THE
University of Vermont
HEALTH NETWORK

August 18, 2017

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

Re: FY 2018 budget

Dear Ms. Shaw, Ms. Kuiper and Mr. Schultheis:

On behalf of the University of Vermont Medical Center and Central Vermont Medical Center, the two Vermont hospitals that are part of the University of Vermont Health Network FY 2018 budget review process, enclosed are our responses to the questions posed in your letter of August 9.

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

cc: Green Mountain Care Board

1. **Please clarify the relationships among the University of Vermont Medical Center (UVMMC), Central Vermont Medical Center (CVMC), the UVM Health Network (UVMHN) and OneCare Vermont (OneCare). In particular:**
   a. **Is OneCare co-owned by UVMMC or UVMHN?**
   b. **Does UVMHN have any employees or assets other than those of its member hospitals?**
   c. **Do gains or losses of one entity flow to any other entities? If so, among which entities and by what mechanisms?**
   d. **What are the financial implications of UVM[MC]'s co-ownership of OneCare? How does this relate to the financial relationships of the member network hospitals with OneCare?**

The UVM Health Network is a Vermont non-profit corporation that is the sole member (*i.e.*, the corporate parent) of UVM Medical Center and CVMC (as well as all other hospitals in the network), holding what are called "reserved powers" to approve all major actions of those corporations. The UVM Health Network currently has no employees or assets other than those of its member hospitals.

OneCare is a Vermont limited liability company (LLC). Its two members (*i.e.*, owners) are UVM Medical Center and Dartmouth-Hitchcock Health (DHH), which each hold 50% membership interests. OneCare is governed by a Board of Managers that includes three representatives each from UVM Medical Center and Dartmouth-Hitchcock Health, one program beneficiary each from the Medicare, Medicaid and commercial insurance programs, and nine at-large managers that broadly represent the other providers participating in OneCare.

Gains and losses of UVM Medical Center and CVMC do not "flow" to UVM Health Network, although the network and its hospital members prepare consolidated financial statements for financial reporting purposes.

UVM Medical Center, as a 50% member of OneCare Vermont, holds a number of financial rights and responsibilities in the corporate operating agreement and under LLC law. This generally includes an obligation to capitalize the company along with Dartmouth-Hitchcock Health if sources of capital and/or operational funding are not otherwise defined. Corporate membership also brings ultimate accountability for the financial liabilities of the company if other sources to cover such liabilities are not defined or available, or serve to be inadequate.

Most of the financial policy of the company is set forth in the operating agreement and other related documents, under the purview of OneCare's Board of Managers. This includes setting policy on the distribution of any shared savings achieved to network participants in the ACO. Historically, the policy has been that the preponderance of any savings achieved by the ACO are returned to network participants in the given program, with a small amount retained by the ACO for operating expenses. UVM Medical Center as an owner of OneCare does not benefit financially other than as a network participant in the ACO should savings be achieved.

No other member hospitals of the UVM Health Network have an ownership interest in OneCare. Their only financial relationship with OneCare is as participating providers in OneCare's accountable care programs.

2. Please clarify the relationship between UVMMC and the UVM Medical Group (UVMMG).
   a. What proportion of UVMMC-employed physicians are in UVMMG?
   b. What proportion of UVMMC physician revenue comes from UVMMG?
   c. Are UVMMG revenues and costs fully reflected in its submitted FY18 budget documents?

The UVM Health Network Medical Group (formerly the UVM Medical Group) is a Vermont non-profit corporation that employs physicians who both provide professional services to UVM Medical Center and hold faculty appointments at the Larner College of Medicine at UVM. The UVM Health Network is the sole member (corporate parent) of both the UVM Health Network Medical Group and UVM Medical Center. The UVM Health Network Medical Group will expand to include physicians employed at other Network hospitals on January 1, 2018.

UVM Medical Center itself directly employs only a small number of physicians; the vast majority of "employed" physicians are actually employed by the UVM Health Network Medical Group.

UVM Medical Center's medical staff – providers credentialed to practice at the hospital – is "open," meaning it includes both employed and independent providers. About 80% of the members of UVM Medical Center's medical staff are employed by the UVM Health Network Medical Group, with the other 20% comprising independent providers.

UVM Health Network Medical Group physicians were responsible for approximately 85% of UVM Medical Center's physician revenue in FY 2016, the most recent year for which we have complete data, with the other 15% coming from UVM Medical Center-employed advance practice providers such as nurse practitioners and physician assistants.

The professional revenues and expenses of physicians employed by the UVM Health Network Medical Group are included in the FY 2018 budget.

3. Please separate gains/losses (or revenue/costs) by capitated business from those by fee for service business.
   a. Please share calculations that support the statement ". . . that 40% of our revenue in FY 2018 will be reimbursed on a per-member per-month (PMPM) basis, even without statewide participation in risk-based contracts under the [All-Payer Model]."
   b. Will UVMMC be reimbursed fee-for-service for patients who are included in the APM but attributed to other providers?
   c. Please share the source(s) for the 2014 and 2016 PMPMs included in the narrative.
      i. To what is the much higher increase in net patient revenue (NPR) as compared to PMPM attributable?
      ii. Do the PMPMs include both capitated and fee-for-service payments?

We do not currently track cost by payment type (capitated versus fee-for-service), and thus are not able to provide gains or losses by those categories.

The 40% estimate is based on the seven hospitals (Brattleboro Memorial Hospital, CVMC, Northwestern, Porter, Southwestern, Springfield, and UVM Medical Center) that declared their intent this spring to participate in the Medicare, Medicaid and Commercial programs to be offered by OneCare Vermont in January. If all seven officially sign on this fall, $400 million out of UVM Medical Center's $1 billion in patient revenue will be paid on a PMPM basis.

UVM Medical Center will be paid fee-for-service only for patients who are not attributed to the OneCare Vermont accountable care programs. As stated above, attributed patients will include those attributed to all hospitals agreeing to participate in the Medicare, Medicaid and commercial programs in 2018.

NPR represents the total of all patient service revenue we earn for the patients we serve, so it is influenced not only by what we get paid but by utilization of services. Higher NPR, then, is often the result of seeing more patients than anticipated in our budget. The PMPM figure, by contrast, takes the revenue number and divides it by the number of attributed patients, so better reflects what is happening to the actual cost of caring for individual patients.

The PMPM figures cited in the narrative, from the John Hopkins Adjusted Clinical Group System, are the estimated PMPM for all sources of patient revenue.

4. Your actual operating [income] has averaged 38% higher than budgeted from 2013 to 2017 (projected). Is this historical pattern reflected in the 2018 budget?

It is important to point out that while the average margin variance the last four years seems like a large number at 38%, when you put the dollar variance (an average of $16.2 million over the last four years) into the context of a $1 billion total budget, that $16.2 million average equates to only 1.6% of our total budget.

As a management team, going into a fiscal year, we view the budgeted margin as a minimum target to try to achieve. This approach has been key the last few years as we have been working hard to position the organization to be able to absorb the cost of a new inpatient building, the potential cost of a new network-wide EHR and revenue cycle system, and to invest in programs and initiatives that will help us be successful in our transition to population health. We have done this through several cost-reduction and non-patient revenue initiatives, not through rate increases and unnecessary utilization. The margin variances are an indication that our management team has been successful, and being a non-profit means this organization is on more solid financial footing to continue to provide high-quality access to many critical services needed by our community and our region.

5. How would you calculate a PMPM for non-APM business? What methodology would you use to determine attribution for a hospital-wide PMPM?

At this point in time, we can only calculate a true PMPM for lives attributed through an accountable care program. We would be happy to work with the GMCB and others to determine ways to calculate PMPMs for non-attributed patients.

6. What are the drivers of NPR going up $41 million (UVMMC budget 2017 to budget 2018), if "actual list prices will go up an average of 0% in the aggregate"?
   a. Why is UVMMC offsetting hospital price increases with physician price decreases?
   b. Have there been any significant changes in the net/gross ratio for commercial payments?

List prices (gross charges) have very little impact on NPR since the majority of our insurers pay us based on a negotiated fee schedule, not a percentage of our list prices. The primary driver behind the $41 million increase is volume – we anticipate caring for more patients in FY2018 than we budgeted in FY2017. The 0.72% increase in commercial reimbursement rates is adding a small amount, while decreases in reimbursement rates from Medicaid, and higher bad debt and charity, are offsetting those increases.

As we first explained in our FY 2015 budget filing three years ago, our benchmark data show that our professional fees are above benchmarks for an academic practice, while our hospital fees are below. We have been bringing them more into balance over the past several years while keeping the total revenue the same.

There have not been significant changes in the net-to-gross revenue ratio because the commercial rate increase is only 0.72% and we have left our gross rate (list price) flat.

7. Is adding Emergency Department capacity part of a sustainable, long-term solution to the inadequate access to mental health treatment experienced by Vermonters? What other avenues are you pursuing to address this crisis in a sustainable way?

No, absolutely not. Adding Emergency Department (ED) capacity cannot be a significant part of a sustainable, long-term solution to inadequate access to mental health treatment for Vermonters. As a result, the UVM Health Network is currently pursuing several other avenues to address Vermont's mental health treatment crisis in a sustainable way. The Network's efforts include actions to improve the provision of care to children, outpatient adults, and inpatient adults.

<u>Expanding Care for Children</u>

The UVM Health Network Medical Group recently approved an expansion of the Child Psychiatry Fellowship – a period of subspecialty training that follows the psychiatry residency – from two fellows

per year to four fellows per year. The increased complement of fellows will provide specialized support to inpatient pediatrics at UVM Medical Center, to children in the ED at UVM Medical Center, and to partnering community agencies. The increased availability of child psychiatrists to support the hospital will result in better care of patients and increased support to pediatrics. There are two indirect ways the increase may reduce ED delays. First, subspecialty assessment may hasten placement and reduce delays caused by conservative bias on the part of general psychiatrists, especially if they are waiting for expert recommendations. Second, the presence of UVM child psychiatrists supporting UVM Medical Center and Champlain Valley Physicians Hospital (CVPH) may result in more rapid and appropriate transfers for psychiatry admission.

Even when these steps are fully implemented, there will continue to be a shortage of intensive services such as hospitalization for children in northern Vermont. In response, the UVM Health Network is bringing the CVPH child psychiatry unit to full capacity, managing it within a better-integrated system of care (we are also partnering with Behavioral Health Services North in Clinton County, New York), and making it more available to clinicians in the Burlington area. We anticipate expanding capacity in the fall of 2017 when the necessary staffing becomes available.

Expanding Adult Outpatient Care

Currently, UVM Medical Center runs the Seneca Program, a partial hospital and intensive outpatient program designed to treat suicidality and mood, anxiety, and personality disorders. The Seneca Program is at capacity, with a wait time of months for access. In order to create additional capacity, the UVM Health Network Medical Group is planning on creating a second intensive outpatient program at Seneca. When implemented, it has the potential to divert patients from inpatient care and to hasten the step-down of patients to outpatient services.

In addition, the psychiatry, internal medicine, and family medicine services at UVM Medical Center have developed the beginning of an integrated medical home mental health and substance use program and will continue to expand this model. Under the model, the psychiatry service would provide a growing portion of its treatment within patients' medical homes, usually at their primary care physicians' offices. Establishing a full medical home primary psychiatry model will allow more effective outpatient treatment without an expansion of UVM Medical Center's traditional general outpatient psychiatry practice. We believe it represents the most efficient way to expand primary psychiatry services in the community.

Expanding Adult Inpatient Care

The programs described above, even when fully implemented and incorporated with other system-wide efforts to optimize patient flow, will not substantially reduce ED boarding unless acute care capacity is also increased. Indeed, the UVM Health Network planning department's analysis indicates that optimizing flow through our inpatient unit would only yield additional inpatient capacity equivalent to two beds. It is also extremely unlikely that conventional community placements can be developed for patients with severe intractable illness and dangerous behavior. Likewise, strategies to divert patients

from EDs will not be sufficient in themselves, because patients whose presentation does not require admission are not those most likely to board. As a result, we believe that significant additional inpatient capacity is also necessary to address the crisis facing our ED and the larger mental health treatment system. Through the public forums hosted by the Department of Mental Health pursuant to Act 82, UVM Health Network providers are sharing data, analysis, and experience that will help inform decisions on these issues.

8. **Please provide a copy of the report referenced on page 8 of your narrative. ("A recently-released report . . . showed that the number of UVM Medical Center patients prescribed an opiate dropped 9 percent from the fourth quarter of 2015 to the fourth quarter of 2016. The total number of prescriptions dropped 7 percent, and the average strength of those prescriptions dropped 4 percent during that same period.")**

That report, "Opioid Prescribing Practices," by Dr. Stephen Leffler and Maureen Vinci, is attached as Attachment A.

9. **For the savings described on page 13 of your narrative, number 5, please provide the proportion of this income and the total dollar amount paid by patients. Please detail the way in which you plan to increase revenue from specialty pharmacy and retail pharmacy. Will these increases be from price increases, market share increases, a combination, or something else?**

These increased revenues are not new money in the health care system, and are not coming from price increases. They are almost exclusively coming from shifting revenue from for-profit pharmacies to our non-profit hospitals, where they can be used to maintain access to critical services, to invest in population health initiatives, to offset the below-inflation-rate increases from commercial insurance, and to offset the cost shift we are absorbing from commercial insurance no longer covering this shift, and from declining Medicaid reimbursement rates.

10. **What are the hospitals' goals for participation in payment reform initiatives in 2018 and in the next five years?**
    a. **What steps will the hospital take to meet these goals?**

Our hospitals' engagement in and commitment to payment and delivery system reform is described in detail in our budget narrative (*see* Attachment B).

11. **As the hospitals take on financial risk, how are they planning to manage that risk while maintaining access to care, high quality care, and appropriate levels of utilization?**
    a. **How much money will each hospital be at risk for in FY18?**
        i. **What will happen if a hospital loses that money?**
        ii. **How will the hospital fill in this gap, if necessary, without increasing rates?**

b. Beyond the Accountable Care Organization-level quality measures, how will the hospitals track access to care, utilization, and quality of care to ensure that new provider incentives do not have a negative impact on patient care?

i. Please list the specific metrics each hospital will use.

ii. For any metric(s) currently in use for this purpose, please provide results by year by hospital for 2014 to 2017 (to date).

Our hospitals manage financial risk on a regular basis. In the current primarily fee-for-service payment system, risks run from unexpected changes in reimbursement (Medicare cuts, DSH cuts, changes to the federal 340B program, etc.) that threaten the revenue we need to provide services to our communities, to unanticipated numbers of patients and the increased costs associated with caring for them. We manage those risks every day through managing our expenses and maximizing non-patient-related revenue opportunities.

We will use the same tools to manage the additional financial risks associated with capitated payments under the APM in 2018. As importantly, the predictable revenue streams will begin to allow us to shift our focus from prices and utilization to investing in the types of services that, over time, will reduce the need for higher-acuity services, helping to bend the cost curve and make care more affordable to all of us – individuals, government, and employers – who bear the cost of our health care system.

Based on the OneCare budget estimate of $400 million in payments to UVM Health Network hospitals in 2018 (*see* Question 3), the maximum risk exposure for UVM Medical Center is $14.8 million and $4.2 million for CVMC. If we were to lose that money and not be able to offset it by managing our expenses, we would have to look at our multi-year financial framework and potentially reduce our planned capital investments. We would not compromise access to high-quality care and will do everything we can to not have rates outpace inflation.

As to metrics, through OneCare Vermont's accountable care programs, we are currently measuring more than 50 measures that span everything from access, utilization, quality of care and patient satisfaction. The table below summarizes those measures for the current year.

In addition to tracking all of those measures, OneCare has structures and processes in place to ensure that the care given to the individuals attributed to its participating providers is appropriate, coordinated and of high quality. That includes a Utilization Review Committee co-led by OneCare's Director of Clinical and Quality Improvement and its Director of Informatics, with oversight from the Chief Medical Officer. That committee, which includes clinical staff from across all participating providers, reports to OneCare's Population Health Strategy Committee.

2017 Reporting Year

KEY: C= Claims; MR = Medical Record; S=Survey; R= Reporting Measure; P=Payment Measure

MSSP Measure Number	GPRO Measure Number	VMSSP & XMSSP Measure Number	VMNG Measure Number	Measure Description	Data Source: Claims, Medical Record, Survey	Medicare	Commercial	Medicaid - VMNG
ACO - 1				CAHPS: Getting Timely Care, Appointments, and Information	S	P		
ACO - 2				CAHPS: How Well Your Doctors Communicate	S	P		
ACO - 3				CAHPS: Patients' Rating of Doctor	S	P		
ACO - 4				CAHPS: Access to Specialists	S	P		
ACO - 5				CAHPS: Health Promotion and Education	S	P		
ACO - 6				CAHPS: Shared Decision Making	S	P		
ACO - 7				CAHPS: Health Status/Functional Status	S	R		
ACO - 34				CAHPS: Stewardship of Patient Resources	S	P		
ACO - 8				Risk-Standardized, All Condition Readmission	C	P		
ACO - 35				Skilled Nursing Facility 30-Day All-Cause Readmission Measure (SNFRM)	C	P		
ACO - 36				All-Cause Unplanned Admissions for Patients with Diabetes	C	P		
ACO - 37				All-Cause Unplanned Admissions for Patients with Heart Failure	C	P		
ACO - 38			4	All-Cause Unplanned Admissions for Patients with Multiple Chronic Conditions - *NEW VMNG*	C	P		P
ACO - 43				Ambulatory Sensitive Conditions Acute Composite (AHRQ PQI #91)	C	*R*		
ACO - 44				Use of Imaging Studies for Low Back Pain	C	*R*		
ACO - 11				Use of Certified EHR Technology	Other	*R*		
ACO - 12	CARE - 1			Medication Reconciliation Post-Discharge	MR	*R*		
ACO - 13	CARE - 2			Falls: Screening for Future Fall Risk	MR	P		
ACO - 14	PREV - 7			Preventive Care and Screening: Influenza Immunization	MR	P		
ACO - 15	PREV - 8			Pneumonia Vaccination Status for Older Adults	MR	P		
ACO - 16	PREV - 9			Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow Up	MR	P		
ACO - 17	PREV -10			Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention	MR	P		
ACO - 18	PREV -12		10	Preventive Care and Screening: Screening for Clinical Depression and Follow-up Plan	MR VMNG C and MR	P		P
ACO - 19	PREV - 6			Colorectal Cancer Screening	MR	P		
ACO - 20	PREV - 5			Breast Cancer Screening	MR	P		
ACO - 28	HTN - 2	Core - 39	7	Hypertension (HTN): Controlling High Blood Pressure	MR	P	P	P
ACO - 30	IVD - 2			Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic	MR	P		
ACO - 42	PREV -13			Statin Therapy for the Prevention and Treatment of Cardiovascular Disease	MR	R		
ACO - 40	MH - 1			Depression Remission at Twelve Months	MR	R		
Diabetes Composite ACO 27 & 41	DM - 2 DM - 7			ACO - 27: Hemoglobin A1c Poor Control ACO - 41: Part two of Composite : Diabetes—Eye Exam	MR	P		
		Core -17	6	Diabetes Mellitus: Hemoglobin A1c Poor Control (>9%)	MR		P	P
			5	Developmental Screening in the First Three Years of Life	VMNG C or MR			P
		Core - 1		ALL Cause Readmission	C		P	
		Core - 2	3	Adolescent Well-Care Visit	C		P	P
		Core - 4	11	Follow up After Hospitalization for Mental Illness, 7 day	C		P	R
		Core - 5	8/9	Initiation and Engagement of Alcohol and Other Drug Dependence Treatment	C		P	P
		Core - 6		Avoidance of Antibiotic Treatment for Adults with Acute Bronchitis	C		P	
		Core - 7		Chlamydia Screening in Women	C		P	
		Core - 12		Prevention Quality Chronic Composite - Hospitalizations for ACSC: PQI Composite - PQI #92	C		P	
			1	30 Day Follow-Up after Discharge from the ED for Alcohol and Other Drug Dependence - *NEW*	C			P
			2	30 Day Follow-Up after Discharge from the ED for Mental Health - *NEW*	C			P
			12	Timeliness of Prenatal Care - *NEW*	C			R
		Core - 21		Access to Care Composite	S		R	*R*
		Core - 22		Communications Composite	S		R	*R*
		Core - 23		Shared Decision-making Composite	S		R	*R*
		Core - 24		Self-Management Support Composite	S		R	*R*
		Core - 25		Comprehensiveness Composite	S		R	*R*
		Core - 26		Office Staff Composite	S		R	*R*
		Core - 27		Information Composite	S		R	*R*
		Core - 28		Coordination of Care Composite	S		R	*R*
		Core - 29		Specialist Care Composite	S		R	*R*
		Core - 51		DLTS Custom Survey Composite: Adult	S		R	*R*
					TOTAL ALL MEASURES	30	19	21
				Total Number of Clinical & Claims Measures		21*	9	11
				Total Number Claims		7	7	7
				Total Medical Record (Clinical)		14*	2	4

ACO 11, 43, 44, and 12 introduced in 2017 so are P4R for 2017 & 2018

* Diabetes Composite is a two part measure only counted once here

12. Do the hospitals participate in any capitated payment agreements directly with insurers? If yes, please describe:

a. Whether the capitated payments save the insurer money compared to fee for service payments;

b. Whether each hospital and/or its providers earn more profit under capitated payments or fee for service, on average;

c. How each hospital ensures that patients continue to receive appropriate services under capitated payments.

In January we entered into a capitated arrangement with Vermont Medicaid. Based on the attributed population from the four hospitals that are participating in that program (CVMC, Northwestern, Porter and UVM Medical Center), it looks like the PMPM payments are close to what the fee-for-service payments would have been, but we will need several more months of claims adjudication to know for sure.

UVMMC also has a small capitated contract with the The Vermont Health Plan for lab services.

We have not yet analyzed what the profitability of that contract or the Medicaid program would be for fee-for-service versus our capitated rates.

13. Please provide the financial incentives that each hospital currently includes in provider, coder, and other personnel salaries and/or contracts. How has the use of incentives by the hospitals changed over time?

We do not offer financial incentives of any kind to our coders.

For UVM Medical Center physicians, we start with what their total salary should be for the coming year, and withhold 15% to provide an incentive to hit productivity, quality, teaching, research, and academic targets. Over the years the productivity component has decreased, and will continue to decrease in the future, while the quality and access components will increase, as more of our revenue becomes PMPM-based.

Similarly, CVMC has been shifting from incentivizing volume to incentivizing value, including recent changes to its primary care compensation plan. They decreased the RVU(volume)-based compensation to a small component of the overall compensation, and increased the compensation for high value care by using risk-adjusted panel data to drive compensation. CVMC's compensation plan now includes incentives for telephone visits, medical complexity, access, and quality.

14. Do the hospitals or any of their departments or personnel receive financial or other benefits for using specific pharmaceuticals?

a. Please list all pharmaceuticals for which the hospitals or provider receives payment when the drug is prescribed, administered, and/or when the prescription is filled.

No.

15. With the various payment reform initiatives underway, shared decision-making is becoming increasingly important as an antidote to the potentially perverse incentives of risk-based payment models.

a. Do you commit to implementing shared decision-making throughout your hospital system in 2018?

b. Please describe your plan for doing so and how you will measure the plan's implementation progress.

UVM Medical Center has fully embraced Patient- and Family-Centered Care, whose core components embody the elements of shared decision-making:

- *Dignity and respect.* Health care practitioners listen to and honor patient and family perspectives and choices. Patient and family knowledge, values, beliefs and cultural backgrounds are incorporated into the planning and delivery of care.
- *Information sharing.* Health care practitioners communicate and share complete and unbiased information with patients and families in ways that are affirming and useful. Patients and families receive timely, complete and accurate information in order to effectively participate in care and decision-making.
- *Participation.* Patients and families are encouraged and supported in participating in care and decision-making at the level they choose.
- *Collaboration.* Patients, families, health care practitioners, and health care leaders collaborate in policy and program development, implementation and evaluation; in research; in facility design; and in professional education, as well as in the delivery of care.

See http://www.ipfcc.org/about/pfcc.html. Patients and families are not only welcomed as active participants in their care, but are now embedded in committees and work groups throughout the institution so that their knowledge and perspectives inform our work on a daily basis.

CVMC is just beginning the process of setting up the structures to incorporate the Patient- and Family-Centered Care model into its work.

16. What is the extent of your Choosing Wisely initiative(s), if any? Please describe the initiative(s), how you have chosen which departments participate, and which of these initiatives, if any, have led to identifiable cost savings and/or quality improvement.

As will be described in our budget presentation to the Green Mountain Care Board, through the UVM Health Network, both the UVM Medical Center and CVMC are actively engaged in initiatives to optimize the care delivered in our system, which includes identifying best practices, reducing variation, and eliminating waste.

In addition, as we noted in response to questions from the HCA last year, the Department of Medicine at the UVM Medical Center collaborated with the Jeffords Institute for Quality and Operational Effectiveness to create a High-Value Care Program in 2012. Each year the Department seeks proposals from front-line clinicians and trainees for possible high value care projects, based on Choosing Wisely initiatives and other evidence-based recommendations. Approved proposals receive mentorship, project management, and measurement support to advance the project from concept to completion in a timely manner. All projects engage medical learners, such as resident physician and/or medical students. Additionally, Department of Medicine faculty have directed regional High-Value Care efforts, also in collaboration with the Jeffords Institute and other departments (such as Pathology), that have yielded cost savings and improved quality.

The table below summarizes the projects supported through the High-Value Care Program and through other initiatives within the Department of Medicine. Estimated direct cost savings are included for those completed projects for which financial modeling has been performed. Many of these projects have also promoted patient comfort and reduced adverse events. For example, the reduction in daily labs on the hospitalist services at UVM Medical Center is estimated to save 65 liters of blood annually in hospitalized adults due to reduced phlebotomy.

Intervention Status	Project Description	Estimated Savings over 2 years
Complete	Reduce Low Value BUN/Cr. Laboratory tests on Hemodialysis Patients	$3,175
Complete	Reduce Osteoporosis Screening on Low Risk Women < 65 years old	$88,348
Complete	Reduce Daily Morning CXR's on Patients Intubated in the ICU unless there is a clinical indication.	$342,276
Complete	Reduce repeat full echocardiograms if prior study done within the past year	
Complete	Reduce additional staging imaging in low stage women diagnosed with breast cancer	
Complete	Reduce Folic Acid Testing on populations at low risk for deficiency	$20,952
Complete	Reduce the use of CK/MB testing with Troponin-I testing	$173,678
Complete	Reduce repetitive daily labs on the internal medicine and family medicine hospitalist services (as part of Vermont Health Care Improvement Project)	$480,000
Data Collection	Reduce repeat ANA testing	
Data Collection	Reduce repeat Hepatitis A and C antibody testing	
Data Collection	Reduce phlebotomy on Hemodialysis Patients	
Data Collection	Reduce arterial blood gas utilization in the Medical ICU	
Project Planning	Reduce overuse of erythrocyte sedimentation rate (ESR)	

A summary of the High Value Care Program in the Department of Medicine was published in 2016 in BMJ Quality & Safety: Stinnett-Donnelly JM, Stevens PG, Hood VL, "Developing a high value care programme from the bottom up: a programme of faculty-resident improvement projects targeting harmful or unnecessary care," BMJ Qual Saf 2016;25:901-908. A copy of that article was provided as part of our responses to your questions last year.

CVMC has also engaged in a number of specific "Choosing Wisely"-type initiatives:

- Chest Pain Accelerated Diagnostic Pathway. This pathway was developed collaboratively by the Emergency Medicine Special Council of the UVM Health Network to use evidence-based tools and sequential high sensitivity blood testing (Troponin) to rule out myocardial infarction, thus alleviating the need for costly hospital admission. Since initiating this pathway, CVMC has noted 14% less admissions for chest pain without an unsafe event.

- The Vermont Medical Society Foundation Project to Reduce Low Value Repetitive Inpatient Lab Testing. Our CVMC Hospitalists and participants from many other Vermont hospitals collaborated on this project. Of the lab tests considered, 20% fewer lab tests were ordered.

- CVMC Women's & Children's Co-Management Project. A multidisciplinary team that includes obstetricians, a nurse midwife, and nursing staff has embarked on a reduction of primary C-sections. In seven months the primary C-Section rate has dropped from a baseline of 39% to a current level of 25%.

17. Please provide copies of your financial assistance policy, application, and plain language summary as well as detailed information about the ways in which these three items can be obtained by patients.

a. Please provide the following data by year, 2014 to 2017 (to date):

i. Number of people who were screened for financial assistance eligibility;

ii. Number of people who applied for financial assistance;

ii. Number of people who were granted financial assistance by level of financial assistance received;

iii. Number of people who were denied financial assistance by reason for denial.

The financial assistance policies, plain language summaries, applications, and copies of UVM Medical Center's and CVMC's web pages are attached as Attachment C.

Both CVMC and UVM Medical Center are mission-driven organizations committed to treating all who need our services without regard to insurance benefits or financial resources. Information about our robust financial assistance programs is actively provided at all portals of access. Our policies, plain language summaries, applications and medical staff coverage rosters are available on our websites,

displays are placed in the Registration waiting rooms in our hospitals, EDs, clinics and Express Care Centers. A copy of the plain language policy summary is available to patients when they register for services across the hospital and physician offices. Beyond our notification and publication efforts, we have processes in place to assist patients in accessing financial counseling, including during pre-service clearance for scheduled appointments and in the inpatient setting. During a pre-service call, or in the case of emergent services at the bedside, patients are educated and counseled on their financial obligation and the programs available to help pay for current/upcoming services and existing balances. Depending upon their federal poverty level, we help them obtain both insurance and/or financial assistance coverage. This includes assistance in the Vermont Medicaid or Vermont Health Connect application process as well as the UVM Medical Center's or CVMC's financial assistance program. For those patients whose financial circumstances change after service, information regarding financial assistance is reflected in the patient statement along with contact information for help. As patients express financial hardship, our customer service departments will provide information and applications for coverage throughout the billing cycle. Lastly, UVM Medical Center's Community Health Improvement team routinely provides education and information to the community at large as a part of their outreach service, and CVMC's Community Health Teams work actively with their patients to communicate the various options available to them.

UVMMC Financial Assistance Program	**FY14**	**FY15**	**FY16**	**FY17 YTD June**	**Grand Total**
Total Applications	4124	4004	4189	3269	15586
Total Household Members	5899	5590	5791	4707	21987
APPROVED/GRANTED					
<=200% FPL	2571	2281	2305	1742	8899
201%-250%	358	436	469	346	1609
251%-300%	264	298	339	281	1182
301%-350%	155	203	230	179	767
351%-400%	99	127	164	124	514
(blank)	6	8	13	8	35
APPROVED/GRANTED Total	**3453**	**3353**	**3520**	**2680**	**13006**
DENIED					
Miscellaneous Notes	3	3	6	46	58
No Current/Scheduled Charges	16	4	9	5	34
No Eligible Charges	13	7	5	4	29
Incomplete Application/No response from Patient	475	457	463	294	1689
Out of Service Area	2	2	1	1	6
Over Assets	66	87	59	20	232
Over Income	79	78	109	99	365
Over Income/Assets	17	13	17	1	48
DENIED Total	**671**	**651**	**669**	**470**	**2461**
OPEN				**119**	**119**

UVMHN CVMC Financial Assistance Program	FY14	FY15	FY16	FY17TD June	Grand Total
Total Applications	1040	881	866	556	3343
Approved/Granted					
<=200% Federal Poverty Level	549	394	389	262	1594
201%-400%	258	290	325	187	1060
Approved/Granted Total	**807**	**684**	**714**	**449**	**2654**
Denied					
Miscellaneous Notes	12	47	16	7	82
No Current/Scheduled Charges	2	2	8	1	13
No Eligible Charges	0	0	0	0	0
Incomplete Application	133	99	86	52	370
Out of Service Area	1	1	1	0	3
Over Assets**					0
Over Income**					0
Over Income/Assests	85	48	41	16	190
Denied Total	**233**	**197**	**152**	**76**	**658**
Open				**31**	**31**
** Over Income and Assets not broken out, all on same line					

UVM Medical Center has also partnered with Vermont Legal Aid (VLA) in an innovative program that embeds an attorney in our Community Health Improvement office to assist our Community Health Teams and their patients with issues like housing and benefits. That program, the Medical-Legal Partnership, started as a pilot in 2016 with a half-time VLA attorney, and was expanded to a full-time position (funded by the UVM Medical Center) in 2017 due to the increasing demand for those services. In the first six months alone, the program served almost 70 patients and increased their benefits (or reduced their expenses) by approximately $40,000.

18. As nonprofits with a duty to benefit the community, how do the hospitals ensure that their commercial rates are in the best interest of consumers? Please provide specific metric(s) that each hospital uses to measure this. For any metric(s) currently in use for this purpose, please provide results by year by hospital for 2014 to 2017 (to date).

Both UVM Medical Center and CVMC provide community benefits to our communities in many ways, as reflected in Schedule H of the Form 990s we file each year with the Internal Revenue Service. In FY

2016, UVM Medical Center's community benefits totaled $173.6 million, or 15.5% of its total expenses. CVMC's community benefits for that year totaled $27.2 million, representing 14.2% of its total expenses.

In terms of commercial rates, the commercial rate increase of 0.72% for both the UVM Medical Center and CVMC represents the lowest increase in six years:

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018 (requested)
UVM Medical Center	9.4%	6.7%	7.8%	6.0%	2.45%	0.72%
CVMC	5.0%	6.9%	5.9%	4.7%	2.45%	0.72%

This is coming down from a high of 9.4% in 2013 for the UVM Medical Center and 6.9% in 2014 for CVMC, and reflects our continued commitment to managing expenses while ensuring we meet our mission and at the same time making significant investments in reform efforts.

19. We often hear from hospitals that they charge extra for a wide variety of services in order to fund core hospital services. In light of this business model, how do the hospitals ensure that the prices of its services are set appropriately?
   a. What factors are considered in setting prices?
   b. What financial or quantitative metrics does each hospital use to ensure that its service pricing is appropriate? For any metric(s) currently in use for this purpose, please provide results by year by hospital for 2014 to 2017 (to date).

For purposes of clarity in this response, the UVM Health Network hospitals use the definitions of "charge" and "price" as defined by the national Healthcare Financial Management Association as part of their Industry Initiative on Price Transparency (www.hfma.org/transparency). "Charge" is the dollar amount a provider sets for services rendered before negotiating any discounts. For all beneficiaries – Medicare, Medicaid, commercially-insured, and uninsured – the charge is almost always higher than the amount paid. "Price" is defined as the total amount a provider expects to be paid by insurance companies and patients for health care services. The price of health care services differs depending on the patient's insurance coverage, plan design, and financial assistance eligibility.

Hospitals are required to provide a wide range of services to the community and provide them to all patients, regardless of their ability to pay. Many of these services cost hospitals far more to provide than the amounts paid to the organization from Medicare, Medicaid, and uninsured patients. Hospitals also provide services to patients who are unable to pay. In FY 2016, the UVM Health Network hospitals in Vermont provided a total of $6.1 million (cost, not gross charges) in financial assistance/charity care to patients who were unable to pay for their care.

In order to ensure that the core hospital services the community relies on can continue to be provided, and that the hospital can remain a vital safety net for the community, the price differential is often shifted to commercial insurance companies in their negotiated rates (what is commonly referred to as

the "cost shift"). Hospitals must consider the following factors when ensuring the appropriateness of the total revenue necessary to continue to serve their communities and meet their missions, including teaching and research in the case of UVM Medical Center: the cost of performing services and procedures, including any market increases expected in the cost of pharmaceuticals and medical devices, historical and/or anticipated volume, marketability, anticipated government payer reductions, and any related strategic initiatives.

As noted in response to Question 6, we periodically evaluate each hospital's chargemaster to see if charges are in alignment with peer benchmarks. Over the past several years, this has led the UVM Medical Center to reduce professional charges and increase inpatient and outpatient charges, but in a revenue-neutral way.

20. For the hospitals' inpatient services, please provide your all-payer case mix index, number of discharges, and cost per discharge for 2014 (actual) through the present (2017 budget and projected) and 2018 (budget).

The following data come from Adaptive Report #4 as filed with the GMCB.

We have responded to this question in terms of adjusted admissions, not inpatient discharges, since cost per inpatient discharge is not a standard measure in the industry, and we do not have the ability to separate out inpatient costs only. Adjusted admissions have long been used to measure and compare hospital utilization, and are calculated to adjust inpatient data to account for outpatient activity as well. As more services shift to the outpatient setting, however, even this measure's utility in comparing hospitals' performance is being questioned.

The case-mix index (CMI) at the UVM Medical Center is significantly higher than the CMI at CVMC because as a tertiary/quaternary care hospital it serves patients with much higher acuity.

UVMMC	FY14 Actual	FY15 Actual	FY16 Actual	FY17 Budget	FY17 Projected	FY18 Budget
Adj Admissions	67,687	66,174	69,349	64,127	65,248	64,805
IP CMI (All Payers)	1.67	1.66	1.69	1.71	1.71	1.71
Cost per Adj Admission	15,842	17,036	16,897	18,978	19,021	19,605

CVMC	FY14 Actual	FY15 Actual	FY16 Actual	FY17 Budget	FY17 Projected	FY18 Budget
Adj Admissions	15,092	16,125	17,709	18,086	17,957	18,029
IP CMI (All Payers)	1.17	1.17	1.22	1.24	1.18	1.18
Cost per Adj Admission	11,085	11,217	11,405	11,032	11,393	11,581