferred facility type for the conversion of acute general hospitals by amending Maryland Code, Health-General to: (1) authorize a CON exemption process for conversion of an existing hospital to an FMF along with associated capital expenditures; and (2) authorize the Health Services Cost Review Commission ("HSCRC") to regulate rates for outpatient services in an FMF, including observation services and ancillary services needed to support of emergency and observation services. As contemplated by this enactment, acute general hospitals converting to FMFs are authorized to provide a much broader array of services in order to treat patients with more

complex and more acute health care needs than the three currently established Maryland FMFs, none of which converted from an acute general hospital serving a community. The existing FMFs in Maryland lack many of capabilities that hospitals converting to FMFs will require to continue to serve the converting hospital's community. Otherwise, hospital conversions to FMFs or hospital closures will leave substantial gaps in health care services needed by communities formerly served by a hospital. This is particularly true with respect to HMH which has served the residents of Harford and Cecil Counties for more than one hundred years.

Pursuant to amended Health-General § 19-120 and the State Health Plan Chapter for Freestanding Medical Facilities, COMAR 10.24.19 (the "State Health Plan"), an acute general hospital may convert to a freestanding medical facility if it follows certain procedures and demonstrates that: (1) the conversion is consistent with the State Health Plan; (2) the conversion will result in the delivery of more efficient and effective health care services; and (3) the conversion is in the public interest. For the reasons set forth more fully below, the proposed conversion of HMH to UC FMF satisfies each of these criteria. Accordingly, UCMC and HMH request that the Commission grant an exemption from CON review to permit conversion of HMH to a freestanding medical facility and for associated capital expenditures.

## I. COMPREHENSIVE PROJECT DESCRIPTION

HMH's conversion to UC FMF is part of UM UCH's plan to create an optimal patient care delivery system for the future health care needs of Harford and Cecil County residents, which comprise a population of 360,000. The applicants propose to locate UC FMF on Lot 1 of the UC Medical Campus at Havre de Grace, a thirty-two acre parcel owned by UCHS/UMMS Venture, LLC, a joint venture between UMMS and UM UCH. The services on Lot 1 will be

organized around two (2) main components: (1) UC FMF, an approximate 61,977 gross square feet building located on the first floor; and (2) the Upper Chesapeake Health Medical Campus at Havre de Grace, Behavioral Health Pavilion ("UC Behavioral Health"), an approximate 67,632 gross square feet special psychiatric hospital located on the ground floor. The combined total gross square footage of these components is approximately 129,609.[1]

As mentioned above and in accordance with recent statutory changes allowing hospital conversions to FMFs, UM UCH's planned FMF will be much different than the three existing Maryland FMFs. UC FMF will be a fully functional, full service emergency department, open 24/7 with the capability of caring for patients categorized in EMS priority levels 2 through 4 as well as EMS priority level 1 patients who suffer from either an unsecured airway, who are in *extremis,* or who suffer from a stroke if an accredited Primary or Comprehensive Stroke Facility is greater than 15 additional minutes.[2] UC FMF will have the ability to rapidly transfer those who cannot be definitively cared for at the facility via a dedicated, onsite ambulance unit and ground helipad (located at UC FMF) with proximity to several hospitals and tertiary centers.

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[1] The overall 61,977 square feet allocated to UC FMF includes 50,800 departmental square feet dedicated to UC FMF and a 48% allocation of 23,285 gross square feet of public and administrative space that will be shared between UC FMF and UC Behavioral Health. Accordingly, an additional 11,177 square feet of space to be shared between UC FMF and UC Behavioral Health (48% of 23,285) has been allocated to the proposed project. The allocation of shared space between the UC Behavioral Health and the UC FMF was calculated pro-rata based on the gross square foot size of each facility

[2] Until only recently, Maryland Institute for Emergency Medical Services Systems ("MIEMSS") jurisdictional optional protocols only permitted EMS providers to transport stable patients categorized as priority 3 or 4 who did not need time-critical intervention to the FMFs located at Bowie and Germantown with certain limited exceptions. *See* MIEMSS Protocols at 417 (2016). Thus, EMS providers were only permitted to transport patients who either did not require medical attention at all or who suffered from non-emergent conditions to two of the three existing FMFs in Maryland.

UC FMF will include the following features:

1. A main public/ambulatory entry and waiting area with two (2) public toilets;

2. An emergency department (with six (6) triage rooms at 125 square feet each, 21 exam rooms at 138 square feet each, 6 patient toilets, and 2 staff toilets) as well as related staff and support spaces, including an ambulance entrance and decontamination facilities;

3. A behavioral health crisis center with four (4) exam rooms at 122 square feet each and 2 patient toilets and related staff and support spaces;

4. An observation suite with eleven (11) patient rooms at 183 square feet each having its own private toilet at 50 square feet, and related staff and support spaces;

5. A diagnostic imaging suite with x-ray, ultrasound, CT, MRI, and two (2) cardio-vascular ultrasound modalities at and related staff and support spaces;[3]

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[3] UC FMF will require an MRI in its imaging department for three main reasons. First, the EMS Acute Stroke Ready pilot program applicable to UC FMF and described more fully below will lead to UC FMF obtaining Acute Stroke Ready Joint Commission Accreditation, which will allow EMS providers to transport patients to UC FMF suspected of stroke. These patients must be within the 4.5-hour window from "last known normal." The AHA/ASA 2013 Guidelines for the Early Management of Patients With Acute Ischemic Stroke Regarding Endovascular Treatment published in coordination between the American Health Association and American Stroke Association ("AHA/ASA Guidelines") require that a facility must offer CT or MRI at all times. For the system to be high reliable, however, there must be a secondary mode of imaging a suspected stroke patient should the CT undergo repair or maintenance. Additionally, when evaluating a patient with a suspected stroke that may qualify for tPA, there are patients that may be a stroke mimic that can be ruled in or out by a diffusion weighted MRI (DW-MRI).

Second, there is a need for an MRI at UC FMF to treat any patient with Transient Ischemic Attack ("TIA") or suspected stroke. MRI is superior to CT to identify acute ischemic stroke as per the AHA/ASA Guidelines in 2010 and 2013. A very large patient population may show a focal neurologic deficit. When this occurs and is transient, it will require an MRI. The emergency department TIA pathway requires an MRI so that clinicians can safely discharge the patient from the emergency department with additional outpatient testing. If discharge from the emergency department is not possible, these patients can be admitted to the observation unit for their evaluation that would include an MRI. Lack of an MRI would result in an increase in transfers that would result in observation stays less than 23 hours and would put the stroke patient "in the window" at risk with only one modality to evaluate stroke.

Lastly, back and cervical pain is a common chief complaint for emergency department patients. Some patients will have intractable pain that is resistant to analgesia. In such UC FMF cases, MRI imaging will be performed to determine the reason for the intractable pain and

6. A laboratory and pharmacy; and

7. Administration and staff support spaces.

Education and conference spaces and dietary and dining services will be located on the ground floor, below UC FMF in space to be shared between UC FMF and UC Behavioral health. Shared public toilets will also be included on the ground floor to serve patients and visitors to both UC FMF and UC Behavioral Health. Also included on the ground floor to be shared between UC FMF and UC Behavioral Health will be administration, information technology, support services, including materials management and loading dock, mechanical, electrical and plumbing spaces, environmental services, medical gas, and linen storage.

UC FMF's emergency department will be staffed by Board Certified Emergency Medicine physicians and nursing staff specializing in emergency medicine with up to forty (40) hours of emergency physician and twelve (12) hours of emergency Advanced Practice Clinicians per day. The observation unit at UC FMF will be staffed by hospitalists. Additionally, the four-bed behavioral health crisis center will be staffed by personnel specializing in the diagnosis and treatment of patients suffering from psychiatric conditions. Specialty services currently not on-site at HMH would remain at UCMC and would be accessible to UC FMF patients via telemedicine. UC FMF will utilize current established clinical protocols and order sets, electronic medical records, technology, and medication administration for the full range of clinical diagnoses.

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inability to ambulate. Once the anatomy is determined with an MRI, clinicians can focus on analgesia and anti-inflammatories. If a patient has a history of intravenous drug abuse, there is a high risk for an epidural abscess that can only be diagnosed with an MRI of the spine. Lack of an MRI would result in unnecessary transfers for patients that would only require an MRI and no other interventions, while having MRI capability at UC FMF would eliminate unnecessary inter-facility transfers.

UC FMF will maintain HMH's EMS Base Station designation to allow communication with EMS providers in transport and the ability to direct patients to the appropriate level of service; such communications are required for all EMS priority 1 and 2 patients before arrival at UC FMF. The EMS Board has also approved a pilot protocol for UC FMF under which UC FMF would obtain accreditation by the Joint Commission as "acute stroke ready." The pilot protocol and acute stroke ready accreditation will allow EMS providers to transport priority 1 stroke patients to UC FMF if a Primary Stroke or Comprehensive Stroke Center is greater than fifteen (15) additional minutes away. Stroke treatment is time sensitive and the applicants believe that the approved EMS pilot protocol and accreditation of UC FMF as "acute stroke ready" is vital to maintaining the level of service needed for the aging population of UC FMF's service area.

The applicants anticipate maintaining nearly the same level of emergency and observation services as currently provided at HMH, with the exception of limited non-stroke EMS priority 1 patients, inpatient acute care beds, and operating room capabilities. Patients requiring these acute levels of service will be transferred from UC FMF to UCMC or other acute facilities as needed. Patients requiring observation stays would be transferred only in the event that UC FMF was at full capacity or the patients' condition deteriorated and warranted an acute care admission or transfer to a tertiary facility. It would be the goal for optimal patient management to achieve a two-hour transport expectation in order to support transitioning the patient to a higher level of care if needed. This optimal transport time will be supported by a dedicated, onsite ambulance unit housed at UC FMF and helicopter ambulance via the on-site helipad if necessary.

Both UC FMF and UC Behavioral Health were designed in accordance with the Facilities Guidelines Institute, Guidelines for Design and Construction of Hospitals and Outpatient Facilities 2014 Edition ("FGI Guidelines"), the 2015 National Fire and Protection Association 101 Life Safety Code, and the 2015 International Building Code. More specifically, UC FMF was designed considering the FGI Guidelines Part 2 – Hospitals, Section 2.2-3 Diagnostic and Treatment Facilities, and Section 2.3 – Specific Requirements for Freestanding Emergency Departments.

The FGI Guidelines do not prescribe minimum or maximum ranges of overall program area/square footage, but rather prescribe minimum requirements, including some minimum square footage/clear floor area requirements, based on the functional program for the project. For example, Section 2.2-3.1.3.6 provides requirements for treatment rooms and states, "Single-bed treatment room(s) shall have a minimum clear floor area of 100 square feet." The proposed project currently includes 137 to 158 square feet for the single-bed treatment room. This allows for the patient stretcher and other required furniture such as side chairs and storage for supplies to be accommodated in the room, leaving more than the 100 square feet of clear floor area as required by the FGI Guidelines. The proposed project meets the requirements of the FGI Guidelines while also taking advantage of FGI Guideline provisions allowing for dual-use of certain program spaces, including consultation, conference and charting room, staff space, and building support spaces which will be shared between UC FMF and UC Behavioral Health.

The behavioral health crisis treatment center at UC FMF was designed according to the FGI Guidelines Part 2 – Hospitals, Section 2.2-3 Diagnostic and Treatment Facilities, Section 2.2-3.1.3 Emergency Department; and specifically 2.2-3.1.4.3 Secure Holding Room which states, the secure holding room shall have a minimum clear floor area of 60 square feet with a

minimum wall length of 7 feet and a maximum wall length of 11 feet. Accordingly, the proposed project includes treatment rooms in the range of 116.4 to 139.7 square feet. Taking into account the patient stretcher within this space, the remaining clear floor area complies with the requirements of FGI Guidelines.

The total project budget is $51,962,824. The proposed project and as well as the other capital projects for which UM UCH and its constituent hospitals have sought approval from the Commission will be funded through a combination of $6,000,000 in operating cash, interest earned on bond proceeds of $2,908,675, and $184,750,000 in tax exempt bonds. The bonds are anticipated to be issued in fiscal year 2019 through the University of Maryland Medical System.

Construction of the proposed project is projected to take place according to the same project schedule as set forth in UC Behavioral Health's CON Application, which the applicants incorporate by reference. Further the same site controls, required approvals, need for utilities as applicable to UC Behavioral Health apply to UC FMF, and the applicants incorporate by reference Sections 10 and 13(B) of UC Behavioral Health's CON Application.

The applicants have provided project drawings, including two copies of full scale drawings, at **Exhibit 2**. UCMC has also completed hospital CON **Tables A**, **B**, **C**, **D**, **E**, **J**, and **K**, which are provided at **Exhibit 1**. The applicants have also completed CON **Table F**, for the all of UCMC's projected operations, which include the proposed project and relocation of MSGA beds from HMH to UCMC with **Exhibit 1**. All assumptions underlying these Tables are also provided with **Exhibit 1**.

## II. THE CONVERSION OF HARFORD MEMORIAL HOSPITAL TO A FREESTANDING MEDICAL FACILITY IS CONSISTENT WITH THE STATE HEALTH PLAN, COMAR 10.24.19.

The conversion of HMH to UCMC is consistent with the State Health Plan Chapter for Freestanding Medical Facilities, COMAR 10.24.19 (the "State Health Plan").

### *A. Location - COMAR 10.24.19.04(C)(4).*

The State Health Plan requires that an FMF established as a result of a general hospital conversion remain on the site of, or immediately adjacent to, the converting general hospital *unless*, among other things, the converting hospital is one of two general hospitals in the jurisdiction, both hospitals belong to the same merged asset system, and the proposed site is within a five-mile radius and in the primary service area of the converting hospital. COMAR 10.24.19.04(C)(4).

UCMC and HMH are both members of UM UCH, a merged asset system, and are the only two general acute hospitals in Harford County. The UC FMF project site, 210 Barker Lane, Havre de Grace, Maryland, is within HMH's primary service area (*see* Section II(E) below) and is located approximately three (3) miles from HMH in a straight line and three and four-fifths (3.8) miles following public roadways. The proposed project complies with this standard.

### *B. UCMC's Compliance With COMAR 10.24.10.04(A) – COMAR 10.24.19.04(C)(5)*

The State Health Plan requires that applicants seeking to convert an acute general hospital to an FMF shall demonstrate compliance with applicable general standards in COMAR 10.24.1.0.04A. *See* COMAR 10.24.19.04(C)(5). UCMC complies with each of these standards.

*1. Information Regarding Charges*

UM UCH's policy, implemented at both UCMC and HMH, relating to transparency in health care pricing complies with this standard and is attached as **Exhibit 3**. This policy will be extended to UC FMF when it opens.

*2. Charity Care Policy.*

UM UCH's financial assistance policy, implemented at both UCMC and HMH, complies with this standard and is attached as **Exhibit 4**. This policy will be implemented at UC FMF when it opens.

*3. Quality of Care*

UC FMF, as a provider-based department of UCMC under 42 C.F.R. § 413.65 and Health-General § 19-3A-01(3), will comply with requirements issued by the Maryland Department of Health (formerly the Department of Health and Mental Hygiene) for licensure as a freestanding medical facility, be accredited by the Joint Commission, and will comply with all conditions of participation in the Medicare and Medicaid programs.

The Commission has recognized that "subpart (b) of [COMAR 10.24.10.04(A)(3)] is essentially obsolete in that it requires an improvement plan for any measure that falls within the bottom quartile of all hospitals' reported performance on that measure as reported in the most recent Maryland [Hospital Evaluation Performance Guide], which has been reengineered with a different focus, and no longer compiles percentile standings." *In re Dimensions Health Corporation*, Docket No. 13-16-2351, Decision at 19 (Sept. 30, 2016).

UC FMF will be a provider-based department of UCMC. UCMC ranked "better than average" or "average" on forty-seven (47) of the seventy (70) quality measures. For an

additional twelve (12) quality measures, UCMC did not have sufficient data to report. UCMC ranked "below average" on only eleven (11) quality measures. Table 1 below, identifies those quality measures for which UCMC was ranked "below average" along with UCMC's corrective action plan:

**Table 1**
**Below-Average Quality Measures and Corrective Action**

| Quality Measure | Corrective Action Plan |
|---|---|
| Communication | |
| How often did doctors always communicate well with patients? | UCMC's Patient Experience Plan includes several strategies to improve physician communication including: language of caring education, direct observations of physician interactions with patients, and structured bedside rounding with physicians and nurses to communicate each patient's plan of care and to answer patient questions. |
| Were patients always given information about what to do during their recovery at home? | UCMC's Patient Experience Committee as well as the Transition of Care Committee work plans include revision of patient discharge educational materials and the implementation of a new interactive patient engagement system to include patient specific education plans, patient portal registration, and an extensive library of education videos. |
| Environment | |
| How often did patients always receive help quickly from hospital staff? | UCMC's Patient Experience Plan includes several strategies to improve responsiveness to patient needs including hourly care rounds and change of shift report at the patient's bedside. New reports have been developed to monitor and improve response time to patient call bells. |
| How often was the area around patients' rooms always kept quiet at night? | UCMC is implementing several strategies to reduce noise including noise stoplights at nurses station to increase staff awareness of noise levels, reducing noise from delivery carts by changing cart wheels, reducing deliveries during night hours ,and implementing "quiet times" at designated times to promote uninterrupted rest. |

| Quality Measure | Corrective Action Plan |
|---|---|
| Satisfaction Overall | |
| Would patients recommend the hospital to friends and family? | UCMC is currently expanding its Patient and Family Advisory Council to facilitate active participation on hospital committees to ensure that patient input is included in the development of hospital policies and procedures. UCMC is also increasing community awareness of hospital services through ongoing community education forums and enhanced social media strategies. |
| Wait Times | |
| How long patients spent in the emergency department before being sent home?<br><br>How long patients spent in the emergency department before they were seen by a healthcare professional? | In furtherance of UM UCH's fiscal year 2018 strategic objective for efficient care, a process improvement team has been charged to review Emergency Department ("ED") throughput and efficiency. Specifically, the work group will utilize the organization's IMPRV methodology to improve the ED's average length of stay and the times from "door to doctor." Executive oversight for this initiative will be driven through the Patient & Family Centered Care Oversight Committee and performance improvements will be monitored through an system-wide scorecard. |
| Results of Care | |
| Dying within 30-days after getting care in the hospital for a heart attack. | An HSCRC-funded grant program was implemented during FY2017. The Wellness Action Teams of Cecil & Harford (WATCH) program provides home visits with a team consisting of an RN, pharmacist, and case manager to monitor and improve medication compliance and disease management for patients with congestive heart failure and other comorbid conditions associated with heart attack, e.g., hypertension and diabetes mellitus. This initiative will help to ensure that proper care is provided to patients who received care for a heart attack at UCMC. |

| Quality Measure | Corrective Action Plan |
|---|---|
| Practice Patterns | |
| Patients who came to the hospital for a scan of their brain and also got a scan of their sinuses. | During fiscal year 2017, Choosing Wisely recommendations regarding CT were implemented to reduce unnecessary radiation exposure. During the most recent three month measuring period ending June 30, 2017, zero patients underwent CT of the sinus when ordered for a CT of the brain. |
| Results of Care - Death | |
| How often patients die in the hospital after bleeding from stomach or intestines. | All-cause mortality is an area of focus on UCMC's fiscal year 2018 Operating Plan. In addition, under the Safety domain, potentially preventable complications are being evaluated and tracked and preventive efforts focused for any with identified opportunities for improvement. In fiscal year 2018, a project team will be deployed to better understand the root causes driving any below average performance. |
| How often patients die in the hospital after fractured hip. | A formal UM UCH Hip Fracture Program is currently underway with a dedicated Hip Fracture Coordinator to focus on issues specific to this population. In addition, a Fragility Fracture Program is being implemented which will enhance UM UCH's hip fracture prevention program. |

### *C. Licensure – COMAR 10.24.19.04(C)(6)*

The State Health Plan Chapter requires that applicants demonstrate that the proposed FMF will meet licensure standards established by the Department of Health. UC FMF will meet or exceed licensure standards established by the Department of Health.

### *D. Financial Assistance and Charity Care – COMAR 10.24.19.04(C)(7)*

The State Health Plan requires that applicants seeking to establish an FMF through conversion of an acute general hospital establish and maintain financial assistance and charity care policies at the proposed FMF that match the parent hospital's policies and that comply with COMAR 10.24.10. Submitted as Exhibit 4 is UM UCH's financial assistance policy currently in

effect at both UCMC and HMH, which policy complies with COMAR 10.24.10. This same policy as may be updated prior to the proposed opening of UC FMF in 2020 will be established and maintained at the UC FMF.

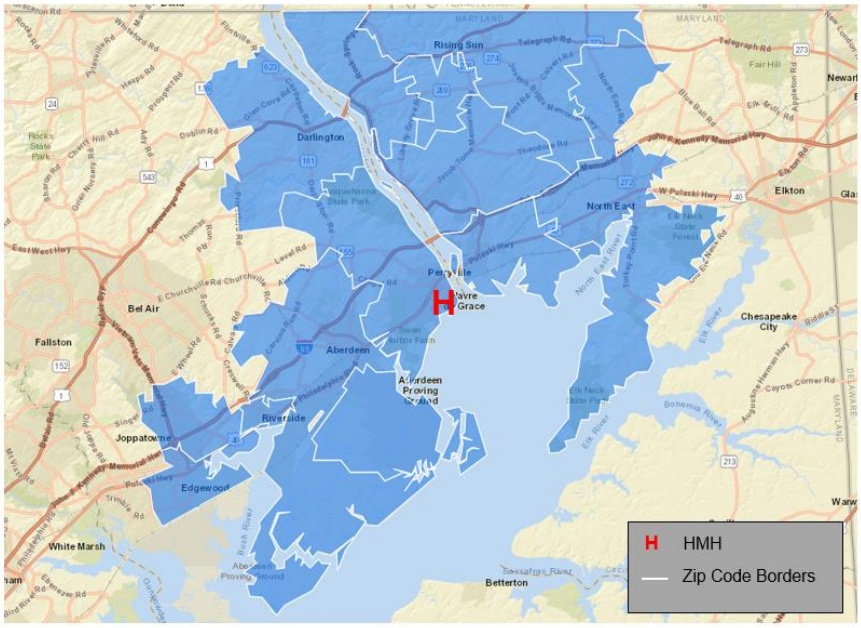
### *E. ED Visits in HMH's Service Area for the Last Five Years – COMAR 10.24.19.04(C)(8)(a)*

The State Health Plan requires that applicants seeking to convert an acute general hospital to an FMF provide the number of emergency department visits and FMF visits by residents in the converting hospital's service area for at least the most recent five years.

In fiscal year 2017, 85% of HMH's emergency department visits came from residents of thirteen (13) zip codes in Harford and Cecil Counties (i.e., HMH's ED Service Area and UC FMF's Service Area) as listed and depicted in Table 2 below.

**Table 2**
**UC FMF ED Service Area**
**FY2017**

| ZIP | City |
|---|---|
| 21001 | Aberdeen |
| 21078 | Havre De Grace |
| 21904 | Port Deposit |
| 21903 | Perryville |
| 21040 | Edgewood |
| 21911 | Rising Sun |
| 21918 | Conowingo |
| 21901 | North East |
| 21009 | Abingdon |
| 21005 | Aberdeen Proving Ground |
| 21017 | Belcamp |
| 21034 | Darlington |
| 21917 | Colora |



In fiscal year 2017, there were 70,280 visits to Maryland hospital emergency departments by residents of this service area. A combined 71.8% of these emergency department visits were to UCMC (37.7%) and HMH (34.1%) with an additional 16.3% of visits going to Union Hospital of Cecil County and 3.3% going to MedStar Franklin Square Hospital (Table 3).

**Table 3**
**UC FMF Service Area ED Visits**
**FY2013 – FY2017**

| | Historical | | | | | 2017 | 2013-2017 |
|---|---|---|---|---|---|---|---|
| Hospital | 2013 | 2014 | 2015 | 2016 | 2017 (1) | % of Total | % Change |
| Upper Chesapeake Medical Center | 25,169 | 24,580 | 26,175 | 27,051 | 26,502 | 37.7% | 5.3% |
| Harford Memorial Hospital | 25,921 | 24,289 | 24,981 | 24,679 | 23,938 | 34.1% | -7.7% |
| Union Hospital of Cecil County | 12,547 | 11,658 | 11,558 | 11,790 | 11,490 | 16.3% | -8.4% |
| Franklin Square Hospital | 3,394 | 2,974 | 2,733 | 2,574 | 2,350 | 3.3% | -30.8% |
| Other hospitals with less than 1000 visits | 6,389 | 6,270 | 6,135 | 6,328 | 6,000 | 8.5% | -6.1% |
| Total Service Area ED Visits | 73,420 | 69,771 | 71,582 | 72,422 | 70,280 | 100.0% | -4.3% |

Note (1): Reflects six months actual experience annualized
Source: St. Paul Computer Center statewide non-confiential utilization data tapes

Utilization of all hospital emergency departments by residents of this service area declined 4.3% between fiscal years 2013 and 2017, yet utilization of the emergency department at UCMC increased by 5.3%. Significantly, HMH continued to provide 34.1% of the service area emergency department utilization in fiscal year 2017. The creation of UC FMF is critical to ensure that access to emergency services for the service area population continues. Other area hospitals, especially UCMC, would be overwhelmed if UC FMF were not developed to the size and with the capabilities designed to meet the needs of the service area population. Further, UCMC could not accommodate a significant increase in emergency visits upon conversion of HMH to UC FMF without UCMC's own major capital improvements to its emergency department.

### *F. Availability and Accessibility of Emergent, Urgent, and Primary Care – COMAR 10.24.19(C)(8)(b)*

The State Health Plan requires that that applicants seeking to convert an acute general hospital to an FMF assess the availability and accessibility of emergent, urgent, and primary care services otherwise available to the population to be served, including information on the number and location of other hospital emergency departments, FMFs, and urgent care centers in the service area of the converting hospital or within five miles of any zip code in the service area of the converting hospital.

UC FMF has been designed to provide similar emergency and observation services as has been historically provided at HMH. Through community education and outreach, which UM UCH has been engaged in for some time, UM UCH will make the community aware of the significant capabilities of UC FMF. As noted above, the applicants anticipate that UC FMF will maintain the nearly same level of emergency care services as currently provided at HMH, with the exception of existing EMS protocols prohibiting the transfer of a limited non-stroke EMS priority 1 patients.[4] Accordingly, the applicants projected UC FMF's service area and number of emergency department visits based on historical utilization at HMH, excluding non-stroke EMS priority 1 patients. *See* Table 3 above.

Within UC FMF's primary service area, there are no other acute general hospitals or FMFs. The nearest acute general hospitals to the proposed project site are UCMC, which is approximately 14.5 miles by public roadways, Union Hospital of Cecil County, which is

[4] In fiscal year 2016, HMH had a total of 187 EMS transports classified as priority 1, of which approximately 151 would no longer qualify for treatment at UC FMF based on EMS protocols while 36 would qualify for transfer to UC FMF through the EMS pilot protocol. In this same period, HMH had a total of 61 EMS priority 1 transports from Cecil County.

approximately 24 miles by public roadways, and MedStar Franklin Square Hospital, which is approximately 26 miles by public roadways.

Within UC FMF's primary service area, the applicants have identified the following urgent care centers and their proximity to UC FMF by roadway travel as set forth in Table 4**.**

**Table 4**
**Urgent Care Centers in UC FMF's Service Area**

| Urgent Care Center Name | Address | Proximity to UC FMF | Hours |
|---|---|---|---|
| MD Immediate Care | 504 Lewis St, Havre de Grace, MD 21078 | 3.7 miles | 10:30am-7pm (M-Sunday) |
| Patient First | 995 Hospitality Way, Aberdeen, MD 21001 | 5.5 miles | 10am-8pm (M-F) 9am-5pm (S-S) |
| Principio Health Center | 4863 Pulaski Highway Perryville, Suite 110, MD 21903 | 5.8 miles | 8am-8pm (M-Sunday) |
| Choiceone Urgent Care | 744 S Philadelphia Blvd, Aberdeen, MD 21001 | 7.6 miles | 8am-8pm (M-Sunday) |
| Medstar Urgent Care | 1321 Riverside Pkwy, Belcamp, MD 21017 | 10 miles | 8am-8pm (M-F) 8am-4pm (S-S) |
| Got A Doc North East | 2327 Pulaski Hwy, North East, MD 21901 | 12 miles | 8am-8pm (M-Sat.) 9am-5pm (Sunday) |
| Total Urgent Care | 2120 Emmorton Park Rd, Edgewood, MD 21040 | 13.6 miles | 8am-8pm (M-F) 9am-5pm (S-S) |

Despite the location of these urgent care centers in HMH's existing primary emergency department service area and UC FMF's projected primary service area, emergency visits at HMH and in UC FMF's projected service area have not declined appreciably. *See* Table 4 above. UM UCH and its member hospitals attribute declining emergency department utilization to significant population health initiatives described in Section II.G below rather than a shift of emergency department visit volume in the service area to urgent care centers.

In sum, there are an ample number of urgent care centers in UC FMF's projected service area. Despite the presence of these urgent care centers, emergency department visits at area

hospitals have not declined appreciably. In fact, the number of emergency department visits at UCMC increased 5.6% between fiscal years 2013 and 2017. Furthermore, the limited hours of operation of these urgent care centers does not provide an alternative for patients experiencing emergency medical conditions. The development of UC FMF with the proposed level of beds and ancillary equipment is critical to ensure continued access to emergency and observation services for the service area population.

### *G. The Proposed Conversion of HMH to a Freestanding Medical Facility is Consistent UM UCH's Community Health Needs Assessment – COMAR 10.24.19.04(C)(8)(c).*

The State Health Plan requires than applicants seeking to convert an acute general hospital to an FMF demonstrate that the proposed conversion is consistent with the converting hospital's most recent community health needs assessment.

UM UCH in conjunction with Healthy Harford completed the most recent Community Health Needs Assessment in 2015. A copy of the Community Health Needs Assessment is provided as **Exhibit 5**. The Community Health Needs Assessment findings revolved around the following areas of focus: chronic disease, tobacco use, mental health/addictions, access to care, maternal and child health; and injury and illness prevention.

UM UCH promotes and supports optimal health in the community through population health initiatives and programs which will be supported by UC FMF. In addition to UM UCH's constituent hospital's traditional medical and surgical capabilities, UM UCH developed community-based care teams in 2016 that conduct in-home interventions for patients with complex, chronic health conditions. The teams are part of the Wellness Action Teams of Cecil and Harford Counties ("WATCH") program. Each WATCH team is comprised of one registered nurse, one social worker, and two community health workers that assess and address barriers to

maintain health. The WATCH program was developed in partnership with the Health Department, Office on Aging, and a local Federally Qualified Health Center, among others. The program has the capacity to work with 2,000 clients annually with two teams in Harford County, one that spans the Susquehanna River, and one in Cecil County for a total of four teams. UC FMF will further the efforts of the Watch Program by making administrative and conference room space that is shared between UC FMF and UC Behavioral Health available for use by the Watch team both as a touchdown area between community interventions and for community outreach and education.

Beyond the WATCH program, UM UCH developed the Comprehensive Care Center ("CCC") in 2015 to serve as a high intensity medical and social clinic for high risk patients. The CCC includes a physician and nurse practitioner, nurses, and social workers who work with patients by phone and in a clinic setting for up to 30 days before transitioning them back to primary care practices. This clinic is centrally located at UCMC in Bel Air where there is close proximity to the Diabetes Center, Wound Center, Ashley Addiction Services, and other vital specialty practices also needed to support chronic diseases experienced by Harford County residents. Additionally, a Congestive Heart Failure program and Infectious Disease practice is located within the CCC. The annual referrals to the CCC have doubled to nearly 3,000 annually.

Strategic deployment of technology is also critical to optimizing patients' health in Harford County. UM UCH has successfully implemented a telemedicine program with five of the six skilled nursing facilities in the county. This program allows for emergency department providers to remotely evaluate patients at skilled nursing facilities to potentially prevent unnecessary trips to the hospital. A pilot program conducted as part of the Commission's grant program showed a 34% reduction in 30-day readmissions. UM UCH intends to deploy this

system in all skilled nursing facilities in Harford County in the coming year. Telemedicine services will also be available at UC FMF for specialty services.

UM UCH also has an extensive partnership with CRISP to benefit the communities it serves. The WATCH Program and CCC utilize CRISP-hosted care management documentation program allowing all providers with the appropriate patient relationship the ability to view patient interactions that occur between office visits. This system also helps different stakeholders understand what other providers are engaged with the patient to avoid duplication of services. Recently, the Harford County Health Department has begun using this system as well, and UM UCH believes that this will enable CRISP to become the closest version of a personal health record for patients since it is not confined to a hospital or ambulatory electronic medical record. UC FMF will continue with UM UCH's collaborative efforts with CRISP.

A need for additional behavioral health and detox services was identified in the Community Health Needs Assessment. UC FMF will include four behavioral health crisis treatment spaces capable of fulfilling needs for these services. Further, the scope of behavioral health services planned for the UC Medical Campus at Havre de Grace is intended to strongly support and provide added services to meet the well-recognized need within the community for comprehensive mental health services. As it relates to community addiction needs, UM UCH has maintained a strong collaboration with the Ashley Addiction program as well as with additional community-based providers throughout Harford and Cecil Counties.

With regards to access to care, the 2015 Community Health Needs Assessment demonstrated the following:

> "…when reviewing the profiles of local hospital emergency department (ED) super utilizers (patients that have visited the ED more than 5 times within a year, and/or been admitted 3 or more times), 60% of them reported having a primary

> care provider. Overuse of the emergency department by this population indicates that while registered with a primary care provider, these patients are not adequately engaged in primary care. Improved access to care challenges include not only increasing the number of available health providers, but also addressing barriers to care that prevent primary care engagement."

(Exhibit 5 at 7.).

The previously outlined population health strategies represent a significant investment by UM UCH to not only meet the needs of individuals in the community with chronic conditions but also to improve access to care, seeing patients in their homes as one of many vital strategies. Additionally, UM UCH is planning for a medical office building on the UC Medical Campus at Havre de Grace Campus that will house both primary and specialty care physician practices in order to provide access to additional providers in this portion of Harford County.

### *H. Number and Size of Emergency Treatment Spaces – COMAR 10.24.19.04(C)(8)(d)*

The State Health Plan requires that applicants seeking to convert an acute general hospital to an FMF demonstrate the proposed number and size of emergency treatment spaces and the size of the FMF proposed by the applicant are consistent with applicable guidance included in the most current edition of the *Emergency Department Design: A Practical Guide to Planning for the Future*, published by the American College of Emergency Physicians ("ACEP Guide"), based on reasonably projected visit volume. Further, the State Health Plan requires that an applicant demonstrate that the proposed number of treatment spaces is consistent with the low range guidance in the ACEP Guide, *unless*, based on the particular characteristics of the population to be served, the applicant demonstrates the need for a greater number of treatment spaces. Finally, the State Health Plan requires that an applicant demonstrate that the building gross square footage is consistent with the low range guidance, *unless*, based on the particular

characteristics of the population to be served, the applicant demonstrates the need for additional building gross square footage.

*1. The Number and Size of UC FMF's Emergency Department Treatment Spaces is Consistent with the ACEP Low Range Guidance.*

Based on UC FMF's service area (*see* Section II.E above), the emergency department visits to HMH from these service area zip codes declined by 7.7% between fiscal years 2013 and 2017 (Table 5). This decline in service area emergency department visits was partially offset by a 2.8% increase in emergency department visits to HMH from outside of the service area.

**Table 5**
**HMH Historical Emergency Department Visits**
**FY2013 – FY2017**

| | Emergency Department Visits to HMH | | | | | |
|---|---|---|---|---|---|---|
| Service Area | FY2013 | FY2014 | FY2015 | FY2016 | FY2017 (1) | 2013 - 2017 % Change |
| Inpatient | 3,527 | 3,105 | 2,842 | 3,036 | 3,050 | -13.5% |
| Outpatient | 22,394 | 21,148 | 22,139 | 21,643 | 20,888 | -6.7% |
| Subtotal Svc Area | 25,921 | 24,253 | 24,981 | 24,679 | 23,938 | -7.7% |
| Outside Svc Area | 4,425 | 4,429 | 4,361 | 4,841 | 4,551 | 2.8% |
| Total | 30,346 | 28,682 | 29,342 | 29,520 | 28,489 | -6.1% |

Note (1): Service area ED visits reflect six (6) months actual experience annualized

As a result, the applicants project that UC FMF will see 29,019 emergency department visits by fiscal year 2024, which includes approximately 27,278 emergency department visits that will be non-psychiatric visits (Table 6).

**Table 6**
**HMH and UC FMF Historical and Projected Emergency Department Visits**
**FY2015 – FY2024**

| | Historical | | Projection | | | | | | | | % Change |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 | FY2024 | FY16-FY24 |
| **Emergency Department Visits** | | | | | | | | | | | |
| **HMH** | | | | | | | | | | | |
| Inpatient Visits | 3,472 | 3,179 | 3,664 | 3,680 | 3,697 | 3,713 | 3,729 | - | - | - | *-100.0%* |
| Outpatient Visits | 25,870 | 26,341 | 24,581 | 24,690 | 24,800 | 24,910 | 25,020 | - | - | - | *-100.0%* |
| Total | **29,342** | **29,520** | **28,245** | **28,370** | **28,496** | **28,623** | **28,750** | **-** | **-** | **-** | *-100.0%* |
| *%Change* | *2.3%* | *0.6%* | *-4.3%* | *0.4%* | *0.4%* | *0.4%* | *0.4%* | *-100.0%* | *0.0%* | *0.0%* | |
| **UC FMF** | | | | | | | | | | | |
| IP Psych Visits (1) | - | - | - | - | - | - | - | 653 | 656 | 659 | |
| Outpatient Visits (2) | - | - | - | - | - | - | - | 28,110 | 28,235 | 28,360 | |
| Total | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **28,763** | **28,891** | **29,019** | |
| *%Change* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *100.0%* | *0.4%* | *0.4%* | |
| Total | 29,342 | 29,520 | 28,245 | 28,370 | 28,496 | 28,623 | 28,750 | 28,763 | 28,891 | 29,019 | *-1.7%* |
| *%Change* | *2.3%* | *0.6%* | *-4.3%* | *0.4%* | *0.4%* | *0.4%* | *0.4%* | *0.0%* | *0.4%* | *0.4%* | |

Note (1): Reflects Behavioral Health patients that will be admitted to UC Behavioral Health on the UCH Medical Campus at Havre de Grace
Note (2): Includes approximately 3,000 patients that were previously admitted at HMH, but will enter UC FMF as outpatients and then be transferred to other hospitals for inpatient admission

Under the current edition of the ACEP Guide (2d. ed. 2016), Figure 5.1 estimates treatment space need per emergency department visits in five thousand visit increments, starting at 10,000 visits per year. ACEP Guide at 116. Even excluding psychiatric emergency visits at UC FMF which are separately discussed, UC FMF would be closest to the 30,000 annual visits tier in the ACEP Guide. At 30,000 annual emergency department visits, the ACEP Guide "low range" projects a need for twenty-one (21) treatment spaces and 16,800 departmental gross square feet. Excluding the six (6) triage spaces which are not counted as treatment spaces and the behavioral health crisis treatment center which is separately addressed, the proposed project includes twenty-one (21) emergency department treatment spaces, all housed in 15,966 departmental gross square feet. Accordingly, the general emergency department treatment space is consistent with the ACEP Guide "low range." Indeed, the ACEP Guide suggests a range of between 135 and 140 square feet for general treatment room. ACEP Guide at 149. The

proposed project currently includes treatment rooms in the range of 116.4 to 139.7 square feet, which is consistent the ACEP recommended emergency treatment room size.

In sum, the number and size of UC FMF's emergency department treatment space is consistent with the ACEP low range guidance.

*2. UC FMF Demonstrates and Need for Four Behavioral Health Crisis Treatment Spaces Which Were Designed in Accordance with the ACEP Guidelines.*

The proposed UC FMF also includes four (4) behavioral health crisis treatment spaces adjacent to the general emergency department. In fiscal years 2016 and 2017, an average of 6.8% of HMH's emergency department visits were diagnosed with a behavioral health condition. To plan for a small unit, though, it is necessary to size the behavioral health crisis treatment spaces around the peak period of utilization. In fiscal years 2016 and 2017, HMH experienced an annual peak utilization of 110 emergency psychiatric patients during the 5:00 pm hour. Extrapolating the peak period to all hours of the day yields 2,640 emergency psychiatric patients per year.

Another consideration for sizing the behavioral health crisis treatment space is that the emergency psychiatric patients have a longer stay in the emergency department than non-psychiatric emergency patients. During the peak 5:00 pm hour in fiscal years 2016 and 2017, psychiatric patients stayed in an emergency department space at HMH an average of 10.5 hours. By contrast, non-psychiatric emergency patients stayed an average of only 3.7 hours. These considerations position the behavioral health crisis treatment spaces in the ACEP Guide mid-range for the volume of projected behavioral health visits.

Each of the exam rooms is designed to be 122 square feet and the overall department is 2,293 square feet. This is consistent with the ACEP Guide which recommends behavioral health

and psychiatric patients be treated in 150 square feet universal rooms with roll-down shutter doors to preclude access to wall-mounted gases. *See* ACEP Guide at 155. Moreover, the overall design of the behavioral health crisis treatment space is consistent with the ACEP Guide recommendations for design of a behavioral health services area within an emergency department. *Id*. at 218 – 221.

UC FMF has demonstrated a need for four behavioral health crisis treatment spaces, and that the size and design meets the need of the particular characteristics of the population to be served.

*3. The Overall Size of UC FMF Is Consistent with FGI Design Standards and Applicable ACEP Guidance Based on the Characteristics of the Population to be Served.*

Excluding 23,285 gross square feet of public and administrative space that will be shared between UC FMF and UC Behavioral, UC FMF is designed to be 50,800 departmental gross square feet. For purposes of financial projections an additional 11,177 square feet of 23,285 gross square space that will be shared with UC Behavioral Health has been allocated to UC FMF. The proposed project has been allocated a total of 61,977 square feet, which includes the following patient and ancillary services with departmental gross square feet:

a) General Emergency Treatment – 15,996
b) Behavioral Health Crisis – 2,293
c) Observation – 6,099
d) Imaging – 8,192
e) Lab – 1,973
f) Pharmacy – 1,876
g) Public – 4,203
h) Administration – 5,5331

*See* **Exhibit 1** at **Table B**.

In addressing the overall size of UC FMF and its consistency with ACEP low range guidance, it should be noted that the ACEP Guide indicates that the low, mid, and high ranges are "general guideline[s]" used to set "preliminary benchmarks for sizing emergency departments," which can be adjusted for "each unique emergency department project" and that the size parameters are merely "estimates." *Id*. at 109, 116-117. The low, mid, and high ranges are also not exacting tiers but represent a continuum based on projections. S*ee id.* at 109. Further the ACEP Guide's consideration of a freestanding emergency department does not contemplate such a facility as a replacement for an existing hospital's emergency and observation capacity. On the contrary, the ACEP Guide's discussion of freestanding emergency departments suggests that such facilities may be developed to "decant" or move certain emergency services from an existing crowded main hospital emergency department. *See* ACEP Guide at 260-61. In other words, the ACEP Guide was not written to address acute general hospital conversions to freestanding emergency departments.

The ACEP Guide categorizes emergency department designs into low, mid, and high range using sixteen factors. Among the factors to categorize a facility in the "low range" are: (a) less than 8% of patients will be expected to be admitted to a hospital; (b) the average length of stay is projected to be less than 2.25 hours; (c) patients admitted to the hospital are expected to be transported out of the FMF in 60 minutes or less after disposition; (d) more than 45% of patients are expected to be classified as ESI 4 and 5 combined; (e) and less than 10% of patients are expected to be older than 65. ACEP Guide at 109-11. Further, the ACEP Guide "low range" design and size standards, however, indicate that facilities in the "low range" would have fewer than three percent (3%) of behavioral health patients and the size and design standards do not account for specialty suites to accommodate behavioral health patients. *Id*. at 111. The

ACEP Guide "low range" size and design standards further state that "imaging studies will not be performed within the department, so there is no need to add space for imaging rooms" and only allow for "minimal" administrative offices within the emergency department. *Id*. at 111-12. Just as significantly, the ACEP "low range" standards contemplate that "[clinical decision units]/observation space will be located outside of the emergency department and [are] not part of [the] architectural project." *Id*. at 110.

The historic emergency department utilization at HMH and projected utilization at UC FMF fall outside the range of the ACEP Guide "low range" criteria. An analysis of the average length of stay for emergency department visits at UCMC and HMH presents an average of 4.0 hours (Table 7). This factor would put UC FMF in the ACEP "high" range.

**Table 7**
**UCMC's Historical Emergency Department Hours per Visit**
**2016 / 2017**

| | Historical 2016 / 2017 (1) |
|---|---|
| ED Visits | 108,039 |
| Average Minutes per Visit | 275.6 |
| Less: Average Minutes from Registration to ED Bay | (37.4) |
| Average Minutes per Visit in ED Bay | 238.2 |
| Average Hours per Visit in ED Bay | 4.0 |

Note (1): Reflects 14 months of experience from Jan 2016 to Feb 2017
Source: UCHS internal report

As further reflected in **Exhibit 6**, UC FMF falls within the "high" range of the ACEP Guide for ten (10) of the ACEP range criteria, in the "mid" range for three (3) of the ACEP Guide criteria, and in the "low" range for only three (3) of the ACEP Guide criteria. Overall, UC FMF projects to be in the high range based on the ACEP Guide criteria, the projected need for

emergency and observation services for the community formerly served by HMH, and for the projected service line requirements.

Although the ACEP Guide provides for a 1.25 multiplier as a building square footage adjustment factor for a freestanding facility, this adjustment factor is inadequate given UC FMF's utilization projections, projected patient volumes and acuity levels, and needed specialty programs to all UC FMF to serve a community that will lose its acute general hospital. Applying the 1.25 multiplier at the ACEP low range with 30,000 annual emergency visits would result in a facility of only 26,250 building gross square feet at the low range. Although the applicants have sought to demonstrate that the 1.25 multiplier is inapplicable to the proposed UC FMF, the ACEP Guide provides no rationale for the 1.25 multiplier for a freestanding facility nor a description of the services contemplated at such a freestanding facility. At bottom, the 1.25 adjustment factor referenced in the ACEP Guide is nothing more than an adjustment to account for wall thickness, mechanical penthouses, stair shafts, etc. *See* ACEP Guide at 113.

The ACEP Guide 1.25 adjustment factor for a freestanding facility fails to account for the need for an observation suite, imaging and laboratory services, a pharmacy, the behavioral health crisis treatment spaces, or extensive administrative space within its square footage recommendations. Nor does the ACEP Guide contemplate the space required to obtain an EMS Base Station designation, to provide telemedicine services, or for a helicopter control room.

Contrary to the ACEP low range, the space programming at UC FMF will necessarily house observation, imaging, lab, and pharmacy, and other ancillary services which are intended to support the diagnostic and treatment needs of patients seen at UC FMF. Each of three distinct patient populations to be treated at UC FMF – general emergency, behavioral health crisis, and observation patients – require access to these ancillary services as a core aspect of their

treatment. The ACEP Guide low range fails to allocate *any* space for existence of these services. Additionally, the imaging, lab, and pharmacy departments at UC FMF will also support UC Behavioral Health's patients needing these services. Therefore, each of these ancillary service departments have been sized in order to support each of the different patient populations to be treated at UC Medical Campus at Havre de Grace, ultimately reducing the need for redundant services while seeking economies of scale.

As set forth above with respect to the emergency department treatment spaces and immediately below with respect to the size of the observation treatment spaces, UC FMF was designed in accordance with the 2014 FGI Guidelines to comply with licensing regulations and modern standards of care. Each of these departments either comply with the ACEP low range and any deviations are necessary to provide effective treatment for the population to be served.

Overall, the project design is, however, consistent with the ACEP Guide except where the ACEP Guide conflicts with the FGI Guidelines. For example, UC FMF's imaging department includes the following components and square footage:

a) MRI – 500 square feet, exclusive of the control room;
b) CT – 427 square feet, exclusive of the control room;
c) Diagnostic imaging suite with X-ray – 250 square feet;
d) Two cardio-vascular ultrasound modalities at 400 square feet combined.

The ACEP Guide recommends General Radiology room space at 250 to 325 square feet. ACEP Guide at 165. UC FMF's diagnostic imaging suite and two cardio-vascular ultrasound rooms are consistent with the ACEP Guide design recommendations. The ACEP Guide, however, recommends MRI and CT space at 300 to 325 square feet plus 120 to 150 square feet for the control room. *Id*. These room sizes are inadequate to meet the clear floor space requirements of the FGI Guidelines. For an MRI scan room, FGI Guidelines require a minimum

of 4 feet clearance around all sides of the gantry and recommend the room size be per the equipment manufacturer's recommendations, in addition to making sure certain functions for the entry into the room and resuscitation fall outside of the 5 Gauss line, the limit beyond which ferromagnetic objects are strictly prohibited. Best practice provides space for the maneuvering of a patient stretcher on either side of the gantry, thereby exceeding the stated minimum in the guidelines. Therefore, a 325 square foot MRI room is too small, given the FGI Guideline standards. UC FMF's MRI room has been designed according to best practices and actual design and constructability experience. Similarly, for a CT room, the FGI Guidelines require a minimum of 4 feet clearance around all sides of the gantry and recommend the room size be per the equipment manufacturer's recommendations. Best practice provides space for the maneuvering of a patient stretcher on either side of the gantry, thereby exceeding the stated minimum in the guidelines. Again, UC FMF's CT room has been designed according to best practices and actual design and constructability experience.

In sum, each component of UC FMF is designed according to FGI Guidelines requirements and is consistent with size recommendations found in the ACEP Guide unless such guidance conflicts with the FGI Guidelines required for licensure.

### *I. The Number and Size of UC FMF's Observation Treatment Spaces is Consistent with the Population to be Served – COMAR 10.24.19.04(C)(8)(e).*

The State Health Plan requires that applicants seeking to convert an acute general hospital to an FMF demonstrate the proposed number and size of observation spaces is consistent with applicable guidance included in the most current edition of the ACEP Guide, based on reasonably projected levels of visit volumes. The ACEP Guide does not provide a projection regarding need for the number of treatment spaces. Instead, the ACEP Guide instructs that its

author "generally program[s] [clinical decision unit or observation] spaces in the range of 900 to 1,100 patients per space annually. Use the lower number if your patients use the [clinical decision unit] for 12+ hours, and use the higher number if your patients use the space for 8 to 12 hours." ACEP Guide at 273.[5] The State Health Plan also states that applicants must demonstrate that the FMF will achieve 1,100 visits per year per observation space (an average of 3 visits per day, per observation bed), *unless*, based on the particular characteristics of the population to be served, the applicants demonstrate the need for a greater number of observation spaces. COMAR 10.24.19.04(C)(8)(e)(i).

*1. The Number of Observation Treatment Spaces at UC FMF is Consistent with the Needs of the Population to be Served – COMAR 10.24.19.04(C)(e).*

UC FMF projected its service area according to the methodology set forth in Section II.E above. As set forth below, the applicants projected need for observation treatment spaces at UC FMF in accordance with its projected emergency department visits. Between fiscal years 2015 and 2017, observation cases at HMH declined 7.7% (Table 8). In 2017, these patients stayed for 40.5 hours or 1.7 days on average.

[5] Notably, the ACEP's 900 patients per space projection for 12+ hours in observation is internally inconsistent. Even at the lowest length of stay, 12 hours, 900 visits per space projects to 2.46 visits per day, which is impossible.

**Table 8**
**HMH Historical Observation Cases and Hours**
**FY2015 – FY2017**

| | Historical | | | % Change |
|---|---|---|---|---|
| | FY2015 | FY2016 | FY2017 | FY15-FY17 |
| **Observation Cases** | 2,887 | 2,664 | 2,666 | *-7.7%* |
| **Observation Hours** | 114,695 | 107,718 | 107,933 | *-5.9%* |
| **Observation Hours per Case** | 39.7 | 40.4 | 40.5 | *1.9%* |
| **Observation Days per Case** | 1.7 | 1.7 | 1.7 | *1.9%* |

The applicants project a decline in observation in fiscal years 2018 and 2019 due to ongoing efforts to transition 60% of the observation patients with stays longer than 48 hours to an inpatient setting. With the transition of HMH's emergency and observation services to UC FMF, the remaining observations patients with stays longer than 48 hours are projected to be transferred to UCMC. While the applicants project that there will be a 23% decline in observation cases at UC FMF in fiscal year 2024 as compared with observation cases at HMH in fiscal year 2017, there remain 2,050 observation cases projected at UC FMF in fiscal year 2024. (Table 9).

**Table 9**
**HMH and UC FMF Historical and Projected Observation Cases**
**FY2015 – FY2024**

| | Historical | | Projection | | | | | | | | % Change |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 | FY2024 | FY16-FY24 |
| **Observation Cases** | | | | | | | | | | | |
| **HMH** | **2,887** | **2,664** | **2,669** | **2,473** | **2,277** | **2,283** | **2,290** | | | | |
| *%Change* | *2.3%* | *-7.7%* | *0.2%* | *-7.3%* | *-7.9%* | *0.3%* | *0.3%* | | | | *-100.0%* |
| **UC FMF** | | | | | | | | **2,026** | **2,038** | **2,050** | |
| *%Change* | | | | | | | | | *0.6%* | *0.6%* | |
| **Total** | **2,887** | **2,664** | **2,669** | **2,473** | **2,277** | **2,283** | **2,290** | **2,026** | **2,038** | **2,050** | |
| *%Change* | | *-7.7%* | *0.2%* | *-7.3%* | *-7.9%* | *0.3%* | *0.3%* | *-11.5%* | *0.6%* | *0.6%* | *-23.0%* |

Upon the opening of UC FMF, the average length of stay for observation cases at UC FMF is projected to equal the average length of stay for observation cases previously at HMH

with stays less than 48 hours. The resulting ALOS that is projected for observation patients at UC FMF is 1.2 days (Table 10).

**Table 10**
**HMH and UC FMF Historical and Projected ALOS**
**FY2015 – FY2024**

| | Historical | | Projection | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 | FY2024 |
| **ALOS (days)** | | | | | | | | | | |
| **HMH** | **1.66** | **1.68** | **1.68** | **1.57** | **1.43** | **1.43** | **1.43** | | | |
| *%Change* | | *1.8%* | *0.0%* | *-7.0%* | *-8.9%* | *0.0%* | *0.0%* | | | |
| **UC FMF** | | | | | | | | **1.20** | **1.20** | **1.20** |
| *%Change* | | | | | | | | | *0.0%* | *0.0%* |

For observation patients projected to stay an average of 1.2 days or 28.8 hours at UC FMF, it is unreasonable to apply the ACEP Guide recommendation of 1,100 visits per observation space – equally three visits per observation bed, per day – to project the need for observation spaces, particularly when historical data and observation use rates are known and projections of observation use at UC FMF can be reasonably projected.[6] To this end, the projected average length of stay for observation cases at UC FMF is between 2.4 and 3.6 times longer than the 8 to 12 hour stays contemplated by the ACEP Guide recommendation for programming at 1,100 visits per observation space, per year.

Applying the ACEP Guide author's recommendation of 1,100 observation visits per observation space would result in only two (2) observation spaces at UC FMF, which would be grossly inadequate to serve the needs of the service area population, overwhelm UCMC and other area hospitals with transfers from UC FMF for patients who could otherwise be safely and

[6] It should also be noted that the ACEP Guide standard incorporated into the State Health Plan is based on the experience of a single architect, the author of the ACEP Guide, and not a broader data analysis of trends in observation utilization, average observation lengths of stay, or use rate demographics.

effectively treated in observation at UC FMF, and result in significant increased costs to the health delivery system in the form of inter-facility ambulance transfers. Such transfers could also jeopardize patient care outcomes and patient satisfaction. Moreover, the increased number of transports resulting from a lack of observation treatment spaces at UC FMF would be certain to burden EMS providers, which have provided support for the proposed project. *See* **Exhibit 7**. Though the applicants' discussions with the service area community, the community also expects UC FMF to provide the same level of observation and emergency services as currently provided at HMH.

Rather than using the ACEP Guide to project observation bed need for a hospital converting to an FMF – an idea not at all contemplated by the ACEP Guide – it is more appropriate to project observation bed need at UC FMF similar to MSGA bed need that considers length of stay and occupancy. Because of the small number of observation cases at UC FMF, because there will be no MSGA beds to accommodate any overflow of observation cases, and because any overflow of observation cases would necessitate potentially unnecessary inter-facility transports, the applicants assumed 70% occupancy of observation beds at UC FMF.

Based on the assumptions presented above, there is a projected need in fiscal year 2024 of eleven (11) observation beds at UC FMF (Table 11).

**Table 11**
**HMH and UC FMF Historical and Projected Observation Bed Need**
**FY2015 – FY2024**

| | Historical | | Projection | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 | FY2024 |
| **Bed Need** | | | | | | | | | | |
| **HMH** | **16** | **15** | **15** | **13** | **11** | **11** | **11** | | | |
| **UC FMF** | | | | | | | | **11** | **11** | **11** |
| **Total** | 16 | 15 | 15 | 13 | 11 | 11 | 11 | 11 | 11 | 11 |

Thus, the number of observation treatment spaces is consistent with the needs of characteristics of the population to be served.

*2. The Size of UC FMF's Observation Treatment Spaces is Consistent with Licensing Standards – COMAR 10.24.19.04(C)(8)(e)(ii).*

The State Health Plan requires that applicants seeking to convert an acute general hospital to an FMF demonstrate the size of each observation space at the FMF not exceed 140 square feet, exclusive of any toilet or bathing area incorporated into an individual observation space, *unless* based on the particular characteristics of the population to be served, the applicant demonstrates the need for larger observation spaces. COMAR 10.24.19.04(C)(8)(e)(ii).

The ACEP Guide generally projects a square footage range of 135 to 150 for each observation room. ACEP Guide at 157. However, the ACEP Guide also instructs that, "if you decide to equip the [observation] rooms with standard inpatient hospital beds, you'll need larger rooms – 150 to 160 [square feet]." *Id*. at 271.

Because the projected average length of stay of patients in observation at UC FMF is 1.2 days or 28.8 hours, significantly longer than the ACEP Guide considers, the observation unit has been planned to use standard inpatient hospital beds rather than gurneys. To comply with licensing regulations and modern standards of care, UC FMF has been designed to comply with the 2014 FGI Guidelines. Pursuant to 2014 FGI Guideline 2.2-3.2.2.2, observation beds require a minimum clear floor area of 120 square feet. Further, because the observation rooms may accommodate patients for up to forty-eight (48) hours and there will be no inpatient beds in which to house patients at UC FMF, the observation rooms have been designed to create a comfortable patient stay and to allow visitors. UC FMF's observation rooms have been designed to be 183 square feet, exclusive of in room toilet and bathing areas. This size allows for a

standard hospital bed in each observation room and other required furniture such as side chairs and storage to be accommodated in the room while satisfying the minimum requirement of 120 square feet of clear floor area.

In sum, the size of UC FMF's observation treatment spaces is needed to meet the needs of the population to be served and to comply with licensing standards.

### *J. Utilization, Revenue, and Expense Projections – COMAR 10.24.19.04(C)(8)(f)*

The State Health Plan requires that applicants seeking to convert an acute general hospital to an FMF provide utilization, revenue, and expense projections for the FMF, along with a comprehensive statement of the assumptions used to develop the projects. UCMC and HMH have completed **Tables A-H, J** and **K**, which are submitted herewith as **Exhibit 1**. Included in **Exhibit 1** for **Tables F**, **G**, **H**, **J** and **K** are utilization and financial projections that include a comprehensive statement of assumptions related to utilization, revenue, expenses and financial performance for UC FMF, as well as UCMC, the parent hospital for UC FMF. **Table F** includes utilization projection and assumptions that reflect both the inpatient and outpatient utilization of UCMC and outpatient emergency department visits, observation cases, and related outpatient ancillary services at UC FMF.

#### *1. UC FMF Emergency Department Utilization*

The projection of emergency department visits at UC FMF assumes the continuation of emergency services at HMH adjusted for annual population growth from actual experience in fiscal year 2017 through fiscal year 2024 with the following exception. In fiscal year 2022, there is an assumed two percent (2%) reduction in projected visits to account for the redirection of EMS priority level 1 patients arriving by ambulance who previously went to HMH, but which

patients will go to other hospitals with inpatient beds based on drive time and service line. The projected emergency visits are presented in Table 12.

**Table 12**
**HMH and UC FMF Historical and Projected Emergency Department Visits**
**FY2015 – FY2024**

| | Historical | | Projection | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 | FY2024 |
| **Emergency Department Visits** | | | | | | | | | | |
| **HMH** | | | | | | | | | | |
| Inpatient Visits | 3,472 | 3,179 | 3,664 | 3,680 | 3,697 | 3,713 | 3,729 | - | - | - |
| Outpatient Visits | 25,870 | 26,341 | 24,581 | 24,690 | 24,800 | 24,910 | 25,020 | - | - | - |
| Total | **29,342** | **29,520** | **28,245** | **28,370** | **28,496** | **28,623** | **28,750** | **-** | **-** | **-** |
| *%Change* | *2.3%* | *0.6%* | *-4.3%* | *0.4%* | *0.4%* | *0.4%* | *0.4%* | *-100.0%* | *0.0%* | *0.0%* |
| **UC FMF** | | | | | | | | | | |
| Inpatient Visits | - | - | - | - | - | - | - | 653 | 656 | 659 |
| Outpatient Visits | - | - | - | - | - | - | - | 28,110 | 28,235 | 28,360 |
| Total | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **28,763** | **28,891** | **29,019** |
| *%Change* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *100.0%* | *0.4%* | *0.4%* |
| Total | 29,342 | 29,520 | 28,245 | 28,370 | 28,496 | 28,623 | 28,750 | 28,763 | 28,891 | 29,019 |
| *%Change* | *2.3%* | *0.6%* | *-4.3%* | *0.4%* | *0.4%* | *0.4%* | *0.4%* | *0.0%* | *0.4%* | *0.4%* |

*2. UC FMF Observation Utilization*

The applicants project a decline in observation in fiscal years 2018 and 2019 due to ongoing efforts to transition 60% of the observation patients with stays longer than 48 hours to an inpatient setting. With the transition of HMH's observation patients to UC FMF, the remaining HMH observations patients with stays longer than 48 hours are projected to be transferred to UCMC. While the applicants project that there will be a 23% decline in observation cases at UC FMF in fiscal year 2024 as compared with observation cases at HMH in fiscal year 2017, there are 2,050 observation cases projected at UC FMF in FY2024. The projected Observation cases are presented in Table 13.

**Table 13**
**HMH and UC FMF Historical and Projected Observation Cases**
**FY2015 – FY2024**

| | Historical | | Projection | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 | FY2024 |
| **Observation Cases** | | | | | | | | | | |
| **HMH** | **2,887** | **2,664** | **2,669** | **2,473** | **2,277** | **2,283** | **2,290** | **-** | **-** | **-** |
| *%Change* | *2.3%* | *-7.7%* | *0.2%* | *-7.3%* | *-7.9%* | *0.3%* | *0.3%* | *-100.0%* | *0.0%* | *0.0%* |
| **UC FMF** | | | | | | | | **2,026** | **2,038** | **2,050** |
| *%Change* | | | | | | | | | *0.6%* | *0.6%* |
| **Total** | **2,887** | **2,664** | **2,669** | **2,473** | **2,277** | **2,283** | **2,290** | **2,026** | **2,038** | **2,050** |
| *%Change* | | *-7.7%* | *0.2%* | *-7.3%* | *-7.9%* | *0.3%* | *0.3%* | *-11.5%* | *0.6%* | *0.6%* |

*3. Laboratory and Imaging*

Laboratory and imaging services are projected to grow and decline in relation to the projection of emergency and observation patients that are presented above.

*4. Projected UC FMF Revenue*

The presentation of projected revenue in **Tables H** and **K** reflect the utilization projections presented above and the 2018 regulated Global Budget Revenue (GBR) assumptions related to update factors, demographic adjustments, revenue variability, and uncompensated care. These assumptions are included with the tables.

*5. Projected UC FMF Staffing and Expenses*

The presentation of projected staffing at the FMF, as presented in **Table L**, reflects the changes in volumes presented above and assumptions related to expense inflation, expense variability with changes in volumes and one-time adjustments to the projection of staffing and expense when HMH closes and UC FMF opens in fiscal year 2022.

*6. Projected UC FMF and UCMC Financial Performance*

As presented in **Table K**, UC FMF is projected to lose approximately $2.5 million to $2.9 million between fiscal years 2022 and 2024. This operating loss, though, can be absorbed by UCMC which is projected in **Table H** to include the UC FMF loss and still achieve net positive operating income between fiscal years 2022 and 2024.

### *K. The Proposed Construction Costs is Reasonable and Consistent with Industry Experience – COMAR 10.24.19.04(C)(8)(h).*

The State Health Plan requires that construction costs of the project be reasonable and consistent with industry cost experience in Maryland. The following compares the project costs to the Marshall Valuation Service ("MVS") benchmark.

#### *1. Marshall Valuation Service*

| | | |
|---|---|---|
| Type | | Hospital |
| Construction Quality/Class | | Good/A |
| Stories | | 1 |
| Perimeter | | 653 |
| Average Floor to Floor Height | | 17.0 |
| Square Feet | | 62,723 |
| f.1 | Average floor Area | 31,362 |
| **A. Base Costs** | | |
| | Basic Structure | $365.78 |
| | Elimination of HVAC cost for adjustment | 0 |
| | HVAC Add-on for Mild Climate | 0 |
| | HVAC Add-on for Extreme Climate | 0 |
| **Total Base Cost** | | $365.78 |
| **Adjustment for Departmental Differential Cost Factors** | | 1.01 |

| | | |
|---|---|---|
| **Adjusted Total Base Cost** | | $370.60 |
| **B. Additions** | | |
| | Elevator (If not in base) | $0.00 |
| | Other | $0.00 |
| **Subtotal** | | $0.00 |
| **Total** | | $370.60 |
| **C. Multipliers** | | |
| Perimeter Multiplier | | 0.899575262 |
| | Product | $333.39 |
| Height Multiplier | | 1.12 |
| | Product | $371.72 |
| Multi-story Multiplier | | 1.000 |
| | Product | $371.72 |
| **D. Sprinklers** | | |
| | Sprinkler Amount | $3.18 |
| **Subtotal** | | $374.90 |
| **E. Update/Location Multipliers** | | |
| Update Multiplier | | 1.03 |
| | Product | $386.15 |
| Location Multipier | | 1.01 |
| | Product | $390.01 |
| **Calculated Square Foot Cost Standard** | | **$390.01** |

### *2. Valuation Benchmark*

The MVS estimate for this project is impacted by the Adjustment for Departmental Differential Cost Factor. In Section 87 on page 8 of the Valuation Service, MVS provides the

cost differential by department compared to the average cost for an entire hospital. The calculation of the average factor is shown below.

| Department/Function | BGSF | MVS Department Name | MVS Differential Cost Factor | Cost Factor X SF |
|---|---|---|---|---|
| **ACUTE PATIENT CARE** | | | | |
| ED | 15,996 | Emergency Suite | 1.18 | 18,875 |
| Imaging | 8,192 | Radiology | 1.22 | 9,994 |
| Observation | 6,099 | Inpatient Unit | 1.06 | 6,465 |
| Lab | 1,973 | Laboratory | 1.15 | 2,269 |
| Pharmacy | 1,876 | Pharmacy | 1.33 | 2,495 |
| Administration | 5,331 | Offices | 0.96 | 5,118 |
| BH Crisis | 2,293 | Outpatient Department | 0.99 | 2270.07 |
| Public | 4,203 | Public Space | 0.8 | 3362.4 |
| Receiving | 433 | Storage and Refrigeration | 1.6 | 693 |
| Maintenance | 923 | Mechanical Equipment and Shops | 0.7 | 646 |
| Maintnenance Staff Lounge and Lockers | 266 | Employee Facilities | 0.8 | 213 |
| Nursing Staff Lounge and Lockers | 298 | Employee Facilities | 0.8 | 238 |
| Provider Staff Lounge and Lockers | 584 | Employee Facilities | 0.8 | 467 |
| Provider Offices | 526 | Offices | 0.96 | 505 |
| Housekeeping | 345 | Housekeeping | 1.31 | 452 |
| Storage | 890 | Storage and Refrigeration | 1.6 | 1,424 |
| Mechanical | 3,575 | Mechanical Equipment and Shops | 0.7 | 2,503 |
| Public dining | 628 | Dining Room | 0.95 | 597 |
| Public Toilets | 231 | Public Space | 0.8 | 185 |
| Public Conf | 651 | Public Space | 0.8 | 521 |
| Shared Circulation | 3,001 | Internal Circulation, Corridors | 0.6 | 1,801 |
| Shared Exterior Walls | 516 | Unassigned Areas | 0.5 | 258 |
| Circulation | 2,533 | Internal Circulation, Corridors | 0.6 | 1,520 |
| Exterior Walls | 1,360 | Unassigned Areas | 0.5 | 680 |
| **TOTAL** | 62,723 | | 1.013185434 | 63,550 |

## Cost of New Construction

| A. Base Calculations | Actual | Per Sq. Foot |
|---|---|---|
| Building | $18,002,964 | $287.02 |
| Fixed Equipment | In Building | $0.00 |
| Site Preparation | $4,606,629 | $73.44 |
| Architectual Fees | $2,165,266 | $34.52 |
| Permits | $317,400 | $5.06 |
| Capitalized Construction Interest | Calculated Below | Calculated Below |
| **Subtotal** | $25,092,258 | $400.05 |

However, as related below, this project includes expenditures for items not included in the MVS average.

### B. Extraordinary Cost Adjustments

| | Project Costs | | Associated Cap Interest & Loan Place. |
|---|---|---|---|
| Site Demolition Costs | $921,435 | Site | |
| Storm Drains | $637,541 | Site | |
| Rough Grading | $62,903 | Site | |
| Hillside Foundation | $0 | Site | |
| Paving | $684,863 | Site | |
| Exterior Signs | $48,000 | Site | |
| Landscaping | $442,211 | Site | |
| Walls | $55,402 | Site | |
| Yard Lighting | $70,514 | Site | |
| Other (Specify/add rows if needed) | $0 | Site | |
| Sediment Control & Stabilization | $112,769 | Site | |
| Helipad | $78,629 | Site | |
| Water Storage Tank | $340,497 | Site | |
| Water Booster Station | $233,280 | Site | |
| Premium for Minority Business Enterprise Requirement | $69,099 | Site | |
| Canopy (two) | $170,000 | Building | $45,534 |
| Pneumatic Tube System | $200,000 | Building | $53,569 |
| Premium for Minority Business Enterprise Requirement | $284,421 | Building | $76,181 |
| Jurisdictional Hook-up Fees | $197,400 | Permits | |
| **Total Cost Adjustments** | $4,608,964 | | $175,283 |

Associated Capitalized Interest and Loan Placement Fees should be excluded from the comparison for those items which are also excluded from the comparison. Since only

Capitalized Interest and Loan Placement fees relating to the Building costs are included in the MVS analysis, we have only eliminated them for the Extraordinary Costs that are in the Building cost item. This was calculated as follows, using the Canopy as an example: (Cost of the Canopy/Building Cost) X (Building related Capitalized Interest and Loan Placement Fees).

### *3. Explanation of Extraordinary Costs*

Below are the explanations of the Extraordinary Costs that are not specifically mentioned as not being in contained in the MVS average costs in the MVS Guide (at Section 1, Page 3) but that are specific to this project and would not be in the average cost of a hospital project.

#### *a) Premium for Minority Business Enterprise Requirement*

UM UCH projects include a premium for Minority Business Enterprises that would not be in the average cost of hospital construction. This premium was conservatively projected to be 1.5%.

Eliminating all of the extraordinary costs reduces the project costs that should be compared to the MVS benchmark.

| **C. Adjusted Project Cost** | | **Per Square Foot** |
|---|---|---|
| Building | $17,348,543 | $276.59 |
| Fixed Equipment | | $0.00 |
| Site Preparation | $849,486 | $13.54 |
| Architectural Fees | $2,165,266 | $34.52 |
| Permits | $120,000 | $1.91 |
| Subtotal | $20,483,294 | $326.57 |
| Capitalized Construction Interest | $4,780,254 | $76.21 |
| **Total** | $25,263,549 | $402.78 |

Building associated Capitalized Interest and Loan Placement Fees were calculated as follows:

| **Hospital** | **New** | **Renovation** | **Total** | | |
|---|---|---|---|---|---|
| Building Cost | $18,961,395 | $0 | | | |
| Subtotal Cost (w/o Cap Interest) | $26,050,690 | $0 | $26,050,690 | | |
| Subtotal/Total | 100.0% | 0.0% | **Cap Interest** | **Loan Place.** | **Total** |
| Total Project Cap Interest &Financing [(Subtotal Cost/Total Cost) X Total Cap Interest] | $6,624,842 | $0 | $6,369,057 | $255,786 | $6,624,842 |
| Building/Subtotal | 72.8% | #DIV/0! | | | |
| Building Cap Interest & Financing | $4,821,993 | #DIV/0! | | | |
| Associated with Extraordinary Costs | $175,283 | | | | |
| Applicable Cap Interest & Loan Place. | $4,780,254 | | | | |

As noted below, the project's cost per square foot is exceeds the MVS benchmark by only 3.3%.

| | |
|---|---|
| MVS Benchmark | $390.01 |
| The Project | $402.78 |
| Difference | $12.77 |
| | 3.27% |

Accordingly, the proposed project complies with this standard.

## III. THE CONVERSION OF HARFORD MEMORIAL HOSPITAL TO A FREESTANDING MEDICAL FACILITY WILL RESULT IN THE DELIVERY OF MORE EFFICIENT AND EFFECTIVE HEALTH CARE SERVICES.

The State Health Plan requires that applicants seeking to convert an acute general hospital to an FMF demonstrate that the conversion to an FMF will result in the delivery of more efficient and effective health care services including an explanation of why the services proposed for the FMF cannot be provided at other area hospital EDs, FMFs, or other health care facilities, and demonstrate why other less expensive models of care delivery cannot meet the needs of the population to be served. COMAR 10.24.17.04(C)(8)(i).

As an initial matter, in addressing the efficiency and cost effectiveness of health care service delivery, the applicants incorporate by reference UM UCH's response to COMAR 10.24.01.08(G)(3)(c) in support of UM UCH's CON application to establish UC Behavioral Health. Further, an assessment of the availability and accessibility of emergent and urgent care in UC FMF's projected service area is set forth in Section II.F above. In short, there will be no acute general hospitals with emergency departments or other FMFs in UC FMF's projected service area.

While there are seven (7) urgent care centers in UC FMF's service area (*see* Table 4 above), in fiscal year 2017, eighty-one percent (81%) of HMH's emergency department visits fell within an range of the HSCRC's EMG Treatment Levels which could not be successfully transitioned to an urgent care center (Table 14). This assumes that only patients at EMG Treatment Levels 1 and 2 who were discharged from HMH's emergency room could be transitioned to an urgent care center. The remaining 19% represent a patient population who self-selects care at a traditional emergency department rather than an urgent care center. Certainly, there are many factors that drive patient selection for site-of-service; however, one key factor is a patient's inability to discern the lowest level of care for their presenting need(s). Another factor is the limited hours of operation of urgent care centers. (*See* Table 4.)

Moreover, it cannot be disputed that the emergency departments at acute general hospitals in nearest proximity to UC FMF could not absorb the more than 28,000 emergency visits currently treated at HMH's emergency department and projected for UC FMF. In addition, UCMC would not be in a position to absorb even a significant fraction of this volume of emergency department visits without its own substantial emergency department expansion project and associated capital expenditures.

**Table 14**
**HMH FY 2017 ED Visits and Disposition**

| HSCRC EMG Treatment Level | ED Discharges | Inpatient Admits | Observation Admits | Grand Total |
|---|---|---|---|---|
| 1 | 71 | 105 | 30 | 206 |
| 2 | 2,495 | 1,766 | 1,033 | 5,294 |
| 3 | 11,001 | 1,788 | 1,503 | 14,292 |
| 4 | 7,951 | 90 | 46 | 8,087 |
| 5 | 382 | 1 | 2 | 385 |
| Unclassified | 208 | 10 | 7 | 225 |
| | **22,108** | **3,760** | **2,621** | **28,489** |

Finally, UM UCH has engaged and continues to engage in a number of population health initiatives as described in Section II.G above. Despite these ongoing efforts, the number of emergency department visits from UC FMF's projected service area has not seen an appreciable decline in utilization. *See* Table 2 above.

## IV. THE CONVERSION OF HARFORD MEMORIAL HOSPITAL TO A FREESTANDING MEDICAL FACILITY IS IN THE PUBLIC INTEREST.

The State Health Plan requires that applicants seeking to convert an acute general hospital to an FMF demonstrate the conversion is in the public interest, based on an assessment of the converting hospital's long-term viability as a general hospital through addressing such matters as: (i) trends in the hospital's inpatient utilization for the previous five years in the context of statewide trends; (ii) the financial performance of the hospital over the past five years and in the context of the statewide financial performance of Maryland hospitals; (iii) the age of the physical plant relative to other Maryland hospitals and the investment required to maintain and modernize the physical plant; (iv) the availability of alternative sources for acute care inpatient and outpatient services that will no longer be provided on the campus after conversion to a freestanding medical facility; (v) the adequacy and appropriateness of the hospital's

transition plan; and (vi) an assessment of the parent hospital's projected financial performance or the projected financial performance of the parent hospital and other health care facilities that share a global budget with the parent hospital.

The conversion of HMH to UC FMF is in the public interest with respect to each of these criteria based on the analyses presented below.

*1. The Conversion of HMH to UC FMF is in the Public Interest Based on HMH's Inpatient Utilization for the Previous Five Years in the Context of Statewide Trends.*

Table 15 presents a 14.6% decline in HMH's hospital acute inpatient admissions between fiscal years 2012 and 2016. This decline is greater than the 8.7% total decline in acute care hospital admissions across the State of Maryland.

**Table 15**
**Comparison of HMH Historical Admissions to Statewide Trends**
**FY2015 – FY2024**

| | Admissions | | | | | 2012-2016 |
|---|---|---|---|---|---|---|
| | 2012 | 2013 | 2014 | 2015 | 2016 | % Change |
| HMH | 5,132 | 4,727 | 4,693 | 4,174 | 4,384 | *-14.6%* |
| *% Change* | | *-7.9%* | *-0.7%* | *-11.1%* | *5.0%* | |
| Statewide Trend | 573,223 | 555,186 | 542,451 | 530,481 | 523,307 | *-8.7%* |
| *% Change* | | *-3.1%* | *-2.3%* | *-2.2%* | *-1.4%* | |

Sources: FY2012 through FY2016 HSCRC Annual Filings and Experience Reports

*2. The Conversion of HMH to UC FMF is in the Public Interest Based on HMH's Financial Performance Over the Past Five Years and in the Context of the Statewide Financial Performance of Maryland Hospitals.*

HMH generated operating margins ranging from 3.4% to 10.5% between fiscal years 2012 and 2016. These operating margins exceed those of the statewide average operating margins which ranged from 1.3% to 3.7% (Table 16). Notwithstanding HMH's operating

margins, HMH has outlived the useful life of its physical plant. Continued operation of HMH for the long term would require significant capital improvements with estimated costs of $239.3 million to bring the entire facility to modern standards (updated to a midpoint of construction in 2020). Given the significant capital required to renovate HMH, it would not continue to generate operating margins following any such renovation project.

**Table 16**
**Comparison of HMH Operating Margins to Statewide Financial Performance**
**FY2015 – FY2024**

| | Operating Margin (%) | | | | |
|---|---|---|---|---|---|
| | 2012 | 2013 | 2014 | 2015 | 2016 |
| HMH | 3.4% | 5.0% | 10.5% | 10.0% | 8.3% |
| Statewide Average | 2.4% | 1.3% | 3.1% | 3.7% | 3.2% |

Sources: FY2012 through FY2016 Annual Filings

*3. The Conversion of HMH to UC FMF is in the Public Interest Based on the Age of HMH's Physical Plant Relative to Other Maryland Hospitals and the Investment Required to Maintain and Modernize the Physical Plant.*

The average age of HMH's physical plant was 18.8 years in 2016. This compares to the statewide average of 10.8 years (Table 17). In a publication by Moody's Investors Service, dated September 8, 2016, it presents the median average age of plant for hospitals that it rates as 11.0 years. The statewide average is consistent with that median while HMH is well above it.

**Table 17**
**Comparison of HMH Average Age of Plant to Statewide Trends**
**FY2015 – FY2024**

| | Average Age of Plant (years) | | | | |
|---|---|---|---|---|---|
| | 2012 | 2013 | 2014 | 2015 | 2016 |
| HMH | 18.3 | 18.9 | 16.7 | 15.7 | 18.8 |
| Statewide Average | 12.0 | 11.2 | 12.7 | 12.0 | 10.8 |

Source: Annual Filings

For HMH to achieve the statewide average would require approximately $100 million in capital expenditures to modernize its physical plant. This estimate of capital expenditures reflects the level of investment in assets with a 25 year useful life that would be required to increase annual depreciation expense to achieve a 10.8 year average age of plant.

*4. The Conversion of HMH to UC FMF is in the Public Interest Taking into Consideration the Alternative Sources for Acute Care Inpatient and Outpatient Services That Will no Longer be Provided on the Campus After Conversion to a Freestanding Medical Facility.*

The conversion of HMH to UC FMF coupled with the other projects for which the applicants and UM UCH have sought the Commission's approval is in the public interest. As stated above, in conjunction with conversion of HMH to UC FMF, UM UCH has applied to the Commission to establish a forty (40) bed special psychiatric hospital on the campus of UC Medical Campus Havre de Grace. The proposed psychiatric hospital's inpatient units are organized into three separate "neighborhoods" to serve male and female patients from young adults (over age 18) to seniors. One twelve (12) bed neighborhood will be principally dedicated to geriatric psychiatry, while the other two neighborhoods will each contain fourteen (14) adult non-geriatric psychiatric beds. In addition to inpatient behavioral health services, UC Behavioral

will provide a broad array of outpatient services, including a partial hospitalization program, an intensive outpatient program, and a variety of outpatient, ambulatory behavioral health services, which will allow patients to transition through multiple stages of treatment at one centralized location.

UCMC and HMH have also applied for an exemption from CON review to construct a three-story, 78,070 square foot addition above the existing Kaufman Cancer Center at UCMC to accommodate 30 MSGA beds to be relocated from HMH to UCMC and 42 observation beds. Upon the conversion of HMH to UC FMF, the addition at UCMC would open and existing inpatients at HMH would be transferred to UCMC or UC Behavioral Health as appropriate.

UM UCH also plans to construct a medical office building at the UC Medical Campus at Havre de Grace that will house both primary and specialty care physician practices in order to provide access to additional providers in HMH's historical service area, including: (1) primary and specialty care physicians practices; (2) rehabilitation services (physical, occupational, and speech therapy); (3) outpatient infusion services (currently not offered at HMH); (4) imaging; and (5) laboratory services (draw station). The only existing outpatient services at HMH that will not be provided on the campus of UC Medical Campus at Havre de Grace are: (1) HMH's sleep study lab; and (2) outpatient pulmonary function testing.

*5. The Conversion of HMH to UC FMF is in the Public Interest Taking into Consideration the Adequacy and Appropriateness of HMH's Transition Plan.*

The conversion of HMH to UC FMF is in the public interest taking into consideration the adequacy and appropriateness of the applicants' transition plan. The applicants' transition planning focused around the overarching plan for transitioning emergency and observation services from HMH to UC FMF, the development of the special psychiatric hospital, needed

outpatient behavioral health services, the relocation of acute inpatient MSGA beds from HMH to UCMC, and provision of other outpatient services at UC Medical Campus at Havre de Grace. This transition plan supports the overarching vision that UM UCH has for its community, which includes creating an optimal patient care delivery system for the future health care needs of both Harford and Cecil County residents. This vision focused on the following:

- Quality and patient satisfaction with a focus on providing care in the right setting at the right time;
- Development of systems of care beyond the walls of a health care facility;
- A comprehensive network of specialty and primary care physicians;
- Multi-faceted ambulatory services; and
- Service placement and coordination with Union Hospital in Elkton.

The projected timeline for the transitioning of acute care services will be dependent on the Commission's approval of the special psychiatric facility – UC Behavioral Health, however, the projected timeline for the opening of UC Behavioral Health is the end of calendar year 2020 or early-mid calendar year 2021.

An initial transition plan for job retraining and placement for HMH employees has been started with the early projections of the potential number of employees who will be impacted by the conversion recognizing that there will be retirements as well as traditional employee transitions over the course of the next three or more years. As a component of the applicants' early planning there has been a projection of the full time equivalent needs for UC FMF, UC Behavioral Health, and the expanded acute services at the UCMC. Future planning will include the identification of alternative locations for employment such as within the planned medical office building to be developed at UC Medical Campus at Havre de Grace where a wide array of outpatient ambulatory services will be provided in conjunction with primary and specialty care physician practices as well as the expansion of ambulatory surgical services within the

community as a component of the overall UM UCH's Vision 2020 project. In addition, UM UCH plans to implement a Workforce Planning workgroup beginning in calendar year 2018. This workgroup will be comprised of multiple internal and external stakeholders including participation from the UM UCH Patient and Family Advisory Committee, the Susquehanna Workforce Network, the Harford County Government, and Harford Community College.

As it relates to preliminary plans for re-use of HMH's physical plant, UM UCH has engaged the commercial real estate firm Cushman & Wakefield to provide a comprehensive evaluation of the property as well as the community and market conditions, in order to assess the potential for successful re-use and/or redevelopment of the site. Through in-depth analysis of demographic and employment trends, extensive community stakeholder interviews, and economic development strategies, Cushman & Wakefield has identified demand drivers that would positively influence both UM UCH's and the City's interests in redevelopment of the property. These drivers have been synthesized into potential development options that could deliver both attractive financial returns and sustainable community benefits. The uses are broadly characterized as a mixed use development in a walkable, town center setting concept.

Cushman & Wakefield has concluded that the site would be attractive to investors and developers as a multi-phase, master-planned development that could provide a significant economic development benefits to the City of Havre de Grace and the surrounding community, and thus achieve the important shared goals for re-use of the property – maximizing financial returns and enhancing the second generation use of the property for the community's benefit.

*6. The Conversion of HMH to UC FMF is in the Public Interest Based on an Assessment of UCMC's Projected Financial Performance.*

UCMC is projected to generate operating profits in each year of the projection period (Table 18). The assumed retention of HMH's GBR will enable UCMC to absorb the losses associated with UC FMF.

**Table 18**
**UCMC Historic and Projected Operating Income**
**FY2015 – FY2024**

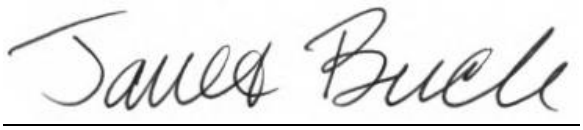
| | Historical | | Projection ($ in millions) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 | FY2024 |
| **Revenue** | **$ 275.6** | **$ 290.4** | **$ 300.9** | **$ 308.7** | **$ 314.8** | **$ 325.1** | **$ 335.6** | **$ 416.1** | **$ 429.6** | **$ 443.5** |
| **Expenses** | **241.6** | **261.1** | **269.7** | **275.6** | **284.1** | **292.7** | **301.7** | **382.0** | **394.7** | **408.2** |
| **Operating Income** | **$ 34.0** | **$ 29.3** | **$ 31.2** | **$ 33.1** | **$ 30.7** | **$ 32.4** | **$ 33.9** | **$ 34.1** | **$ 34.9** | **$ 35.4** |

For the reasons set forth above, the conversion of HMH to UC FMF is in the public interest.

## CONCLUSION

For all of the reasons set forth above, HMH and UCMC respectfully request that the Commission authorize the conversion of HMH to a freestanding medical facility and associated capital expenditures.

Respectfully submitted,



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August 4, 2017

## Table of Exhibits



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