

To: The Honorable Kevin Mullin, Chair, Green Mountain Care Board

From: John Brumsted, CEO, University of Vermont Medical Center
President and Chief Executive Officer, University of Vermont Health Network

Date: July 2, 2018

Subject: UVM Health Network quarterly report on inpatient mental health capacity

The UVM Health Network has begun the process of planning new inpatient psychiatric capacity in central Vermont. Please accept this memorandum as our first quarterly report on those planning efforts. As we have discussed, this first report is necessarily preliminary in nature. I anticipate future reports will address the GMCB's milestones in more detail.

The Current Crisis

As the GMCB's budget enforcement order recognizes, Vermont continues to experience an acute mental health treatment crisis. Although there is a lack of treatment capacity at many places along the care continuum, the crisis is most often experienced by Vermont hospitals in the form of patients waiting in Emergency Departments for days or weeks until an appropriate inpatient placement becomes available. In a recent reminder of the depth of this crisis, on certain days in June 2018, our Emergency Department had 20 psychiatric patients waiting for extended periods for lack of an appropriate placement.

It is important to keep in mind that the creation of new inpatient capacity – the subject of this report – is only one component of the solution to this crisis, and the UVM Health Network also continues to advance others that are within its ability to address. For instance, as part of its FY 2018 Mental Health Strategic Plan, the Network has prioritized integrating outpatient mental health care into its primary care practices. We hope this initiative, among others, will help prevent some patients from experiencing the type of mental health crises that require inpatient treatment.

Of course, many other pieces of the solution can only be addressed by our public and private partners. We remain committed to working with them to improve the entire mental health care delivery system in Vermont.

Planning Overview

Pursuant to the Board's direction, the UVM Health Network is planning to create significant new additional adult inpatient psychiatric treatment capacity on or near the Central Vermont Medical Center campus. We have developed a planning process that is designed to ensure that the new capacity is right-sized, clinically appropriate, and well-coordinated with existing treatment resources operated by other public and private providers. The planning process is also designed

to take account of many types of legitimate constraints that attend the creation of new inpatient capacity, such as space, finance, and staffing considerations. Finally, the process is designed to create capacity that will be eligible for the types and amounts of funding that will be necessary for sustainable operation. Taken together, these and other factors make for a planning process that is as challenging as any the Network has previously undertaken.

Planning Committee Structure

In order to tackle this challenge, I have assembled a Psychiatric Inpatient Capacity Steering Committee to oversee and support the Network’s planning process. The Steering Committee is comprised primarily of senior Network leaders with expertise in the wide range of specialized subjects necessary to guide a successful process and the ability to marshal internal resources in support of the effort. That Steering Committee will oversee the work of a smaller Planning Subcommittee, which will design and direct the day-to-day planning work.

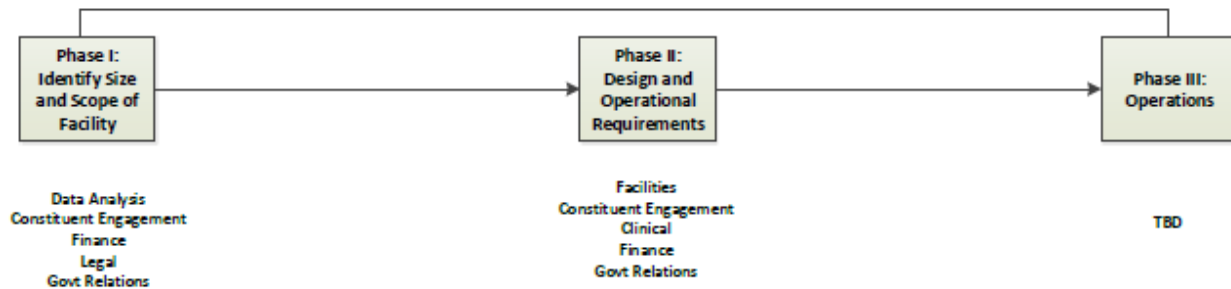
Steering Committee	Planning Committee
John Brumsted (Executive Sponsor)	John Brumsted
Anna Noonan (co-chair President COO CVMC)	Anna Noonan
Eric Miller (co-chair Deputy Gen Counsel and Senior Advisor)	Eric Miller
Theresa Alberghini DiPalma (SVP External Relations)	
James Alvarez (VP Support Services-CVMC)	
Heidi Guevin (Sr. Quality Improvement Partner, PM)	Heidi Guevin
Eve Hoar (Dir Strategic/Business Planning)	
Louis Josephson (Pres. and CEO Brattleboro Retreat)	
Dawn LeBaron (VP Hospital Services-UVMC)	
Bob Pierattini (Chief Psychiatry- UVMC)	Bob Pierattini
Howard Schapiro (chief clinical integration-Network)	
Marc Stanislas (Network VP treasury/Finance)	
Eileen Whalen (President COO UVMC)	
Jason Williams (Dir Gov and Cmty Relations)	Jason Williams
Scott Walters (Halsa Advisor)	Scott Walters
Kristin Anderson (Halsa Advisor)	Kristin Anderson

During the different phases of the project, discussed below, we will engage smaller action teams, comprised of both internal and external stakeholders and experts, to perform specific duties to support implementation. These teams will also serve as a key conduit through which the planning process solicits and incorporates the interests of a wide group of constituents.

Throughout the planning process, we will have the support of other subject-matter experts. First, we have retained Halsa Advisors, a health care facility-planning firm with deep knowledge of the UVM Health Network and Vermont, to guide and inform the plan. Second, we have engaged project management expertise from the Jeffords Institute. Finally, I have asked the UVM Health Network Planning Department to provide its experience in data gathering and analysis and facilities and capital planning.

Project Phases

We have divided the planning process into three phases, each of which will engage different action teams with the relevant skills.



Phase I will focus on identifying the size and type of facility that would best serve Vermont’s unmet inpatient psychiatric health needs. It is crucial that we create enough new capacity to meaningfully improve access to adult inpatient psychiatric care, but it is equally important that we not build more capacity than the system requires. Determining the right number of new beds is no easy task. It involves gauging present and future inpatient demand, taking account of limitations on federal reimbursement for care provided in existing facilities, and determining the effects that any additional planned step-down capacity will have on inpatient flow, among many other factors. While there is no way to arrive at a precise calculation of the unmet inpatient need, and it will be impossible to reach perfect consensus among all of the interested parties, we are committed to conducting a data-driven process that credibly answers these difficult questions. We hope to complete Phase I by early fall 2018.

Phase II will identify the design and operational requirements, including the location of the facility. This phase, too, will require us to consider a myriad of factors, such as whether and how to incorporate new capacity with existing facilities, how to take advantage of existing and future staffing resources, and how large an investment the UVM Health Network can responsibly make in new inpatient capacity. Our goal will be to build an efficient but state-of-the-art inpatient facility that provides our mental health patients with the high-quality care and respect they deserve. The timeline for Phase II will be determined, at least in part, by the size of the need identified in Phase I.

Phase III will begin implementation of detailed construction, financing, and operations plans.

Phase I Progress

Phase I work is underway, with an appropriately heavy focus on data collection and analysis, as recognized by the GMCB’s Milestones for Quarterly Reporting, referenced below:

- **Describe Activity Related to Appropriate Number and Type of Beds:** A multi-disciplinary data support and analysis team has convened to quantify the number and type of inpatient beds required to reasonably accommodate the population's current and projected needs. The core team consists of analysts in the UVM Health Network Planning Department, the Jeffords Institute, and Halsa Advisors, along with clinicians from the UVM Health Network.
- **Identify the Stakeholders from Whom UVMHN Will Seek Input:** The team's methodology and analysis will be coordinated with key constituents across the state of Vermont. The data analysis team has already met with VAHHS and is meeting with the Department of Mental Health and VAHHS together next week in order to gain the benefit of prior analysis, plan additional analysis, and discuss further stakeholder engagement.
- **Identify Existing Analyses and Data Sources:** I currently anticipate that our data analysis will draw on at least three different data sources in order to arrive at the most accurate and credible estimate of the number and type of inpatient beds necessary to meaningfully address the access and quality issues currently facing Vermont.

First, the data team will utilize very detailed data from the UVM Health Network's three Vermont hospitals – which consist of a large academic medical center, a community hospital, and a critical access hospital – to assess demand among our own patients and to extrapolate regarding demand in other HSAs.

Second, the team will work with VAHHS and the Department of Mental Health to analyze Vermont's unmet inpatient demand based on non-Network data from VAHHS member hospitals and the State-operated components of the mental health system.

Third, the team will draw upon national benchmarking and utilization data sources to help place the Vermont-specific data in a larger context. Much of this work is already moving forward, and we look forward to discussing this phase with you in more detail later this month.

- **Summarize Results of the Needs Assessment, When Available:** We anticipate that we will be able to provide the GMCB with an initial report on the results of our needs assessment in our next quarterly report.

Conclusion

We remain committed to this exciting and important project and are convinced that, if executed carefully and well, it will meaningfully improve access to inpatient mental health capacity in the State of Vermont in a way that benefits our patients and our care partners. We look forward to providing you with more detail and answering any questions you may have on July 11.

To: The Honorable Kevin Mullin, Chair, Green Mountain Care Board
From: The University of Vermont Health Network
Date: July 10, 2018
Subject: Supplement to July Inpatient Planning Report

- **Identify the stakeholders from whom UVMHN will seek input, and how those stakeholders will be engaged.**

UVMHN has and will continue to seek input from a broad group of stakeholders, including but not limited to the Agency of Human Services, the Department of Mental Health, Vermont hospitals (both through VAHHS and individually), other mental health clinicians, Vermont's Designated Agencies and other providers of community mental health services, state policymakers, patients and their families, and advocates, among others. The planning process will include many different opportunities for input from these stakeholders at every stage. First, Halsa is conducting one-on-one initial interviews with many stakeholders; some of those interviews have already taken place and others are currently being scheduled. Second, throughout the process, Dr. Pierattini will be soliciting input from the members of the standing Program Quality Committee, which has long served as an avenue through which a broad group of constituents – including policymakers, advocates, patients and their families – have provided valuable advice and engagement on the provision of mental health care by the UVM Health Network. Third, the subject-matter-specific action teams carrying out different aspects of the planning process will seek input from relevant stakeholders, as appropriate, during each phase of the project.

- **Provide analysis that supports the choice of CVMC as the location for additional inpatient psychiatric capacity.**

The UVM Health Network has three Vermont hospitals. Porter Hospital, in Middlebury, does not have an inpatient psychiatry unit. The UVM Medical Center has significant space limitations on its main campus, where its existing 28-bed inpatient psychiatry service is located. CVMC has additional space on or very near its campus, as well as an existing inpatient psychiatry service that could be expanded to meet additional need. The CVMC region has proven to be an attractive place to live and work, and we anticipate the location will help us attract the workforce necessary to operate additional inpatient beds. As its name suggests, Central Vermont Medical Center is also the Network hospital best located to most conveniently serve patients from across

the entire state and to coordinate with hospital emergency departments and other providers to transfer patients when appropriate. CVMC is adjacent to the existing Vermont Psychiatric Care Hospital (VPCH) and can therefore more easily coordinate and transfer care responsibilities between those facilities, regardless of the precise future programming at VPCH.

- **Describe how UVMHN will assess and address workforce needs for the additional beds.**

Workforce assessment will be a crucial component of the planning process and can begin in earnest once the number and type of new inpatient beds is better understood. CVMC has a strong track record of attracting high-quality clinicians and other skilled employees to all of its existing departments, including psychiatry; we anticipate CVMC’s location will help attract the additional workforce made necessary by this new capacity.

- **Describe how UVMHN will assess and address the need for additional investments in Health Information Technology (e.g., software licenses, hardware, infrastructure), if any.**

As the Board is aware, CVMC is currently converting to a unified EHR system, Epic. At this early stage, we anticipate any new inpatient beds would be served by Epic, just as our existing inpatient beds at both UVMMC and CVMC will convert to Epic. More detailed HIT plans, if any, must await decisions on the amount and type of new capacity to be built.

- **Complete the following table to the extent possible.**

	Measure(s) of Need	Methodology for Assessing Need	Existing Analyses	Potential Data Sources
Capacity Needs	Patients currently unable to promptly access inpatient psychiatric treatment when clinically appropriate	Analysis of UVMHN emergency department and inpatient data, along with sample chart reviews, to determine number of patients waiting for inpatient beds; analysis of VAHHS and DMH data to inform same statewide need; analysis of	UVMMC Barrier Days Analysis (2017); DMH analyses of involuntary patient demand (2017-2018); VAHHS analysis of Vermont ED data (2018); others to be collected.	See “Methodology for Assessing Need”

		national data and benchmarks.		
Workforce Needs	TBD			
HIT Needs	TBD			

- **Provide ED utilization data (number of visits, length of stay, wait time for inpatient beds, etc.) system-wide and by hospital.**

We currently have the following ED utilization data for the Network’s three hospitals. We will supplement it with additional VAHHS data once we have had an opportunity to further analyze it.

Between May 1, 2017 and April 30, 2018, 656 patients waited in the UVM Medical Center Emergency Department for a mental health bed. Of those patients, 422 were admitted to UVMMC, and 234 were discharged to an inpatient psychiatric bed elsewhere. The wait times for those patients were as follows:

Patient Wait Times for IP Psych Beds Hours in the ED until admission or transfer	Mean	Min	1st Qu.	Median	3rd Qu.	Max.
All Patients	55.1	2.2	20.6	55.1	71.2	507.1
Patient Type	Mean	Min	1st Qu.	Median	3rd Qu.	Max.
Admit to UVMMC Med/Surg, then discharged to IP Psych	12.9	2.5	4.7	7.3	11.3	77.8
Admit to UVMMC IP Psych	49.2	2.2	19.5	36.0	69.6	291.1
Discharged to other IP Psych Hospital	71.5	7.5	26.0	45.8	80.6	507.1

At CVMC, the number of patients who waited in the Emergency Department for a mental health bed, either at CVMC or another facility, grew substantially from FY 2016 to FY 2017, as did the length of the patients’ wait times:

- The number of patients waiting in the ED for transfer to an inpatient bed increased 21% from 607 to 735.

- The average length of time those patients waited in the ED to be admitted to CVMC's inpatient psychiatric beds increased 107% to 14 hours.
- The average length of time those patients waited to be admitted to an inpatient psychiatric bed anywhere other than CVMC increased by 315% to 72 hours.
 - The average length of time those patients waited in the ED to be admitted to an inpatient bed at the Brattleboro Retreat increased 330% to 75 hours (3.2 days).
 - The average length of time those patients waited in the ED to be admitted to an inpatient psychiatric bed at the Rutland Regional Medical Center increased 110% to 25 hours.
 - The average length of time those patients waited to be admitted to VPCH decreased by 3% to 55 hours.

At Porter Hospital:

- There were 37 patients in FY 2017 who remained in the ED while awaiting an available bed at a mental health facility. In FY 2018 year-to-date, there have been such 30 patients.
- The 37 patients Porter served in FY 2017 required 4,236 hours in 1:1 direct care, and FY 2018 year-to-date has amounted to 2,843, a total of 4,874 hours annualized.
- In FY 2017, the time patients spent awaiting appropriate mental health placement ranged from a minimum of 2.8 hours to 7.9 days. The average wait time was 40.2 hours.
- Year-to-date FY 2018, the wait time ranged from 3.5 hours to 8 days for placement. The average wait time is 41.1 hours.

- **Inpatient psychiatric bed occupancy rates; system wide and by hospital.**

We currently have hospital-specific occupancy rates at UVMMC and CVMC, as well as system-wide rates, which include all Vermont hospitals with inpatient psychiatric beds.

Occupancy at UVMMC's two inpatient psychiatry units were 99% and 96% in June 2018, the most recent month available. Occupancy at CVMC, which has many double rooms that cannot always be fully utilized, was 94% in June 2018.

According to the data provided by the Department of Mental Health, weekly occupancy rates of adult inpatient beds at all of the state's Designated Hospitals were between 94% and 100% during the month of June 2018. ***In that same period, 100% of the so called "Level 1" beds, reserved for the most acutely ill patients, were occupied.***

- The flow of funds from \$21 million FY 2017 net patient revenue overage (using the table, below)

Time Period	Description of Transaction	Amount of Expenditure	Amount of Revenue	Balance
FY 2018 Q3	Halsa Advisors engaged, first invoice issued, with payment to be made in July 2018			

- In the July 1 and January 1 reports, updates on actuals vs. approved budget.

University of Vermont Health Network	YTD MAY			
	2018 Budget	2018 Actual	\$ Δ	% Δ
Revenue				
Total Net Revenue + FPP	979,397,380	1,016,437,305	37,039,925	3.8%
UVMHC	794,336,841	826,698,080	32,361,240	4.1%
CVMC	132,694,391	134,611,812	1,917,421	1.4%
Porter Hospital	52,366,148	55,127,412	2,761,264	5.3%
Other Operating Revenue + 340B	83,609,049	85,812,055	2,203,006	2.6%
UVMHC	71,125,535	73,613,890	2,488,356	3.5%
CVMC	9,104,919	8,796,823	(308,096)	-3.4%
Porter Hospital	3,378,595	3,401,341	22,746	0.7%
Total Revenue	1,063,006,428	1,102,249,360	39,242,931	3.7%
Expenses				
Salaries and Benefit Expense	608,322,543	632,351,323	(24,028,780)	-4.0%
UVMHC	484,706,504	507,252,521	(22,546,017)	-4.7%
CVMC	91,130,730	92,080,677	(949,948)	-1.0%
Porter Hospital	32,485,310	33,018,125	(532,815)	-1.6%
Total Non-Salary Expense	418,870,703	431,666,486	(12,795,784)	-3.1%
UVMHC	349,395,506	361,031,910	(11,636,404)	-3.3%
CVMC	47,952,220	49,828,052	(1,875,832)	-3.9%
Porter Hospital	21,522,976	20,806,525	716,451	3.3%
Total Operating Expenses	1,027,193,246	1,064,017,809	(36,824,564)	-3.6%
Net Operating Income (Loss)	35,813,183	38,231,550	2,418,367	6.8%
Operating Margin %	3.4%	3.5%		
Projected FY2018 Year-End Total Net Revenue + FPP				
	<u>FY2018 Budget</u>	<u>FY2018 Budget Rebased</u>	<u>FY2018 Proj</u>	<u>% Δ Rebased to Projected</u>
UVMHC	\$ 1,212,580,571	\$ 1,252,297,020	\$ 1,248,164,121	-0.3%
CVMC (not rebased)	\$ 198,695,454	\$ 198,695,454	\$ 203,951,635	2.6%
Porter Hospital	\$ 79,146,442	\$ 80,862,127	\$ 82,231,330	1.7%
Total UVMHN - VT Hospitals	\$ 1,490,422,467	\$ 1,531,854,601	\$ 1,534,347,086	0.2%

- **Provide timeline/work plan and progress report for developing and submitting the CON application.**

We will provide a CON timeline as soon as the planning process produces sufficient information to support it. We will also complete the table in Section III of the GMCB Milestones document as soon as the planning process allows us to do so with a reasonable degree of accuracy.

- **Describe how UVMHN will ensure that the proposal avoids IMD issues.**

In order to ensure the sustainability of any new inpatient capacity, that capacity must be created in a location and number that avoids IMD exclusion from Medicaid funding. We have preliminarily analyzed the factors that will bear upon this issue, utilizing expertise from within the Network, other hospitals, and the State. As the planning process continues, we will work with policy experts, lawyers, and others to ensure that we maximize the ability to draw upon Medicaid funding for the care provided in any new beds.

- **Verify that CON-related activities are included in 2019 hospital budget submission(s).**

The UVM Health Network's FY 2019 Budget Narrative identified the CVMC psychiatric inpatient capacity project as among the capital projects the Network will be undertaking in the coming years. Consistent with our discussions with GMCB staff, the Network has not yet assigned a dollar value to the project in its capital plan, but will do so as soon as the planning process allows.