THE
University of Vermont
HEALTH NETWORK

August 26, 2016

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Kaili Kuiper, Staff Attorney
Vermont Legal Aid, Inc.
Office of the Health Care Advocate
264 North Winooski Avenue
P.O. Box 1367
Burlington, VT 05402

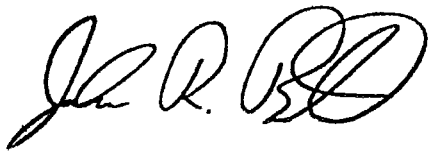
Re: FY 2017 budget

Dear Ms. Shaw and Ms. Kuiper:

On behalf of the two University of Vermont Health Network hospitals that are part of the budget review process, enclosed are our responses to the questions posed in your August 11 letter. As we mentioned at the budget hearing on August 17, we regret that we did not receive these in time to have written responses at that hearing, and hope we were able to address some of them in our discussion that day.

In any event, we have endeavored to answer all of the questions as completely and as thoughtfully as possible here. Please do not hesitate to contact us if you have further questions.

Very truly yours,



John R. Brumsted, MD
President and CEO, UVM Health Network

Encs. (4)
cc: Green Mountain Care Board

General

1. **Please clarify several details regarding the table at the bottom of page 4 of your narrative:**

   a. **We are assuming that the top line of the chart contains a typo, and is presumably the FY2015 Actual Net Patient Revenue (and not FY17 Budget). Please confirm.**

You are correct. Enclosed is a revised version of the budget narrative with the correction.

   b. **We are assuming that $1,219,432,174 refers to patient revenue before Provider Tax. Please confirm, and clarify what the provider tax was in FY2015.**

UVM Health Network's audited financial statements report the Medicaid provider tax as a deduction from revenue. Therefore, the table at the bottom of page 4 reports FY 2015 net patient revenue (NPR) after reducing it by the provider tax.

UVM Medical Center's provider tax for FY 2015 was $61,055,591, while CVMC's provider tax was $9,613,251 ($752,688 of which was the provider tax on Woodridge Rehabilitation and Nursing).

2. **Please explain why your projections for FY16 have not been adjusted based on your partial year actuals. Please provide your projections for FY16 based on the partial year actuals.**

Our FY 2016 projections show us to be on track to end the year within the 0.5% allowed NPR variance:

(in millions)	FY 2016 YTD May Annualized	FY 2016 Budget	$ Variance	% Variance
UVM Medical Center	$ 1,131.7	$ 1,126.8		
CVMC	$ 189.9	$ 174.0		
Physician integrations		$ 5.8		
FY 2015 increased access		$ 12.4		
Total	$ 1,321.6	$ 1,319.0	$ 2.6	0.2%

3. **Why do you believe the Green Mountain Care Board should agree to rebase your budget? How do you plan to contain your growth going forward?**

We have asked the GMCB to recognize two categories of NPR in our FY 2017 budget as existing spending in the system: $12.4 million relating to increased volumes we have experienced beginning in FY 2015, and $11.6 million from two physician practice integrations that occurred during the course of this fiscal year.

The physician integration NPR is simply a shift of existing unregulated NPR onto regulated budgets.

As we discussed at the hearing, the increased volumes we saw beginning in FY 2015 have not disappeared, nor have they increased. They appear to be a one-time bump in volumes that was likely caused by a variety of factors, including greater access to health care in general with the advent of the health care exchange and expanded Medicaid, and increased access to primary care at the UVM Health

Network resulting from a number of our population health management initiatives. As the table on Slide 16 showed, most of this change in volume is happening not on the inpatient side, but in outpatient and physician visits – exactly the type of shift that population health management is trying to move us to.

In terms of containing our growth going forward, under population health management our challenge is to contain the wrong kind of growth – growth in high-cost, high-acuity services – by investing in better care in more appropriate settings. We are fully committed to doing that, and believe that the shifts in volumes we are beginning to see are a preliminary indication that we are moving down that path.

4. What is the expected All-Payer and/or Medicare case mix index for each hospital for FY17?

a. Please also provide each hospital's case mix index for FY14 (actual), FY15 (actual) and FY16 (budget and projected) along with any drivers (e.g. demographic shifts, product line additions, payer mix changes, etc.) that explain increases or decreases over time.

b. Please explain the basis for anticipated changes to the each hospital's case mix index going forward from FY16, if any.

CMI is currently trending higher overall at both the UVM Medical Center and CVMC. There are many factors that could be influencing this change. One example is the aging demographics of Vermont since Medicare patients tend to have a higher CMI.

	FY14	FY15	FY16		FY17
	Actual	Actual	Budget	YTD Jan	Budget
All Payers					
UVMMC	1.66	1.66	1.66	1.71	1.71
CVMC	1.17	1.18	1.18	1.23	1.24
Medicare					
UVMMC	1.89	1.85	1.86	1.93	1.93
CVMC	1.28	1.31	1.31	1.33	1.33

The basis for FY 2017 CMI budget is the current year trend. There were no major changes built into this budget.

5. You state on page 12 of your narrative that you do not anticipate any significant shifts in payer mix in FY 17. On page 5 of your narrative you reference the shift in payer mix from commercial to Medicare and Medicaid and describe the shift as a trend. Please explain how you came to the conclusion that this trend will not continue in FY17.

On page 5 of the narrative, we were explaining our experience with bad debt and free care in FY 2016, which was affected by the shift in patients from commercial insurance to Medicare and Medicaid that started in FY 2015 when the health exchange and Medicaid expansion took effect.

On page 12, we were responding to the question of whether we foresaw any additional changes in our bad debt or free care assumptions that could materially impact our FY 2017 budget. As we noted on page 5, we believe our bad debt and free care rates have leveled off and do not anticipate any significant changes from what was filed as part of the budget.

a. What are the changes in payer mix that you expect to see going forward?

As discussed at the hearing, we anticipate increases in Medicare patients, and decreases in commercially-insured patients, as the population continues to age.

6. You state on page 8 of your narrative that you are adding 75 FTEs for "Hospital Operational Changes." Please provide detail on what these roles will be and why they are being added to your current staff. Are these roles entirely new? Are they expanded from existing positions? Are they changing contract positions to in-house? Please explain how the new positions will decrease costs and/or increase quality of care.

UVM Medical Center's budget includes 36 FTEs in this category:

	FTEs
Clinical service (lab, radiology, perioperative, rehab)	9.0
Pharmacy (prescription home delivery, specialty pharmacy expansion, retail extended hours)	5.0
GME (additional administrative support & UVM transfer)	6.0
Network support services (budget, risk management, credentialing, audit)	6.0
Hospital services (moving into new space, including Miller Building)	6.0
Other changes	4.0

The clinical services / ancillary areas increases are related to an increase in the number of patients being seen. All of the Pharmacy positions are related to expanded services, including mail order, home delivery and extended hours at the Medical Center Campus retail pharmacy. The graduate medical education (GME) changes are related to recommendations from our national accrediting body, the Accreditation Council for Graduate Medical Education, to add more support, along with transfers of existing positions from UVM (3.4 FTEs). The UVM Health Network positions are being added to help support our network, while the hospital services positions are related to additional buildings (the network offices and the new space in the GE/IDX building in South Burlington), as well as preparing for the new Miller Building coming online. The remaining changes are due to partial FTE additions across a wide variety of departments, both clinical and non-clinical).

CVMC's budget includes 39 new FTEs in this category:

	FTEs
Environmental services	10
Woodridge	7
Diagnostic imaging	5
Coding/med records/CDI	5
HR (employee relations, workday)	4
Palliative care	2
Pharmacy	2
Rehab	2
Care manager	1
Organizational education	1

Of the 7 Woodridge FTEs, two each are for life enhancement providers (activities coordinators), physical and occupational therapy, and nursing, and one is for environmental services.

The increases in HR have to do with our new recruitment program to attract and retain staff.

The organizational education position relates to one of CVMC's goals this year: to create an organizational education and effectiveness program. As an organization CVMC recognized that there was a need for direction and planning for ongoing staff development, as well as coordination of programs and educational resources. Our overall goal is to create a high performing/reliability organization by providing education and development resources to staff, patients and the community. Additionally we strive to provide a coordinated, structured program to onboard, continually prepare and advance staff.

All other CVMC additions are being driven by our higher admissions and outpatient volumes.

7. As a nonprofit with a duty to benefit your community, please explain the policies your organization has, if any, to put a reasonable cap on executive pay and on the percentage of your overall budget that is attributable to administrative costs.

The UVM Health network and its affiliate organizations are complex institutions that employ thousands of individuals, including highly-trained professionals, and that play a critical role in the health care delivery system in Vermont and New York. In order to meet our mission, which includes not only delivering high-quality care but research and education, it is imperative that the organization attract and retain talented administrators to lead and manage the organization. The executive compensation program is designed to focus, motivate and retain such individuals. It is consistent with market best practices and the current non-profit compliance and regulatory environment.

CEO and executive compensation is determined by the Compensation Committee of the UVM Health Network Board of Trustees. The committee works with an independent consultant who provides comparative data about similar positions in the northeast and across the United States. The committee assesses salaries against that benchmark information.

The committee's goal is to provide compensation that is fair, reasonable, and in line with compensation at similarly complex institutions across the country. Compensation is set at the 50th percentile for the peer groups. Total compensation – including base and any incentives – is targeted at the 65th percentile.

The UVM Health Network pays competitive, market-based wages to all of its employees.

8. How do you determine for which programs and services to increase commercial rates? Are the increases based on projected cost increases by program or service or based on something else?

The UVM Health Network hospitals perform a comprehensive review of their list prices for all services on an annual basis. For the FY 2017 budget, UVM Medical Center and CVMC have proposed no price increase for their services (inpatient, outpatient and professional) in the aggregate. The only price change proposed is for CVMC's skilled nursing facility (3.2%), which is anticipated to yield an NPR increase of 0.7%.

On an annual basis, UVM Health Network uses regional and national pricing benchmark data to adjust individual prices based on comparative benchmarks for individual CPT and HCPCS codes, with individual prices increasing or decreasing across all programs and services. This process develops a fair fee schedule that appropriately places our pricing within the national and regional average percentiles. UVM Medical Center also periodically compares our prices with other academic medical centers and New England teaching hospitals, and we have found that our list prices for services provided are reasonable, and in many cases, are at a lower rate within the New England region.

Every few years, a national consulting firm specializing in hospital pricing is brought in to review all charge line items and prices for reasonableness and accuracy. UVM Health Network undertook this process again in the past year, and has used their pricing recommendations in the FY 2017 budget.

9. How did you determine the margin targets for the two hospitals and the Network?

As we discussed at the budget hearing, hospitals need margins to continue to invest in the programs, infrastructure and people essential to ensuring we can meet our mission into the future.

From a general perspective, hospital margin targets should be in the range of 2 – 5%. Multiple factors influence what the actual target margin percentage should be, including current financial position, capital investment needs, the current market, the type of hospital the margin target applies to, and minimum financial thresholds of creditworthiness. All of these considerations inform how we develop margin targets for the UVM Health Network and our individual institutions.

Margin, together with days cash on hand and debt capacity, are key metrics in building an organization's capital framework (its short-term and long-term investment plan). Rating agencies have benchmarks for these metrics, and our budget is built on meeting or exceeding the A-rating benchmarks. The A rating has allowed us to refinance existing debt at the most favorable rates, and to access the capital markets to help support needed investments in our infrastructure and programs. Our recent refinancing, for example, will save us $3.1 million in interest savings just in FY 2017.
The overall margin target for the UVM Health Network is 3.5%, with individual institution margin targets ranging from 2 – 4%.

a. Are these long-range targets?

The UVM Health Network has a five-year financial plan that is refreshed on a regular basis.

10. Please describe how your budget process would differ if a 3- or 5- year net patient revenue cap were used rather than a yearly cap.

The hospitals and the GMCB have been discussing whether the NPR caps remain the best way to constrain cost growth in the health care system, or whether other metrics that giver a fuller picture of the system should be added, especially as hospitals move away from the current mostly fee-for-service payment system into one in which we assume accountability for the health of a population. Having said that, reviewing a hospital's performance under any metric over a longitudinal period of time arguably gives a better picture of what is really happening, as it smoothes out "noise" that can arise for any number of reasons.

11. What is each hospital's budgeted amount for Medicaid underpayment for FY17?

Medicaid underpayment (payments less the cost of providing the services) is a calculated number in the budget based on many considerations and assumptions. Assumptions are made as to future payment levels (payments include all net funds flowing to and from the State, including the provider tax and adjustments for bad debt and free care), then an overall cost estimate is applied. Using this model the calculated amount of underpayment in the FY 2017 budget from Vermont Medicaid is approximately $90 million for the UVM Medical Center. CVMC's budget anticipates a Medicaid shortfall of approximately $15 million.

12. You state that population health management policies have reduced emergency department utilization in terms of number of admissions per 1,000 patients. Can you point to any evidence that the reduction is due to population health management rather than changes in your population's insurance coverage from the Affordable Care Act?

It is too early to fully understand the impact of our population health management activities, or to disentangle them from the multitudinous other variables at play in health care. Having said that, we do know that new patient visits have increased 62% since FY 2014, which means we are more actively managing our patient population, and that ED utilization for patients in our primary care practices is

going down; this appears to be preliminary evidence that our commitment to better preventive and primary care is moving us in the desired direction of keeping patients out of high-cost, high-acuity care settings by working with them to better manage their health in more appropriate settings.

13. Please provide a description of each of your Choosing Wisely initiatives.

a. Which Choosing Wisely initiative saved $20,000?
b. Have you identified measureable cost savings or quality improvement from other Choosing Wisely initiatives?
c. How have you have chosen which departments participate in Choosing Wisely?

We have enclosed a recent article from the British Medical Journal that describes the genesis of this work at UVM Medical Center, which we call "High-Value Care" (HVC),[1] as well as a number of the initiatives that have been undertaken. As we discussed at the hearing, the HVC program takes a grass-roots approach to identifying and ultimately reducing harmful, unnecessary or low-value care under physicians' control. The $20,000 per month savings mentioned in our budget narrative related to the project that focused on the routine use of chest x-rays in intensive care units. We estimate that since the inception of these initiatives, they have generated savings (defined as reductions in revenue to us plus reductions in cost) of approximately $675,000.

Ideas for additional HVC initiatives are solicited through a Department of Medicine website (http://www.med.uvm.edu/medicine/department_of_medicine_high-value_care_program). Applications can be made at any time and are evaluated on a rolling basis.

It is important to understand that our commitment to quality and efficiency is not limited to the HVC program. The Jeffords Institute for Quality and Operational Effectiveness was established at the UVM Medical Center two decades ago. It brings together more than 50 professionals with expertise in data analytics, patient safety, patient and family advocacy, regulatory compliance, infection prevention, research and quality improvement methodology. Those resources, which have supported quality improvement activities for years at the UVM Medical Center, are now available to the entire UVM Health Network, as well as to community partners (for example, the Jeffords Institute recently worked with the Howard Center to maximize the efficiency of their medication-assisted treatment (MAT) program). The Jeffords Institute hosts regular quality forums where staff from across all of our network organizations come together to showcase the quality initiatives they have undertaken. The most recent quality forum, held in April 2016, included more than 75 different projects. We have enclosed a brochure from that forum, which illustrates the broad range of projects our staff were engaged in this year alone.

[1] "Choosing Wisely" is a protected trademark, so we cannot use that term officially.

Community Benefit

14. Please explain how the federal regulations on nonprofit financial assistance policies and billing practices that go into effect on October 1, 2016, affect your budget proposal for FY17 as compared to FY16.

a. How do you anticipate the regulations affecting your bad debt and charity care?

b. Which charges did you base your financial assistance discounts upon in FY16?

In March of 2014, the UVM Medical Center updated its financial assistance policy to comply with the IRS 501r proposed rules. Our financial assistance program shifted from one that used a federal poverty level (FPL)-scaled deductible plan to an FPL-scaled discount grant program based upon a calculation of what was the average generally billed (AGB) to insured patients. That policy was also implemented by CVMC as we have worked to develop joint UVM Health Network policies for financial assistance.

While the AGB calculation in FY 2016 was based upon a blended payer collection rate for fully adjudicated claims, the final 501r rules (released on December 29, 2015) required a calculation using the "allowable" charge. When calculating for the allowed charges our AGB shifted from 55% to 51%, in essence reducing the minimum discount amount we could offer to our patients. To ensure we would continue to offer the best discount possible, we chose to increase the payer blend to include Medicaid and are now able to maintain the previous generous discount level.

Thus, the FY 2016 calculation used a blended collection rate for Medicare, Medicare Advantage and commercial payers, and the FY 2017 calculation now uses a blended "allowable" rate for a broader range of payers, including Medicare, Medicare Advantage, Medicaid and commercial payers.

Because the change in calculating AGB under the new rules was implemented so as to maintain our previous level of financial assistance, we did not include any changes to free care or bad debt levels in our FY 2017 budget relating to the final regulations and policy. As noted in the budget narrative we filed on July 8, while our bad debt and free care are going down from FY 2016 budget to our FY 2017 budget, that is not due to the new rules; rather, it recognizes the downward trend in these items that started in FY 2015. As we have said, the FY 2017 budget represents where we believe these items have settled.

15. We are interested in better understanding the level of community benefits that the University of Vermont Health Network (UVMHN) has been providing and is committing to providing in its FY17 Budget. This seems especially relevant given the proposed $12.4M rebasing of the net patient revenue baseline. UVMHN committed to providing this incremental amount for community needs as a significant component of its response to the FY15 actual versus budget variance, and now proposes to keep this amount in the revenue baseline.

a. For all community benefits that you listed on your Form 990 Schedule H, what is the dollar amount you are budgeting for each benefit by year (FY14 Actual, FY15 Actual, FY16 Budget, FY16 Projection, and FY17 Budget)?

As we discussed briefly at the hearing, the Form 990 community benefits schedule (Schedule H) was developed by the Internal Revenue Services – using a methodology originally pioneered by the Catholic Hospital Association – as one way of measuring how nonprofit hospitals were meeting their nonprofit missions. If you look into how those calculations are made, you will find that while some of the numbers used in Form 990 reporting come from readily-available resources or from applying specified formulas to existing numbers (for example, how Medicaid underpayments are calculated), other elements of Form 990 depend on robust data collection about things like individual staff activities that qualify as community benefits. Because those activities require considerable resources to track, not all hospitals do so with the same capacity.

Because of the challenges inherent in Form 990 reporting, therefore, CVMC and UVM Medical Center calculate the amounts included in their respective Forms 990 differently. CVMC measures community benefits using actual dollar figures, not things like staff participation in health fairs. Because of that, they are able to budget those amounts using general ledger figures:

CVMC	FY 14 Actual	FY 15 Actual	FY 16 Budget	FY 16 Projected	FY 17 Budget
Financial assistance at cost	$860,631	$909,647	$1,085,994	$933,527	$1,163,700
Medicaid and other public programs shortfall	$11,444,877	$12,561,101	$11,843,053	$14,659,632	$15,033,298
Community health improvement services	$51,193	$49,670	$64,000	$44,414	$44,000
Health professionals education and research	$298,491	$322,201	$415,853	$340,120	$460,396
Subsidized health services	$4,113,293	$7,470,305	$7,416,889	$10,400,784	$11,092,394
Contributions for community benefit	$46,766	$30,000	$29,000	$34,632	$29,000

UVM Medical Center, by contrast, started tracking community benefits using the CHA methodology in FY 2006. That includes using an online tool developed by the CHA known as the Community Benefit Inventory for Social Accountability (CBISA), which allows us to track the various types of community benefits reportable under Form 990 with greater precision. As such, the development of UVM Medical Center's Schedule H reporting is a retroactive exercise, rather than a budgeting function. Our most recent Form 990 filing was for FY 2015. We will not file our FY 2016 Form 990 until 2017.

UVM Medical Center	FY 14 Actual	FY 15 Actual
Financial assistance at cost	$6,257,657	$3,808,545
Medicaid and other public programs shortfall	$94,428,503	$103,321,444
Community health improvement services	$3,485,264	$3,358,511
Health professionals education and research	$37,552,657	$39,142,099
Subsidized health services	$6,616,562	$8,320,489
Contributions for community benefit	$1,275,761	$2,309,378

b. **Please show where the incremental $12.4M adjustment fits into this projection**.

We will capture the $12.4 million in investments in our Form 990 filings for FY 2016 and succeeding years. As we discussed at the hearing, some of those investments will be one-time only, but many of them will have ongoing expense associated with them, like the expansion of MAT services at Day One and the additional dental chair being brought online at the UVM Medical Center Dental and Oral Health practice.

c. In adding it to the net patient revenue baseline going forward, is UVMHN committing that the $12.4M will also be added to the baseline of community benefits and carried forward? If not, why not?

As we discussed at the hearing, the FY 2015 dollars that we directed to new or additional community investments were not bottom-line dollars, but revenue brought in for treating patients, with associated costs. We did, however, take that opportunity to make some investments in areas of need that have been identified by our Community Health Needs Assessments. Going forward, we have developed the process outlined in our hearing to partner with others in our community to continue investing in areas of identified community need.

d. What is UVMHN's current level of community benefits as a percentage of revenues?

i. What percentage level would UVMHN be willing to commit to on an ongoing basis?

ii. Please provide a detailed breakdown of the programs and other components you include in your community benefit calculation.

CVMC's community benefits, as a percentage of expenses (how the measure is captured in our Form 990 filings), was 12.41% in FY 2015; UVM Medical Center's community benefit was 14.92%, a level consistent

with its community benefits for a number of years. We do not anticipate those levels fluctuating in any substantive way.

These levels compare well to area hospitals. In FY 2014, for example, Albany Medical's community benefit was 9.72%, Rutland Regional's was 12.82%, and Northwestern Medical Center's was 8.73%. We also compare well when looking at regional health system: in FY 2014, Partners Healthcare's community benefit totaled 10.09%; Dartmouth-Hitchcock Medical center's was 14.20%; Boston Medical Center's was 14.14%, and U Mass Memorial was 7.67%.

As noted earlier, community benefits as reportable to the IRS on Form 990 comprise many different types of spending or (in the case of Medicaid and similar public programs) forgone revenues. General categories that are tracked include:

- direct financial assistance to patients – charity care – measured at cost, rather than at gross charges;
- subsidized programs, including health professions education (programs and financial assistance for physicians and medical students, nurses and nursing students, and other health professionals) and subsidized health services (services that benefit our community, including the uninsured and low-income individuals, despite incurring losses – a good example being mental health and psychiatry services);
- community programs and direct grants, which in turn includes:
  - community health services (health education classes, support groups, screening services, free clinics, etc.),
  - financial contributions and in-kind donations (cash donations, grants, in-kind support such as meeting rooms, parking vouchers, supplies), and
  - community benefit operations (community health improvement operations, community health needs assessments, etc.); and
- Medicaid and other public program underpayments (for example, Ladies First and the VA).

16. How does the money you plan to spend on community benefits align with the top five issues identified in your most recent Community Health Needs Assessment (CHNA)? If your assessment of your top five issues has changed since your last CHNA, please explain the change as part of your answer.

a. Are there needs identified in your CHNA that you would like to address, but feel that additional cooperation by outside entities is required for an effective solution?

Because community health needs assessments (CHNAs) are focused on local hospital service areas as defined by the State when Act 53 was passed in 2003, UVM Medical Center and CVMC each do separate assessments.

UVM Medical Center, which has been participating in community needs assessment since the 1980s, completed our most recent CHNA earlier this year; it was approved by our Board of Trustees in June. That process identified the following health needs (in alphabetical order):

- Affordable housing
- Economic opportunities
- Early childhood and family supports
- Access to healthy food
- Chronic medical conditions
- Healthy aging
- Mental health
- Oral health
- Sexually transmitted infections and teen births
- Substance abuse

This is similar to the top five needs identified in our 2013 CHNA, which included access to food and good nutrition, dental health (especially children), mental health (especially children), removing barriers to care (transportation, language, affordability), and senior issues (safety, caregiving, well-being).

UVM Medical Center is now developing an implementation strategy on how to address the identified needs. Workgroups for nine of the topic areas have been formed, and include a senior leader, a patient/family advisor, a medical student or resident, a representative from the Vermont Department of Health, and other relevant staff; meetings are being facilitated by Quality Consultants from the Jeffords Institute. Each workgroup is scheduled to meet twice over the summer. In addition, a "community leader" breakfast was held on July 26 to bring together over 150 individuals who could inform the implementation strategies of the work groups. The workgroups are responsible for identifying existing internal and external programs that address the health needs, as well as developing ways in which the UVM Medical Center can effectively respond to these needs. Workgroups will develop an aim statement, tactics, and measurable outcomes for their assigned community health need. The plan is to incorporate three of the nine health needs in each of the next three fiscal years into UVM Medical Center's strategic plan. The complete implementation strategy will be published in December 2016 after approval by the Board of Trustees.

CVMC's 2013 CHNA identified the top five needs in the central Vermont area as healthy living, immunization rates, prenatal care, transportation and youth obesity. Progress was made in all of those areas, which led them to identify slightly different needs as the top five to be addressed in their 2016 CGHNA:

- Drug abuse
- Mental health
- Tobacco use
- Healthy diets

- Youth participation in physical activities

CVMC has seen some improvements in areas of healthy living, so we have chosen to focus on some specific healthy living components in our new assessment, which represent significant needs in our community. Immunizations rates have increased, and continue to increase based on the most current data. Prenatal care is still very important, but was eclipsed by some of the more critical needs in the community, namely the abuse of opioids and other drugs, and mental health. Transportation was a major focus area in CVMC's last assessment. We have chosen to remove it from the current assessment, but we will continue to support the improvements we have made in the community related to public transportation. Youth obesity is still a major issue, so we have chosen to narrow our focus on the two biggest factors contributing to obesity: healthy diets and physical activities.

Many of these strategies of both organizations will depend on working with community partners who are also focused on addressing these needs, much as UVM Medical Center has collaborated on housing efforts this past year.

Health Information Technology

17. What timeframe do you anticipate for replacing your electronic health records system?

Our proposal to replacement electronic health records across the UVM Health Network will be subject to CON review. We hope to file a CON application in the near future. Assuming the CON is approved, the project will take approximately 40 months to complete.

18. Which services offered by VITL (Vermont Information Technology Leaders) do you use?

At UVM Medical Center, we use the full range of VITL's "Connectivity" services, which means that we both send and receive patient demographics, lab orders, lab results, transcribed reports (radiology, pathology, etc.), Clinical Summaries, and information on the Vermont Immunization Registry. In 2016, those totaled almost 279,000 transactions through July. At present, CVMC has "send" capacity only for those same transactions.

UVM Medical Center also uses two of VITL's "Provider" services: VITL Access (its secure provider portal that accesses clinical data available through the Vermont Health Information Exchange) and VITL Direct (its secure point-to-point messaging system). CVMC will be ramping up VITL Access for use in the Emergency Department, and by Medical Record nurses and in physician practices, sometime this fall.

a. To what extent are VITL's services integrated into the hospitals' care delivery?

At UVM Medical Center, everything but VITL access is automated. We are in the process of building VITL Access directly into our electronic health record so that a provider can go from the patient they are

looking at there straight into the same patient's page in VITL Access. This is working in a test environment now, and we hope to completely deploy it this fall.

b. Have the hospitals experienced any cost savings or quality improvement from VITL's services?

We have not attempted to directly measure the impact of our ability to share information through VITL, but at least at UVM Medical Center, with the level of automation we have achieved, it is likely that we have experienced some "soft" savings.

c. Do VITL's services complement your other health information technology initiatives? If so, how?

According to Adam Buckley, the Chief Information Officer for the UVM Health Network, VITL's work is absolutely complementary to what we are doing. He advises that as we work towards automating as much exchange of clinical information as possible, VITL is foundational to that effort. Seamless access to VITL Access, which has information that we do not otherwise have access to, will give our providers more information about their patients at their fingertips.

Substance Abuse and Mental Health

19. What percent of your employed primary care providers are participating in the Hub and Spoke program?

a. What is the average number of substance abuse patients that those providers treat?

CVMC presently has 7 out of 25 Family and Internal Medicine physicians (28%) participating in the Medication-Assisted Treatment (MAT, also known as Hub & Spoke) program. The average number of patients each serves is 111.

At UVM Medical Center, 34 out of a total 44 Family and Internal Medicine physicians (77%) are now eligible to prescribe suboxone as part of the MAT program. The average number of patients they see is 4, but providers at our Pain Clinic and the Comprehensive Gynecological and Obstetrics Services (COGS) program, which cares for opioid-addicted pregnant women, see more (about 35 patients each). We anticipate that those numbers will increase over time with the expansion of our Day One program, designed to help transition patients from the hub (Howard Center) into the primary care setting.

b. How many additional providers would be required to fully meet your community's needs in a reasonable amount of time? Please take into consideration any waitlists for treatment.

The waiting list of patients in the UVM Medical Center service area has reduced dramatically in the months since the Howard Center and UVM Medical Center began working together to develop a more streamlined approach to moving patients from the hub into primary care practices, which included the expansion of the Day One program to help that transition. As of mid-July, the number of patients

awaiting services was 301, with approximately 250 of those individuals living in the Chittenden County area.

As was recently announced by Governor Shumlin's office, a new hub is being developed in St. Albans; it is scheduled to open on January 1, 2017. We anticipate that the new hub will provide additional significant relief to the waiting list in our service area, as many of the patients currently being served in Chittenden County – or who are on the waiting list – live in Franklin County.

We also note that while some other primary care providers in the Chittenden County area, like Community Health Centers of Burlington, are participating in MAT, it is not clear how and to what extent other practices are accepting these patients. The wait list count maintained by the Howard Center indicated that, as of mid-July, of the 301 patients awaiting care, 80 were attributable to the CHCB, 45 to UVM Medical Center providers, and 66 to "community providers," with the remaining 110 having no known primary care providers. Of the 45 attributed to UVM Medical Center, only 38 were appropriate for spoke (office-based opioid treatment) services. While UVM Medical Center is committed to serving our patients who need MAT, for Hub & Spoke to succeed all primary care providers need to be at the table.

At this time, there is no waiting list in the CVMC service area. However, two prescribing physicians are planning on retiring in the next year, so it is important that we continue to ensure these services are available.

We are excited that under the Comprehensive Addiction Recovery Act, a recently-passed federal law, Congress has expanded the ability to prescribe suboxone for opioid addiction to Advance Practice Registered Nurses and Physician Assistants – something that we actively promoted through our Vermont delegation. While rules still need to be developed as to how those providers will be trained and certified to become eligible prescribers, we believe that expanding participation in our MAT programs to these health care professionals will measurably impact our ability to care for opioid-addicted individuals in our communities.

c. Do you have any information on your costs for medication assisted treatment programs versus savings to your hospitals?

At this time we are not tracking any metrics that would give us this precise information.

The enclosed study (from the *Journal of Substance Abuse Treatment*) used a serial cross-sectional design from 2008 to 2013 to evaluate medical claims for Vermont Medicaid beneficiaries with opioid dependence or addiction (6158 in the intervention group, 2494 in the control group). The study assessed treatment and medical service expenditures for those receiving MAT compared to those receiving substance abuse treatment without medication. Results suggest that MAT is associated with reduced general health care expenditures and utilization, such as inpatient hospital admissions and outpatient emergency department visits, for Medicaid beneficiaries with opioid addiction.

20. To what extent do mental health patients presenting at your Emergency Departments affect your budget?

In addition to the $500,000 investment CVMC made this year in their ED to create better space for patients awaiting placement for mental health issues, both CVMC's and UVM Medical Center's ED budgets have been increased as a result of having so many mental health patients who remain in that setting for lengthy periods awaiting appropriate placement for treatment. Those costs include increases in regular staffing, increased training costs, and increases in costs for patients who need to have 1:1 observation. For example, CVMC's portion of the budget includes an additional 5.4 mental health technician FTEs over FY 2016, and UVM Medical Center added 5.35 mental health technician FTEs, with the attendant wage and benefit costs. At UVM Medical Center, the ED is already more than $250,000 over budget for FY 2016 (year to date) for unanticipated observation costs, of which over 75% relates to patients with mental health issues.

At the same time, hospitals are not paid anything additional for those patients other than the one-time charge they incur, which is coded according to the level of need and urgency. Those charges are the same whether the visit is a short stay – which is what ED services usually represent – or a stay of 24, 48, or more hours for a mental health patient awaiting appropriate placement for services. We get paid no more for those long-stay patients than the more typical ED patient, even though the resources necessary to care for them are considerably more intensive.

a. Please explain how mental health patients are handled when they present to your Emergency Departments or other triage locations, including a description of any holding or isolation areas that your hospitals use, and how often you expect to use this type of area in FY17.

At UVM Medical Center, mental health patients are treated like all other patients when they arrive at the emergency department. They are placed in an ED room. There are two rooms that are designed to minimize the risk of self-harm, and those rooms would be prioritized for patients at risk (which are not necessarily mental health patients). There are no holding or isolation areas. UVM Medical Center expects to use these rooms and other ED resources for mental health patients virtually every day in FY 2017.

Similarly, patients who present to the CVMC ED with mental health concerns are identified by the triage nurse and placed in a treatment room aligned to their needs. For general anxiety disorders, we use a standard treatment room. If patients present with intent to harm self or others, or who are out of control with behaviors, they are placed in our secure treatment area. This is a recently-renovated care area of three beds in a secure subunit. The space is designed to be safe, but less restrictive than rooms that were used in the past; they share a common area that has its own bathroom and shower facility. This project was a $500,000 investment made by the hospital to improve the patient experience while also helping to ensure staff safety. CVMC is on track to see 1,300 mental health patients in its ED this year (an increase from the 950 mental health patients seen in its ED in FY 2015, and 833 in FY 2014).

b. How do you train your security staff, contracted or in-house, on handling situations involving people experiencing mental health crisis? If some security staff members have been trained but not all, please explain which ones and why.

At CVMC, ED techs and nurses receive 8 hours of training in MOAB (Management of Aggressive Behavior) as well as passing an internal competency each year. Security and Mental Health Techs are trained in the 16-hour MOAB course and another 16 hours of ProAct (de-escalation techniques), as well as undergoing their own internal competencies for inpatient psychiatry.

Security staff at UVM Medical Center, like the clinical staff, are also trained in MOAB. They work together as a team to handle situations needing their intervention. For example, if a patient with a history of post-traumatic stress disorder (PTSD) could be potentially "triggered" by being asked to change their clothes, the clinical team will communicate that to the security team and work together to develop a different approach to ensuring the safety of both the patient and staff (for example, wanding and patting down the patient, or removing only shoes, belts and hoodies but otherwise allowing the patient to remain in street clothes).