Northeastern Vermont Regional Hospital
FY 2018 Budget
Response to Green Mountain Care Board Staff Questions
August 11, 2017

INTRODUCTORY COMMENTS FROM NORTHEASTERN VERMONT REGIONAL HOSPITAL:

Before addressing the questions presented by the Green Mountain Care Board staff we will begin by acknowledging a couple of key points right away. First, Northeastern Vermont Regional Hospital (NVRH) has submitted a budget that includes net patient revenue (NPR) growth, on a budget to budget basis, of 11.3%. That growth is significantly higher than the 3.4% limit established by the Green Mountain Care Board (GMCB.) In a June 13, 2017 letter to Mr. Mullin, GMCB Chair, NVRH did provide advance notice that NPR growth would be significantly higher than 3.4%. Justification for the additional NPR will be provided in responses to several questions from the GMCB staff. Second, on a budget to budget basis, expenses, especially salaries, are increasing significantly. Most of the salary increase is related to additional full time equivalent (FTE) employees. We will review and provide explanations for those additional FTES, which are primarily in direct patient care departments. We note that despite these additional FTEs and other cost increases, NVRH's overhead expenses, as a percent of total expenses remain the lowest in the State.

We also want to acknowledge there is a great deal of uncertainty surrounding health care financing at the Federal and State level that may affect our fiscal year 2018 budget. One concrete example of how the financial picture can change quickly was a notice from DVHA after our budget was prepared informing us that NVRH's disproportionate share revenue would be reduced by an additional \$202,000. Potential changes to the Affordable Care Act, proposed cuts to federal disproportionate share revenue and a new Medicaid Outpatient Prospective Payment System model are a few examples where uncertainty could result in reimbursement reductions for NVRH and other hospitals between now and September 30, 2018.

It is our steadfast opinion that NVRH submitted a responsible budget that allows us to meet the community's needs for essential health care services. Through our responses to the GMCB staff questions and our budget presentation on August 15th, we will provide information to support our position that our fiscal year 2018 budget provides only the resources necessary to efficiently meet the needs of our community.

Our Board of Trustees was involved throughout the budget process. They were well aware of all significant budget assumptions, including projected revenue and expense growth assumptions. A special two- hour special board meeting was held to further review the operating and capital budgets and key budget assumptions. The Trustees had ten days after that meeting to re-review the budget and underlying assumptions, ask additional questions and make themselves well-informed before their unanimous vote to approve the 2018 budget on June 28, 2017.

Our responses to specific questions from the GMCB staff follows.

1. INCOME STATEMENT - The hospital is \$5.6 million over the 2017 budget levels. Much of this variance is described as utilization and higher Medicare reimbursement. The hospital needs to provide more detailed utilization information that explains this increase - for example, what internal information do you have that describes this increase? What are the consequences if this increase is not approved? Discuss the hospital's options to address this overage.

Response: Northeastern Vermont acknowledges our fiscal 2018 budget is \$5.6 million over fiscal 2017 levels, an increase of 11.3%. At 11.3%, the net patient revenue growth is significantly higher than the 3.4% increase guideline established by the Green Mountain Care Board. With that point in mind it is our belief we submitted a responsible budget that allows us to meet the community's need for essential health care services. With responses to this question and the other 13 questions we will provide rationale that supports our position.

Adjusted admissions is a universally accepted metric that attempts to measure both inpatient and outpatient activity in one number (FORMULA: total revenue/inpatient revenue X acute patient days.) However, our volume is increasing while the one metric would indicate it is decreasing. As measured by adjusted patient admissions it appears NVRH is projecting a slight volume decrease, on a budget to budget basis. However, the individual department statistics used to project the budget show something completely different. A review of the table below makes that point clear.

	FY 2017	FY 2017	FY 2018
Department	Budget	Projected	Budget
Acute Patient Days	4,289	4,245	4,330
Swing Bed Days	785	900	785
Nursery Days	470	470	470
Total Patient Days	5,544	5,615	5,585
Magnetic Resonance Image	1,216	1,346	1,400
Drugs Sold	91,103	97,226	97,955
Anesthesiology	2,444	3,427	3,517
Cat Scan	8,406	9,155	9,423
EKG	1,027	1,238	1,281
Labor & Delivery	180	180	180
Nuclear Medicine	714	900	900
Operating Room	3,182	3,275	3,400
Radiology - Diagnostic	16,700	16,700	17,001
Recovery Room	1,249	1,161	1,169
Laboratory	172,200	172,199	173,000
Inhalation Therapy	6,020	6,201	6,199
Physical Therapy	45,790	47,450	47,900
Med/Surg Supplies Sold	416	1,640	1,653
Observation Care	873	876	900
Other Outpatient Services	91,122	93,480	93,830
Blood Bank	407	340	341
Cardiac Rehab	2,470	2,289	2,306
Emergency Room	14,330	14,000	14,300
Surgical Day Care	2,782	2,887	2,909
Physician Office Practice Services (Uncategorized)	73,981	71,942	75,580

The Medicare reimbursement growth is a result of volume increases, a higher percentage of Medicare patients and the reimbursement formula that applies to Critical Access Hospitals. The utilization increases we are experiencing were described previously. During fiscal year 2017 NVRH experienced Medicare patients increasing as a percentage of total patients (based on gross revenue.) We are projecting that trend to continue into fiscal 2018.

As a Critical Access Hospital, Medicare reimburses NVRH for costs (as defined by Medicare) incurred to care for Medicare patients. Historically, that means Medicare pays approximately 34% of total hospital expenses. On a budget to budget basis we are projecting costs to increase by approximately \$8 million. Medicare's share of that increase, 34%, is \$2,711,700, which is the amount of "higher" Medicare reimbursement included in our narrative.

A detailed look at orthopedic services provides an example of additional internal information that describes both the utilization increases and NPR growth. First, we'll provide a brief history of orthopedic changes at NVRH.

For many years, NVRH did not have enough orthopedic surgeons to meet the community's need. As a result, many patients seeking orthopedic services traveled to hospitals in New Hampshire to obtain timely access to those services. We know that is true based on VHCURES data. That data revealed \$10 million of VT healthcare dollars, for commercial insurance patients only, was spent at NH hospitals by patients in our service area during the fiscal 2010 to fiscal 2014 period. Hiring the third orthopedic surgeon in July 2015 meant patients no longer had to leave their community for essential orthopedic services. Anecdotally, we understand that fewer and fewer patients are traveling to NH hospitals for orthopedic services. We had hoped VHCURES date through at least December, 2016 would be available to support what we know only anecdotally. However, VHCURES is not available beyond December, 2015. What we do know, and the table below demonstrates, is the number of orthopedic surgical cases and estimated NPR generated by our orthopedic surgeons has increased significantly since the third orthopedic surgeon was hired in 2015.

Fiscal Year	Orthopedic OR	Orthopedic Net Patient
	Cases	Revenue
FY 2015 (Actual)	525	\$ 7,600,000
FY 2016 (Actual)	768	\$11,000,000
FY 2017 (Budget)	775	\$11,100,000
FY 2017 (Projected)	825	\$11,900,000
FY 2018 (Budget)	870	\$12,500,000

As noted in the narrative, several departments have seen little or no volume increase, but, have seen a significant increase in intensity of services provided. The Emergency Department provides a good example of this. On a budget to budget basis volume in the emergency department will decrease slightly. However, the acuity of patients treated will increase significantly. Using Medicare Relative Value Units (RVUs) as a measurement tool the average acuity of an emergency room patient has increased from 1.71 in budget 2017 to 2.16 in budget 2018, a 26% increase. This increase is due in large part to increased scope of services provided in the ED by board certified / board eligible physicians and in part due to improved documentation, and therefore improved coding and billing, for level of services provided. The effect on NPR from this change in service intensity is shown in the following table.

Period	Total ED Visits	Avg. RVU/Visit	Avg. NPR/Visit	Total NPR
FY 2017 Budget	14,330	1.71	\$ 989	\$14,178,100
FY 2018 Budget	14,300	2.16	\$1,163	\$16,636,600
Change	(30)			\$ 2,458,500

The consequences of not approving the \$5,600,000 additional Net Patient Revenue (NPR) would be a reduction in the availability of essential services at NVRH. A reduction in availability of essential services would mean decreased access and increased wait times for those services. Decreased access and increased wait times would result in patients leaving the community seeking services at NH facilities, as we experienced with orthopedics. A flow of significant VT healthcare dollars into NH would have a deleterious effect on the Northeast Kingdom economy.

We will continue to look at options and opportunities for making operational efficiencies that will lower costs without effecting access to or quality of care. We will continue to focus on strengthening clinical programs while keeping overhead expenses low. We will continue to use Choosing Wisely concepts and other strategies to assure all services provided are justified by evidence-based practices. We will continue to work on health care reform initiatives that will improve the health of the population in our service area. We will continue to be a leader in addressing the needs identified in our Community Needs Assessment survey.

2. UTIL&STAFF - Adjusted admissions show a slight decrease, suggesting little change in utilization. As a result, as costs and staff increase, cost per adjusted admissions and productivity measures are changing unfavorably. Discuss whether this is related to the hiring of the 25 mid-levels FTEs. Discuss the inflation assumptions in the budget.

Response: As noted in our response to Question 1, utilization trends at the departmental level show consistent increases, even though the overall adjusted patient day statistic shows a slight utilization decrease. Adding FTEs while a unit of measure is stagnant will result in a calculated increase per unit of service. We rely on our internal review process to determine when additional FTEs are required. Each request for a new FTE is closely scrutinized by the senior leadership team along with the applicable department manager. A summary of the significant additional FTEs, on a budget to budget basis, is shown below. In general, FTEs were added to either assure safety of patients and staff or to provide timely access to essential services in departments with increasing patient volumes

Department or Service	FTE Increase	Justification
Medical Surgical Inpatient	4.0	Increased patient observers to monitor patients at risk of falling; increase LNAs to free up RN time
Emergency	2.0	New physicians to replace locum tenens coverage. Fully staffed with ED Board Certified/Eligible MDs
Perioperative Services/Anesthesia	5.4	Extend OR time to late pm 3 days/week; provide time off after call nights to preventing provider fatigue
Pain Management/Palliative Care	3.4	Demand for both services continues to grow. Over 1.0 FTE now for Palliative Care
Information Services	3.0	Provide increasing support for providers; new data analyst position (only have 1)

Report 3 of our budget submission shows an increase of 25 "mid-level providers" herein after Advanced Practice Providers (APP.) FTEs from budget 2017 to budget 2018. However, this apparent growth is due to inconsistently separating APPs FTEs from other non-MD FTEs from budget 2017 to budget 2018. The actual APP increase is only 4.3 FTEs. We will work with GMCB staff to correct prior year reports for consistency with fiscal 2018 budget.

The expense budgets assume an overall inflation rate of 3%.

3. UTIL&STAFF and NARR- A 3rd orthopedic surgeon was added and a urologist was added in the 2018 budget. The narrative notes that the orthopedic business continues to grow and that the urologist was "busy". Was the urologist a physician transfer? Why was a 3rd orthopedic surgeon added? Is the growth noted in the narrative sustainable -what information supports this?

Response: The urologist was not a physician transfer but did represent an FTE increase from .65 to 1.0. Also, the 3rd orthopedic surgeon was added in July 2015 and not in 2018.

For many years, NVRH did not have enough orthopedic surgeons to meet the community's need. As a result, many patients seeking orthopedic services traveled to hospitals in New Hampshire to obtain timely access to those services. We know that is true based on VHCURES data. That data revealed \$10 million of VT healthcare dollars, for commercial insurance patients only, was spent at NH hospitals by patients in our service area during the fiscal 2010 to fiscal 2014 period. Hiring the third orthopedic surgeon in July 2015 meant patients no longer had to leave their community for essential orthopedic services. Anecdotally, we understand that fewer and fewer patients are traveling to NH hospitals for orthopedic services. We had hoped VHCURES date through at least December, 2016 would be available to support what we know only anecdotally. However, VHCURES is not available beyond December, 2015. The table shown in response Question 1 illustrates the orthopedic surgical volume and NPR growth resulting from having a third orthopedic surgeon to meet the community's need locally rather than traveling to NH facilities to receive services.

We believe the growth is sustainable. This belief is based on the community's response to both the urologist and orthopedic surgeon. Wait times continue to grow for both providers. Additional resources, advanced practice providers, have been added to meet this growth. Patient satisfaction with both providers is outstanding. Their satisfaction results in not only return visits when additional services are required but also word-of-mouth referrals to their families and friends, which in a small

community has a huge impact on a provider's ability to sustain a busy practice over time. Lastly, the population in our service area continues to grow older thereby creating an increasing need for urology and orthopedic services.

4. DASHBOARD - The hospital budget shows a significant cost per adjusted admission increase of 12%. Why is cost per unit so high? What options are available to reduce costs to lower the per unit cost?

Response: As shown in the table below, NVRH's cost per adjusted admission has fluctuated from year to year over the past five years. The budget cost per admission is higher than it was for 2 of the past 3 completed fiscal years (2014 and 2016) but lower than fiscal 2015. Typically, NVRH's cost per adjusted admission is high, as compared to the Critical Access Hospital (CAH) per group, in large part because of the significant number of physicians and advanced practice providers included in our cost base that may not be included in base of other CAHs.

Fiscal Year	FY 2014A	FY 2015A	FY 2016A	FY 2017B	FY2017P	FY 2018B
Acute Admissions	1,199	1,233	1,367	1,329	1,315	1,340
Adjusted Acute Admissions	5,463	5,331	6,561	6,559	6,442	6,506
Cost Per Admission	11,900	12,263	10,947	10,903	11,794	12,217

Because our salary and non-salary expenses occur primarily in direct-patient care departments, options to reduce costs and not affect access to essential services are limited. We will use proven techniques such as lean, to review operations for ways to improve efficiencies to reduce expenses. We are constantly reviewing drug purchases to identify opportunities for savings. The same is true for our review of all medical supplies. A switch to the Medline brand of supplies has resulted some fairly significant savings. The operating room staff continues to identify supply savings opportunities.

5. RATE&NPR - NVRH has a rate/price request of 4.25%. This is higher than the 3.2% rate level the Board requested because of NVRH's 2016 actual performance. NVRH has requested the 1.05% higher level because they expect a reduction in disproportionate share revenues (\$465,000) from DVHA for 2018. What other options were considered instead of raising your rates?

Response: NVRH's submitted budget includes a \$465,000 reduction in disproportionate share revenue and a \$482,000 provider tax increase. DVHA's final distribution of DSH revenue resulted in a total reduction of \$655,100, on a budget to budget basis. That reduction combined with the \$482,000 provider tax increase results in a negative \$1,137,000 hit to our operating margin from DSH/Provider Tax transactions. We continue to explore all opportunities to improve operating efficiencies and reduce operating expenses. However, it is still necessary to generate \$375,000, or roughly 1/3 of the DSH/Tax hit, from the additional 1% additional rate increase in order to maintain an appropriate level of financial health.

6. NPR PAYER - Medicare shows more favorable reimbursement and higher utilization. The narrative describes some of this as "Medicare share of cost increases for Critical Access Hospital". Explain and discuss the assumptions you are making for both of these changes?

NOTE: Net patient revenue for Medicare, Medicaid and Commercial insurance has been revised for projected 2017 and budget 2018. GMCB staff has been made aware of these changes.

Response: As revised, net Medicare patient revenue will increase by \$4,637,100. The higher Medicare reimbursement is a result of the increase utilization, higher percentage of Medicare patients and the reimbursement formula applied to Critical Access Hospitals. The utilization increases were described as part of our response to Question 1. During fiscal year 2017 NVRH experienced Medicare patients increasing as a percentage of total patients (based on gross revenue.) We are projecting that trend to continue into fiscal 2018.

As a Critical Access Hospital, Medicare reimburses NVRH for costs incurred to care for Medicare patients. Historically, that means Medicare pays approximately 34% of total hospital expenses. On a budget to budget basis we are projecting costs to increase by approximately \$8 million. Medicare's share of that increase, 34%, is \$2,711,700

7. NPR PAYER - Commercial shows less favorable reimbursement from 2017 to 2018 budget. Describe the significant reimbursement assumptions the hospital has made for the Commercial revenue estimates.

NOTE: Net patient revenue for Medicare, Medicaid and Commercial insurance has been revised for projected 2017 and budget 2018. GMCB staff has been made aware of these changes.

Response: As revised, net Commercial patient revenue will increase by \$3,918,500 and the ratio of NPR to gross charges improves to 64.5%. The revised ratio for budget 2018 is only slightly less than for budget 2017. Patients with commercial insurance, as a percent of total patients, will increase slightly. The volume and service intensity changes described in response to Question 1 will also increase commercial NPR. There are no significant changes to our reimbursement assumptions for commercial payers.

8. NPR PAYER - Medicaid shows little change in reimbursement and utilization. Describe your assumptions.

NOTE: Net patient revenue for Medicare, Medicaid and Commercial insurance has been revised for projected 2017 and budget 2018. GMCB staff has been made aware of these changes.

Response: Medicaid utilization as a percentage of total hospital utilization is trending downward from fiscal 2017 budget to 2017 projected. That trend is expected to continue into fiscal 2018. The volume and service intensity changes described in response to Question 1 will also affect Medicare NPR. The budget assumes no changes will be made to current Medicaid reimbursement levels. The net effect of these factors is Medicaid revenues, as revised, will decrease by \$44,800, on a budget to budget basis.

We note again that DVHA is working on a new Outpatient Prospective Payment System (OPPS) model, which may have a negative effect on Medicaid reimbursement during fiscal 2018.

9. INCOME STATEMENT - The hospital has not budgeted any revenue for 2017 and 2018 for non-operating revenues. Is this reasonable given the increase in the markets the last two years? If revenues were earned, describe how this might impact your submitted rate increase?

Response: We believe it is reasonable not to budget any non-operating revenue for fiscal 2018. The vast majority of non-operating revenues are unrealized gains, or losses, due to changes in the financial markets. The financial markets are too volatile to predict from year to year so NVRH doesn't attempt to make a prediction. Non-operating revenues or losses would not impact our annual rate request. The underlying investments are board-designated to fund future capital projects and equipment. Gains and losses are reinvested to be used as intended, for the acquisition of long term capital assets, and not to fund operations.

10. CAPITAL - The hospital describes planned increases in information systems for medical records. Are these replacements of existing systems or new technology?

Response: The capital budget includes \$1,800,000 to upgrade the existing Meditech system from Version 6.0 to Version 6.1. This upgrade will significantly improve the integration of records from physician practices and the hospital.

11. INCOME STATEMENT - Are the 2017 projections still valid? If not, please describe material changes?

Response: Yes, the 2017 projections are still valid. We do not anticipate the operating margin will change materially from what is shown in the projection.

12. Refer to the Act 53 price and quality data schedule that is included in the staff analysis and be prepared to address questions the Board may have concerning that information.

Response: NVRH will be prepared to address questions relating to the Act 53 price and quality data.

- 13. In the March 31 GMCB hospital guidance, the Board allowed up to 0.4% for new health care reform. The Board directed each hospital to provide a detailed description of each new health care reform activity, investment or initiative included within the designated 0.4%, provide any available data or evidence-based support for the activity's effectiveness or value, and identify the benchmark or measure by which the hospital can determine that the activity reduces costs, improves health, and/or increases Vermonters' access to health care. With this in mind, please describe how you are investing for new health care reform activities in the four approved areas:
 - Support for Accountable Care Organization (ACO) infrastructure or ACO programs;
 - Support of community infrastructure related to ACO programs;

- Building capacity for, or implementation of, population health improvement activities identified in the Community Health Needs Assessment, with a preference for those activities connected with the population health measures outlined in the All-payer Model Agreement;
- Support for programs designed to achieve the population health measures outlined in the All-payer Model Agreement.

Response: The new health care reform initiatives included in the fiscal 2018 budget are:

A registered nurse (RN) to join the core Community Health Team (CHT) to provide in home skilled nursing, including medication education, to people who would benefit from a nursing home visit for an ongoing chronic condition, but are not eligible (do not meet the criteria) for traditional home health nursing services. This RN would work closely with other members of the CHT who already work as a team to better coordinate care for at risk and high risk patients. This position would be funded by NVRH and hired in partnership with Caledonia Home Health Care (CHHC), with CHHC providing supervision and scheduling and administrative services.

Paramedic service staff to make home visits following discharge for an identified cohort of patients who would benefit from a home visit. A trigger list would be created to identify those patients who would benefit from this service. The goal of this initiative would be to reduce readmissions. Similar projects already implemented in other parts of the country have proved to be successful in reducing admissions and reducing unnecessary ER visits. Again, this service would be for patients not meeting criteria for traditional home health services. It would be funded by NVRH in partnership with local community EMS.

Creating mental health and substance abuse screening and referral services in the NVRH Emergency Department. This program could be adapted from the SBIRT (screening, brief intervention, referral to treatment) program used by other ER's in Vermont and across the country. There is strong research to support this type of program especially for reducing the misuse of alcohol.

The following sections describe new health reform activities in the four approved areas.

NVRH is working with the healthcare system and our non-medical community partners to go far beyond the population health goals of the APM. We are going upstream to address the root cause of poor health and meet our mission to improve the health of the people in the communities we serve. We have formed an Accountable Health Community – the Caledonia and So. Essex Accountable Health Community (CAHC) – that defines our "population" as everyone living within the geography of our service area. This is in direct contrast to the APM definition of "population" - an "attributed" group based on enrollment in an ACO. The Leadership Team of the CAHC includes the decision makers (CEOs and Executive Directors) from the hospital, the FQHC and home health organization, designated mental health agency, designated regional housing organizations, the community action agency, the council on aging, and the VT Foodbank. The CAHC members include a wide variety of traditional e.g. state agency and non-traditional e.g. Catamount Arts and Habitat for Humanity partners. The CAHC uses the framework of Accountable Health Communities, the elements of Collective Impact, and the principles of Results Based Accountability to guide our work. The CAHC has 5 outcomes; Our Communities will be Well Nourished, Well Housed, Physically Healthy, Mentally Healthy, and Financially Secure. Collaborative Action Networks (CANs) have been formed to steward the work in the 5 outcome areas. CANs include CAHC members and other experts and interested people. Efforts are underway to recruit community members to the CANs. Early successes of the CAHC partners include opening a warming shelter in St Johnsbury (the last 2 winter seasons), and embedding 2 community health workers in the St Johnsbury School to work with school staff to provide support to at risk families. We are also investigating the role of "psych techs" in the ER to work as part of the care team with the physicians and nurses to assess and monitor patients presenting to the emergency department with

Measures of success for the new health reform initiatives: Using the principles of Results Based Accountability we will have both population level measures and performance measures. Population level indicators will include reduction in avoidable ER visits, hospital admissions, and hospital readmissions. Performance level measures will be developed for each new initiative and will include measures such as number of visits/encounters and a qualitative component to address provider and patient satisfaction with the care.

14. Please identify which ACO(s) you will have a contractual relationship with in 2018. If your hospital plans (or already is) in a risk-bearing contract with OneCare, please explain the effect of the risk on your financial statements. Please explain specific strategies your hospital is developing to move toward population-based payment reform. Finally, what tools does your hospital employ to ensure appropriate, cost effective, quality care when working with providers outside the CHAC or OneCare network?

Response: NVRH will have a contractual relationship with the Community Health Accountable Care (CHAC) during 2018.

NVRH will not participate in the Next Gen Risk-Based program during fiscal year 2018. Several factors led us to make that decision. First, NVRH wanted to align its strategy with that of Northern Counties Health Care, another significant primary care organization in our community. NCHC also elected to not have a risk-bearing contract during 2018. Also, at the time our budget was prepared, financial-modeling data was not available to allow us to make an informed decision to take on risk. Lastly, one significant question remained unanswered: Would NVRH maintain its Critical Access Hospital status if we joined the Next Gen Risk-Based program?

NVRH started positioning itself for population-based reform eight years ago. NVRH and the St. Johnsbury community were among the first in the nation to embrace the medical home program. Currently, all of our primary care practices are NCQA Patient-Centered Medical Home certified. Other population health strategies include taking a lead role in The Caledonia and S. Essex Accountable Care Community (CAHC). One other strategy is NVRH's adoption of the Choosing Wisely concepts to assure diagnostic testing performed at NVRH is consistent with evidence-based practices

NVRH does not work with providers outside the CHAC or OneCare network.