Proposed Vermont Hospital Sustainability Framework
July 15, 2020

Introduction

COVID-19 has highlighted many of the known weaknesses of our current fee for service payment system. As the pandemic clearly illustrated, downward shifts in utilization can have a profound impact on hospital margins, potentially jeopardizing the ability of hospitals to continue providing essential services to Vermonters.

Even prior to the onset of COVID-19, the topic of rural hospital sustainability has been a growing concern both nationally and in Vermont. For example, on April 3, 2019, the Board held a panel discussion with local stakeholders and a national expert to discuss the financial challenges facing rural hospitals. In 2019, the Vermont legislature passed Act 26 which established the Rural Health Services Task Force charged with providing recommendations to address Vermont's rural health challenges.

Vermont's hospitals are increasingly financially vulnerable due to a multitude of forces, including a declining and aging population, payer mix shifts, lagging public reimbursement, workforce shortages, and growing supply costs. [1] At the same time, national and state health care reform efforts have shifted towards more value-based payment which holds providers accountable for both cost and quality. Successful transition to new payment models requires hospitals to invest in population health, preventative care and care management.

The financial vulnerability of rural hospitals is not unique to Vermont. According to the UNC Sheps Center for Health Services Research, 170 rural hospitals in the US have closed since 2005 and even before COVID-19, the proportion of rural hospitals predicted to be at mid-high or high risk of financial distress was high (over 25%) and growing.[2] In VT, one hospital has declared bankruptcy and 6 out of 14 have consistently reported negative operating margins for at least 3 of the past 5 years. Closures of rural hospitals have significant, negative impacts on their communities.[3] In Northern New England, health care workers are 10% of each state's workforce.[4] When a community's sole hospital closes, it is estimated to reduce per capita income by 4% and increase unemployment by 1.6% in that community.[5] In addition, every $1.00 spent by a hospital supports approximately $2.30 of additional business activity in that community, which in Vermont is estimated to have a $2.2 billion impact.[6] Hospital closures also impact physician supply, including primary care, and reduce services available to that community.[7]

The Rural Health Services Task Force recommended four areas of focus in addressing the issues common across Vermont's health care providers, including addressing health care workforce

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[1] Rural Health Services Report, See slides 7-8, 10-11 & Workforce White Paper, pages 1-5.
[2] https://www.shepscenter.unc.edu/programs-projects/rural-health/rural-hospital-closures/; https://www.shepscenter.unc.edu/wp-content/uploads/dlm_uploads/2019/04/FDI-Trends-1.pdf
[3] Rural Health Services Report, Slides 44-47
[4] Id.
[5] Id.
[6] Id.
[7] Id.

shortages, expanding telemedicine, and continuing with payment and delivery system reform.[8] In addition, the Bipartisan Policy Center's report on Reinventing Rural Health Care is consistent with the Task Force's, but also recommends "rightsizing health care services to fit community needs" and includes Medicare policy changes on the federal level to provide more flexibility for hospitals, in particular, to right-size.[9]

The GMCB has a statutory obligation to ensure that hospital budgets "promote efficient and economic operation of the hospital" and "reflect budget performances for prior years". 18 VSA 9456 (3) & (4). In its 2020 hospital budget review, the Board ordered 6 of the 14 hospitals to complete sustainability plans to address concerns about consistent operating losses. Based on the COVID-19 pandemic and the economic impact on all hospitals, we now propose expansion to all Vermont hospitals.

The initial stage of sustainability planning will include both action steps to improve financial health and an assessment of current services, particularly in light of the transition to value-based payment. For some hospitals, service lines may require adjustment as hospitals face greater accountability for both cost and quality. The goal is to identify pathways to ensure that hospitals remain strong enough to maintain access to high quality and financially sustainable essential services in their communities.

Below, we provide a sustainability planning framework. It is hoped that each hospital will include the leadership team, trustees and community members in their sustainability planning efforts. The Board requires these plans to be completed by [TBD]. Each submission must include the signatures of the CEO, COO (if relevant), CFO, CMO and Board Chair.

Stage 1: Financial Health

Please review Table 1 in the supplementary spreadsheet which contains a summary of each hospital's Financial Performance relative to regional and national benchmarks (e.g., S&P[10]). A list of relevant financial metrics and their source is also included below:

Stage One Financial Health Metrics

Metric	Theme	Source	Proposed Benchmark
Total margin	Income and margins	Hospital budget submissions	S&P Global Rankings
Operating margin	Income and margins	Hospital budget submissions	S&P Global Rankings
Private price ratio[11]	Income and margins	Medicare cost reports	Vt hospital median
Charge markup[12]	Income and margins	Medicare cost reports	1.5

[8] Id, Slides 28-30, 58-29, and 66.
[9] Reinventing Health Care, Bipartisan Policy Center, page 4.
[10] https://www.standardandpoors.com/en_US/web/guest/article/-/view/type/HTML/id/2232376
[11] (Commercial net revenue per discharge) / Medicare revenue per discharge
[12] (Private allowed amount) / Medicare allowed amount for the same services.

Investment income	Income and margins	Hospital budget submissions	VT hospital median
Payer mix (including bad debt and free care)	Income and margins	Hospital budget submissions	VT hospital median
Salaries and benefits as % of NPR	Income and margins	Medicare cost reports	S&P Global Rankings
Administrative salary bill / NPR	Income and margins	Medicare cost reports, Form 990	VT hospital median
Occupancy rate	Income and Margins	Medicare cost reports	VT hospital median
30-day same cause readmission rate[13]	Quality	VHCURES	VT hospital median
All-cause readmission rate	Quality	Medicare Hospital Compare data	Medicare Hospital Compare: Hospital Readmissions Reduction Program
FTE per adjusted occupied bed	Income and margins	Hospital budget submissions	VT hospital median
Current ratio	Assets	Hospital budget submissions	VT hospital median
Days cash-on-hand	Assets	Hospital budget submissions, S&P	S&P Global Rankings
Days in net accounts receivable	Assets	Hospital budget submissions, S&P	S&P Global Rankings
Days in gross accounts receivable	Assets	Hospital budget submissions	VT hospital median
Unrestricted reserves	Assets	Hospital budget submissions	S&P Global Rankings
Long term debt	Liabilities	Hospital budget submissions	VT Hospital Median
Defined benefit pension liability (%)	Liabilities	Hospital budget submissions	S&P Global Rankings
Debt burden (%)	Liabilities	Hospital budget submissions	S&P Global Rankings
Unrestricted reserves/ Long term debt (%)	Liabilities	Hospital budget submissions	S&P Global Rankings
Equity financing	Liabilities	Hospital budget submissions	VT hospital median
Debt service coverage ratio	Liabilities	Hospital budget submissions	S&P Global Rankings
Capital Expenditures/ to Depreciation Expense		Hospital budget submissions	S&P Global Rankings
Long term debt to capitalization ratio	Liabilities	Hospital budget submissions	S&P Global Rankings

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Average age of plant	Liabilities	Hospital budget submissions	S&P Global Rankings

For **each** financial metric in the supplementary spreadsheet highlighted as "vulnerable" or "highly vulnerable" relative to the benchmark, provide 1) specific *action steps* taken or to be taken to bring under-performing metrics into the "adequate" zone, 2) the *time* needed to achieve that milestone and 3) potential *obstacles* to success as well as *strategies* to overcome those obstacles.

Stage 2: Ensuring Provision of Essential Services

Given the current confluence of forces facing hospitals, it is important that Vermont as a state begin to discuss right sizing health care in its communities in order to ensure access to essential services and avoid the hospital closures happening around the country. This is a challenging process, which must take into consideration community needs, financial viability, and other factors. This section asks each hospital to comment on the ability to provide, or support the provision of, Essential Services in its community. We rely on the American Hospital Association's definition of Essential Services as outlined in its 2016 report "Task Force on Ensuring Access in Vulnerable Communities".[14]

The AHA-defined Essential Services include:

- **Primary Care** (which includes pediatrics, palliative care, rehabilitation)
- **Prenatal Care**
- **Home Care**
- **Dentistry**
- **Psychiatric and Substance Abuse Services** (which includes behavioral health, psychotherapy, social work services, individual and family counseling)
- **Emergency and Observation Services**
- **Diagnostic Services** (which includes laboratory and imaging services)
- **Transportation** (which includes both ambulance and non-emergency transportation services),
- **Robust Referral System/Transfer Agreements** for specialty services (to avoid low-volume service and reduce unnecessary duplication).

Please review Table 2 in the accompanying spreadsheet which lists each of the AHA Essential Service areas delineated above. For each Essential Service, 1) tell us whether community needs for that service are *not met*, *partially met*, or *fully met*, and 2) which *entities* deliver these Essential Services (e.g., Hospital, FQHC, Designated Agency, Independent providers, Home Health Agency, etc.).

For any Essential Service delivered by the Hospital, please report whether the *contribution margin* (revenue net variable costs) and *total margin* (revenue net fixed and variable costs) are

[14] https://www.aha.org/system/files/content/16/ensuring-access-taskforce-report.pdf; AHA Resources for hospitals are available here.

positive or negative. Also, please estimate the *average private price ratio (commercial net revenue per discharge/Medicare revenue per discharge), charge markup (private allowed amount/Medicare allowed amount for the same service), average Medicaid-to-Medicare reimbursement ratio, payer mix (inclusive of average bad debt and charity care),* and *percent contribution to Net Patient Revenue* for each Essential Service line.

Please answer the following additional questions:

1) For FY19, what percentage of NPR was generated by delivery of the above-defined Essential Services?
2) For each Essential service, please describe any current and future obstacles to sustainably and fully delivering the service to your community. (By sustainably, we mean for each Essential Service, revenue exceeds cost, without cross-subsidization from other services). Please focus your answer on a typical year (e.g. 2019). That said, we are also interested in understanding obstacles to delivering essential services during a public health crisis.
3) Please offer possible solutions to those obstacles that can be undertaken by the Hospital.
4) Please offer solutions that could be addressed by other stakeholders, regulatory or policy bodies (e.g., GMCB, State legislature, Agency of Human Services, VAHHS, CMS/CMMI, etc.)

Stage 3: Sustainability of Other Services

This section focuses on other services delivered by hospitals. Hospitals will become more accountable for both cost and quality as we transition to a value-based environment. Sustainability will require that hospitals evaluate their ability to deliver low cost, high quality care for each service line. Volume must be considered in that context given the evidence that for some procedures, there is a relationship between volume and quality.[15] Notably, Johns Hopkins, Dartmouth-Hitchcock and the University of Michigan recently pledged that they will require their surgeons and affiliated hospitals to meet minimum annual thresholds for several procedures; for example, for knee or hip replacements, the Volume Pledge requirement is 25 per surgeon and 50 per hospital. To the extent that many VT hospitals are facing declining populations, and growing fixed and variable costs, low volumes may impact both cost and quality. As we move to a value-based payment world, hospitals may need to reoptimize their service lines by investing in services that can be delivered at low cost and high quality and divesting of services that are more cost-effectively delivered elsewhere. In such cases, hospitals will need to explore innovative ways to ensure that its community has alternative access to those services.

Please review Table 3 which lists hospital services. For each service delivered by the hospital, please report whether the *contribution margin* (revenue net variable costs) and *total margin*

[15] See for example: Bauer H, Honselmann KC. 2017. "Minimum Volume Standards in Surgery - Are We There Yet?" *Visceral Medicine*. 33(2):106-116.; Kozhimannil et al. 2016. "Association between Hospital Birth Volume and Maternal Morbidity among Low-Risk Pregnancies in Rural, Urban, and Teaching Hospitals in the United States." *Am J Perinatol*. 33(6):590-9; https://newsatjama.jama.com/2015/06/10/jama-forum-back-to-the-future-volume-as-a-quality-metric/; https://khn.org/news/three-hospitals-hope-to-spark-a-reduction-in-surgeries-by-inexperienced-doctors/

(revenue net fixed and variable costs) are positive or negative; *the average private price ratio, charge markup, average Medicaid-to-Medicare reimbursement ratio, payer mix (inclusive of average bad debt and charity care),* and *percent contribution to Net Patient Revenue;* distance to nearest alternative provider; growth potential; whether this service line supports an Essential Service (and how); and whether this service line would be included in an optimal service line mix in a Value-Based environment. Also please note if CMS requires a specific service line to maintain the hospital's current designation.

Please also complete Table 4 which focuses on hospital capacity and procedural volume for surgical procedures.

Please answer the following additional questions:

1) Has the hospital forecasted the demographic changes that are expected in its HSA through FY 2024? (Y/N) What demographic changes does the hospital anticipate and what strategic planning has been done to accommodate those changes?
2) How does the hospital anticipate these demographic changes will impact demand for the following services through FY 2024:
    a. Essential services in Stage 2 above? (+/--)
    b. Other services in Stage 3 above? (+/--)
3) How does the hospital anticipate these demographic changes will impact local health care workforce from the following streams:
    a. Current and future Vermonters who will be available to work through FY 2024?
    b. Travelling nurses or other contracted labor from inside or outside Vermont?
4) For service lines with negative contribution and/or total margin, please explain their inclusion in current service mix, with particular reference to documented community need and closest alternative provider.
5) For services with charge markups greater than 150%, please describe strategies to bring down the cost of delivering those services to commercial patients.
6) For procedures identified in Table 4 where hospital volumes lie below 50 and surgeon volumes lie below 25, please assess whether these surgical volumes are sufficient to maintain low cost and high-quality outcomes for your patients.
7) Can the hospital deliver each of the services listed in Table 3 in a high-quality, cost-effective, and sustainable manner? (Y/N) If not, what steps will the hospital take to optimize its service line delivery? Which services might be more cost effectively delivered elsewhere?
8) Describe what an optimized service line looks like for the hospital in FY 2024. Assume there is a scaled-up, value-based payment model focused on primary prevention and population health where hospitals are held accountable for cost and quality.
9) What steps will the hospital take to ensure that patients have access to divested services through referral and transportation options; establishment of regional collaboratives, management agreements; clinical affiliations; telemedicine, etc.?
10) Will the optimized service line strategy in response 8 impact the hospital's ability to respond to a public health emergency?

Stage 4: Strategic Planning

In stage 4, hospitals are asked to reflect on the information and analyses in the previous stages of this framework and discuss their plans for sustainability as they consider their ability to deliver essential services to their community in a value-based world.

1) Given the financial headwinds facing rural hospitals, how will your institution balance the need to deliver care to rural patients who, on average may be older, poorer, and less mobile than other patients, with the need to ensure that services delivered in your community are delivered efficiently at the lowest cost and highest quality?
2) Please describe how the hospital will ensure delivery of high-quality essential services to all members of its community in a cost-effective way.
3) Please describe any current and future obstacles to sustainably and fully delivering cost effective, high quality care in your community for your *envisioned optimized service line*.
4) Please offer possible solutions to those obstacles that can be undertaken by the Hospital.
5) Please suggest solutions that could be addressed by other stakeholders, regulatory or policy bodies (e.g., GMCB, State legislature, Agency of Human Services, VAHHS, CMS/CMMI, etc.)
6) How might payment reform (e.g. global budgets, capitation) mitigate your financial sustainability challenges? Please be specific.
7) Please describe your relationship with other care providers in your community as it relates to your work and investment in prevention and population health. What are the challenges and opportunities for improving how you work together to achieve better population health in your community?
8) How has the onset of COVID impacted service line decisions for both the short term and the long-term? Please describe any service investments or divestments related to your COVID experience. Are there barriers to continuation of these services after the state of emergency such as telemedicine coverage by payers?
9) Given the existing financial and economic pressures faced by hospitals and the goal of delivering high-quality low-cost care, which assumes lean operations, how do we simultaneously plan for an impending public health crisis (e.g. not only a second wave of COVID-19 but potential future pandemics); what is the right level of slack in the system?
10) Please provide a summary of your hospital's application for- and receipt of- funding related to the CARES Act, Coronavirus Relief Funding, or other pandemic-related grants or loans. Please explain how your facility used these funds and their impact on your budget going forward.
11) What assumptions and utilization expectations are you building into your budgeting and forecasting? Have these methodologies changed with COVID-19?
12) Please attach any documents pertaining to strategic or sustainability planning you already have in place.