

ACT 167 COMMUNITY ENGAGEMENT: RECOMMENDATIONS

Aug 2024 (Updated 1/30/25*).

*Footnotes on “hospital current situation” slides have been modified to reflect data source and, where available, visit counts from the Vermont Uniform Hospital Discharge Data Set (VUHDDS) and hospitals (hospital input), and Vital Statistics were added. This did not impact the analyses, results, or recommendations presented in this report. Additional information about the data used in this project can be found in the Appendix resource. No new analyses were completed.

CONTEXT

In 2022, Vermont Legislature passed Act 167 to fund investigations on how to improve health system sustainability and hospitals' financial health.

*Act 167 (of 2022) required **GMCB**, in collaboration with the **Agency of Human Services**, to develop an **inclusive engagement process** for Vermont hospitals to improve access, affordability, and equity.*

Oliver Wyman** was engaged to **support this investigation** by conducting **interviews / working sessions** over 2 phases, codifying qualitative and quantitative into a set of **recommendations outlined in this report.



TABLE OF CONTENT

1

Project Objectives
Pages: 3-7

2

Executive Summary
Pages 8-12

3

Platform for Change
Pages 13-28

4

State Recommendations
Pages: 29-31
(See separate document for detailed recommendations)

5

System Recommendations
Pages: 32-47

6

Hospital Recommendations
Pages: 48-114

7

Next Steps
Pages: 115-121

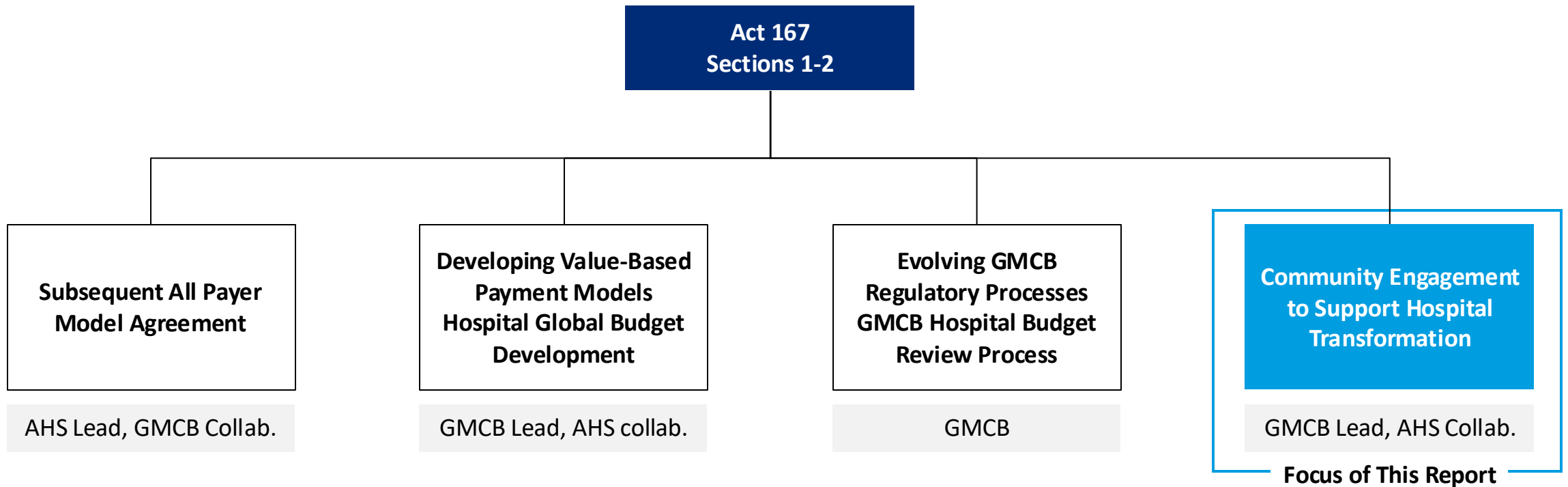
8

Appendix
Pages: 122-139

01

PROJECT OBJECTIVE

IN 2022, VERMONT LEGISLATURE PASSED ACT 167 TO FUND INVESTIGATIONS ON HOW TO IMPROVE HEALTH SYSTEM SUSTAINABILITY AND HOSPITALS' FINANCIAL HEALTH



Oliver Wyman was engaged to facilitate community meetings to gain a **deeper understanding of the current state of Vermont's health care system** (including the experiences of Vermonters and their health care providers) and to support hospitals in **identifying short, medium, and long-term actions to keep them financially sustainable while providing high-quality care to their communities.**

Link to legislation: <https://legislature.vermont.gov/Documents/2022/Docs/ACTS/ACT167/ACT167%20As%20Enacted.pdf>

Link to GMCB Hospital Sustainability and Act 167 webpage: <https://gmcbboard.vermont.gov/hospitalsustainability>

PROJECT CONTEXT



ACT 167 OBJECTIVES

Section 2 of Act 167 (2022) requires that the GMCB, in collaboration with the Director of Health Care Reform in the Agency for Human Services, develop and conduct a data-informed, patient-focused, community-inclusive engagement process for Vermont's hospitals to:

- **Reduce inefficiencies**
- **Lower costs**
- **Improve population health outcomes**
- **Reduce health inequities**
- **Increase access to essential services**

While maintaining sufficient capacity for emergency management



OLIVER WYMAN'S WORK

Scope:

- **Broad community and provider engagement in and across all Hospital Service Areas (HSAs) in Vermont**
- A data-informed, patient-focused, community-inclusive engagement for the second stream of work for Act 167

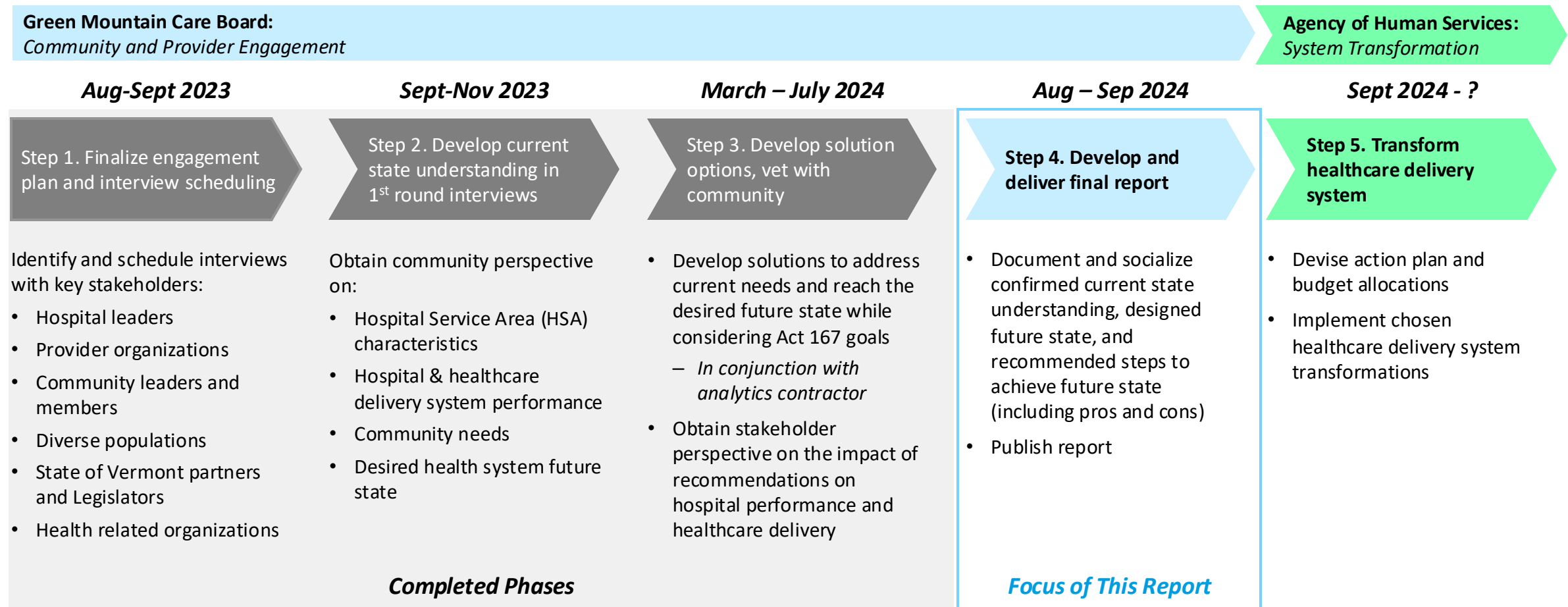
Goals: engage diverse stakeholders and ascertain their interactions with the health system and perceived needs to overcome any barriers to equitable access and outcomes

Work to Date: conducted interviews and working sessions in 2 phases and codify qualitative and quantitative inputs to inform a recommendation

- Phase 1 – August through mid-November 2023
- Phase 2 – March through Sep 2024

SCOPE AND APPROACH: TO IMPROVE THE VERMONT HEALTHCARE DELIVERY SYSTEM, WE SOUGHT OUT INPUT FROM COMMUNITY STAKEHOLDERS OVER 12 MONTHS

Act 167 (of 2022) requires GMCB, in collaboration with the Agency of Human Services, to develop and conduct a data-informed, patient-focused, community-inclusive engagement process for Vermont’s hospitals to **reduce inefficiencies, lower costs, improve population health outcomes, reduce health inequities, and increase access to essential services**



WE WORKED WITH STATE AGENCIES, HOSPITALS, COMMUNITY PROVIDERS AND PATIENTS TO BETTER UNDERSTAND CURRENT AND FUTURE NEEDS OF VT'S HEALTHCARE SYSTEM

3100+ PARTICIPANTS	Across all stakeholder types and meetings ¹	Meeting Type	# of Meetings	Estimated # of Attendees¹
~68 PARTICIPANTS	On average per Ph2 community meeting, including state-wide meetings	Stakeholder meetings on engagement plan	16	91 ²
100+ ORGANIZATIONS	Contacted	Hospital Leadership and Boards	57	243
120 PUBLIC COMMENTS	Received	Diverse Populations	15	96
14 HOSPITALS	Visited in person	State Partners	45	109
		Community Leaders	10	29
		Community Meetings (<i>public HSA level</i>)	50	1947
		Provider Meetings	35	596
		Payers / insurer meetings	3	5

1. The number of attendees provided is an estimate as there are pending meetings, and technical errors/malfunctions in producing some attendance reports;

2. The 91 participants are excluded from the total as they are accounted for in the other meeting types

02

EXECUTIVE SUMMARY

THREE IMPERATIVES FOR VERMONT'S HEALTHCARE TRANSFORMATION

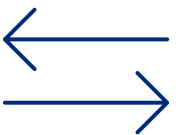
1 Build housing and other facilities and fix transportation



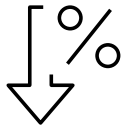
2 Pay PPS hospitals with reference-based pricing and move to global budgets/capitation for all when conditions for success are met



3 Move all care possible out of hospitals



EXECUTIVE SUMMARY: VERMONT HEALTHCARE FACES SERIOUS CHALLENGES IN AFFORDABILITY, SUSTAINABILITY, ACCESS AND EQUITY



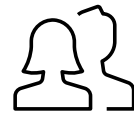
Decreasing Affordability:

- Average premiums for silver exchange plans are \$985 in 2024, a 108% price increase in 6 years, representing a greater challenge for affordability
- 60-80% increase in individual, small group plan premiums in the past 6 years
- >100% increase in out of pocket max in the past 5 years



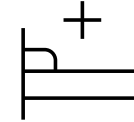
Deteriorating Sustainability:

- 9 of the 14 hospitals report operating losses (up to -8.9%) in 2023. Trend is projected to worsen with 13 of the 14 hospitals expected to report losses by 2028



Aging and Shrinking Population:

- Overall population is aging - individuals >65 years old are projected to exceed 30% of the total population by 2040 which will exacerbate current strains on the healthcare system due to increasingly complex care needs
- Working age population declines (-13% by 2040) will intensify workforce shortages and limit contributions to commercial healthcare premiums, rendering cross-subsidization increasingly unsustainable as a financial strategy



Lack of Healthcare Access:

- Primary and specialty care clinics have long wait times preventing patients from seeing providers for urgent/routine visits in a reasonable timeframe
- Community-based care (e.g., primary care, home health, etc.) does not fully support population health needs, resulting in increased hospital use



Inequity in Healthcare:

- Current system does not sufficiently support access and affordability needs for dispersed, low-income populations in rural areas
- Affordable housing supply is inadequate, a significant social determinant of health, and a barrier in delivering home-based care
- Emergent and non-emergent transportation is unreliable and lacks timeliness, preventing community members from accessing care
- Culturally competent care is not widely practiced to treat patients with unique needs (e.g., language, mental health, gender/sexual identity)

EXECUTIVE SUMMARY: HEALTH SYSTEM TRANSFORMATION IS URGENTLY NEEDED ACROSS THE STATE, SYSTEM AND HOSPITAL LEVELS



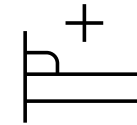
At the state-level, Vermont must support development of infrastructure and legislation to enable future provider-level transformation work

- Foundational infrastructure including a robust workforce, greater access to transportation, and an affordable housing supply are all tightly linked to hospitals through various access points (e.g., staffing, inter-facility transfers, boarders, avoidable ED visits)
- Agency of Human Services sub-units and community-based care models will require reconfiguration to better coordinate health and social service needs at the community and individual level
- Current administrative processes and requirements should be streamlined to minimize the provider burden (e.g., simplify prior authorization process and state agency documentation)



At the system-level, new regional specialized centers of care are recommended to drive hospital efficiency and shift care outside of the hospital setting

- Regional centers for different specialties should be identified to support acute, complex medical / surgical needs in a targeted and coordinated manner vs. managed in the community
- Community-based care, primary care, mental health care, and housing capacity should be increased to divert care to lower cost settings
- Healthcare workforce affected by system changes could be redistributed or retrained to perform services needed by the community



At the hospital-level, hospitals should consider reconfiguring their services based on their financial position and community population needs

- Several hospitals are at risk of closing their inpatient beds and should consider repurposing their facilities and clinical staff through several options e.g., Rural Emergency Hospital, Community Ambulatory Care Center, Care at Home support program
- Regional specialized centers will need to adapt services to accommodate new patient volumes and changing population health needs
- UVM needs to examine current overhead and administrative costs, especially the proportion of providers supporting non-patient care activities

VERMONT LEGISLATORS AND AGENCIES NEED TO START ON TRANSFORMATION PRIORITIES IN 2025 TO ALLOW FOR ORDERLY SYSTEM TRANSFORMATION TO COMPLETE BY 2028

Priority policy changes for Vermont legislators to approve in 2025

- 1 Remove barriers to building affordable housing for VT residents and newcomers to the State
- 2 Approve funding for EMS transformation
- 3 Expand broadband coverage to rural areas (e.g. Star Link)
- 4 Review existing AHS agency structure and program list to identify overlaps and opportunities for efficiency
- 5 Develop state regulations and provision details for Rural Emergency Hospital and free-standing birthing centers
- 6 Expand professional licensure and practice scope for nurses, EMT and pharmacists

Form the critical **infrastructure and regulatory foundations** for implementation of health system transformation

Priority transformation programs for AHS to initiate in 2025

- 1 Regionalize of specialty care services across hospitals
- 2 EMS professionalization and regionalization
- 3 Improved care coordination and management for heavy utilizers (e.g., elderly, mental health, and neuro-divergent and foster care)
- 4 Dual eligible targeting, care planning and coordination
- 5 State-wide electronic medical record coordination and optimization

Devise **realistic operational details and implementation plan** for transformation initiatives

Priority regulatory changes for GMCB to apply starting 2025

- 1 Permit no further increases in commercial subsidization for hospital financial shortfalls
- 2 Refrain from licensing any further hospital-based outpatient department unit
- 3 Simplify and shorten CON process
- 4 Encourage free-standing diagnostic, ASC, birthing centers
- 5 Begin movement to reference-based pricing ideally at 200% of Medicare or less for PPS hospitals
- 6 Require all hospitals to use the same accounting agency and method to construct hospital financials and budget submissions

Align system incentives and guardrails to desired transformation goals

RECOMMENDED TRANSFORMATION IS EXPECTED TO YIELD >\$400MM IN SAVINGS WHICH CAN BE REINVESTED INTO THE SYSTEM TO PROMOTE THE HEALTH OF VERMONTERS

Hospital transformation initiatives are expected to yield

>\$400 MM
in direct savings in 5 years*

*Independent of savings from payment reform activities (e.g., AHEAD)

Savings can be reallocated to improve VT's healthcare system **outside of hospital-based care** including:

- Invest in community-based care (e.g., primary care, home health)
- Invest in social needs programs (e.g., housing, mental health)
- Bend the trend of rising health insurance premiums

Hospital transformation recommendations are expected to achieve direct and indirect savings

Sources of Direct Savings

>\$100 MM

1. **Close inpatient facilities with unsustainable financials...because**
Finances are projected to continue to decline, requiring a significant cash infusion to compensate for budget deficits

>\$300 MM

2. **Reduce hospital administrative costs ...because**
Exceedingly high administrative costs in some hospitals have been driving hospital budget increases and state-wide costs
3. **Reduce costs through synergies ...because**
Individual hospitals could benefit from shared services/staff

Sources of Indirect Savings (to system)

1. **Deliver same procedures in Ambulatory Surgical Units and outpatient settings...because**
Low-risk procedures can be delivered in non-hospital settings at a lower cost
2. **Expand access to primary care settings to manage patient needs...because**
Some emergency visits are preventable if patients can access timely primary care
3. **Address social determinants of health ...because**
Some inpatient stays and ED visits are avoidable if SDOH needs are addressed in the first place (e.g., housing)

03

PLATFORM FOR CHANGE

ALL VERMONT COMMUNITIES ARE FACING SIGNIFICANT CHALLENGES WITH HEALTHCARE ACCESS, EQUITY, AND AFFORDABILITY

Access and equity challenges



Difficulty in getting primary care appointments



Long waits in the ER



Long ambulance waits



Long/difficult travel/transportation to care sites



Long waits to get elective procedures



Inequity in access and treatment experience (e.g. rural, language, gender identity etc.)

Affordability challenges



~60-80% increase in individual, small group plan premiums in the past 6 years^{1,3}



>100% increase in out of pocket max in the past 5 years²



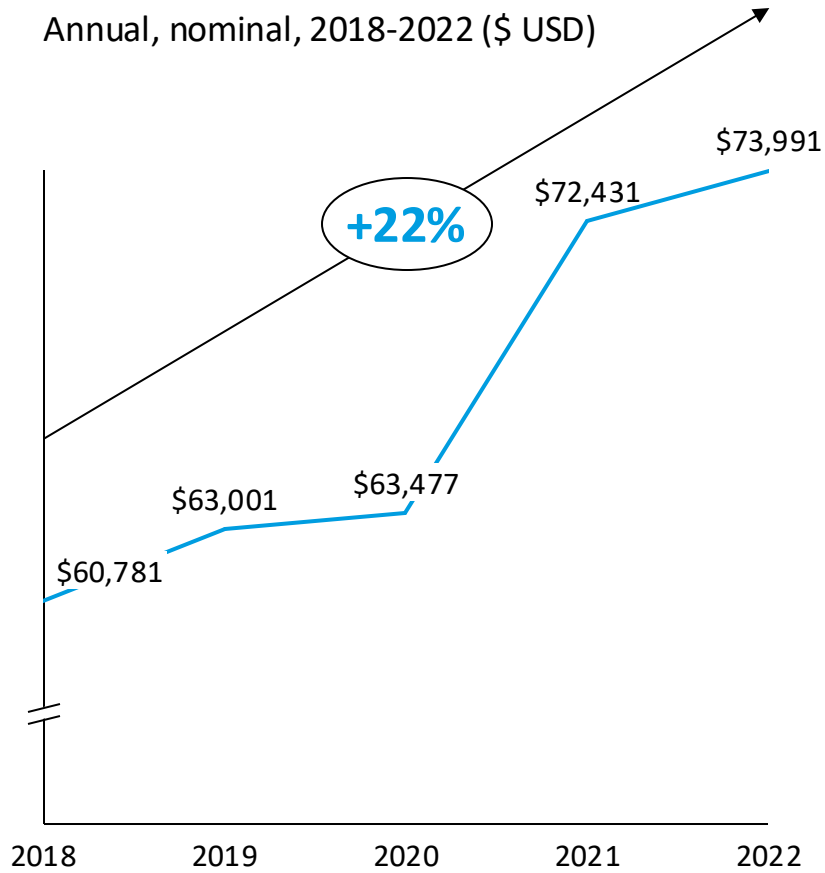
High costs of healthcare and housing without income increases

School budgets, property and income taxes all affected by rising costs

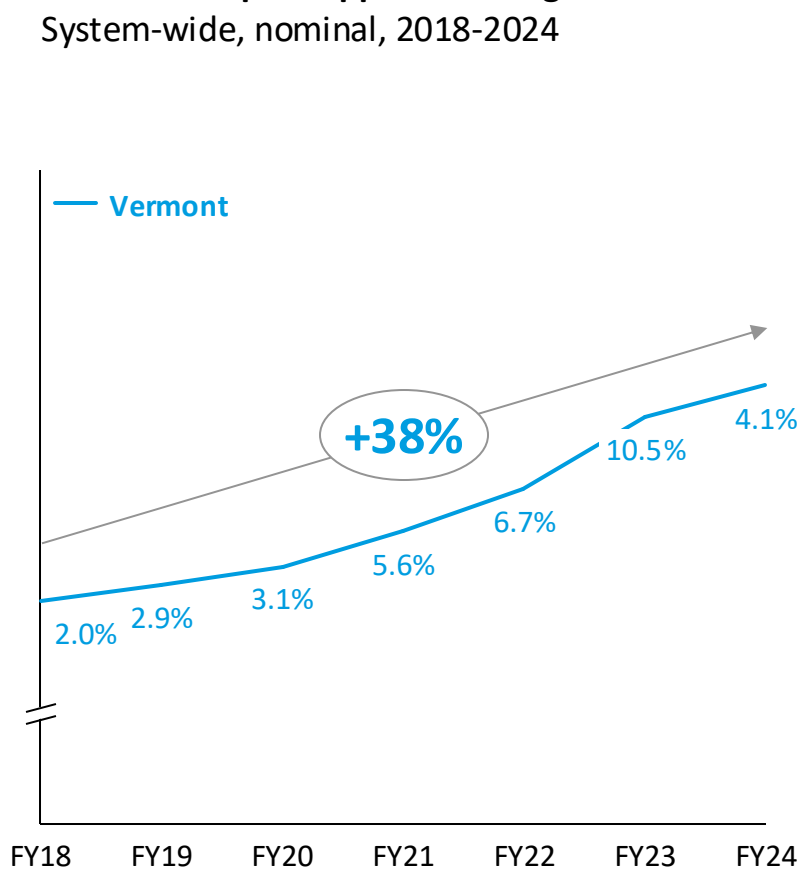
Source: 1. GVCB Vermont Hospital Budget Deliberations ([link](#), [link](#), [link](#)) 2. KFF analysis of data from Healthcare.gov, state rate review websites, state plan finder tools and CMS analysis of rate changes in the benchmark silver plan, October 2023 ([link](#)).3. GVCB analysis Note: 4. Premiums are monthly. Premiums were analyzed using the lowest-cost premium for each metal tier (bronze, silver, and gold) and the second-lowest-cost silver (benchmark) premium for a 40-year-old in each county and weighted by county plan selections. In some state-based marketplaces, the premium data for some years are at the rating area level and are mapped to counties before weighting by county plan selections.

CURRENT HEALTHCARE COSTS ARE BECOMING LESS AFFORDABLE: PREMIUMS AND HOSPITAL CHARGES OUTPACE MEDIAN HOUSEHOLD INCOME GROWTH

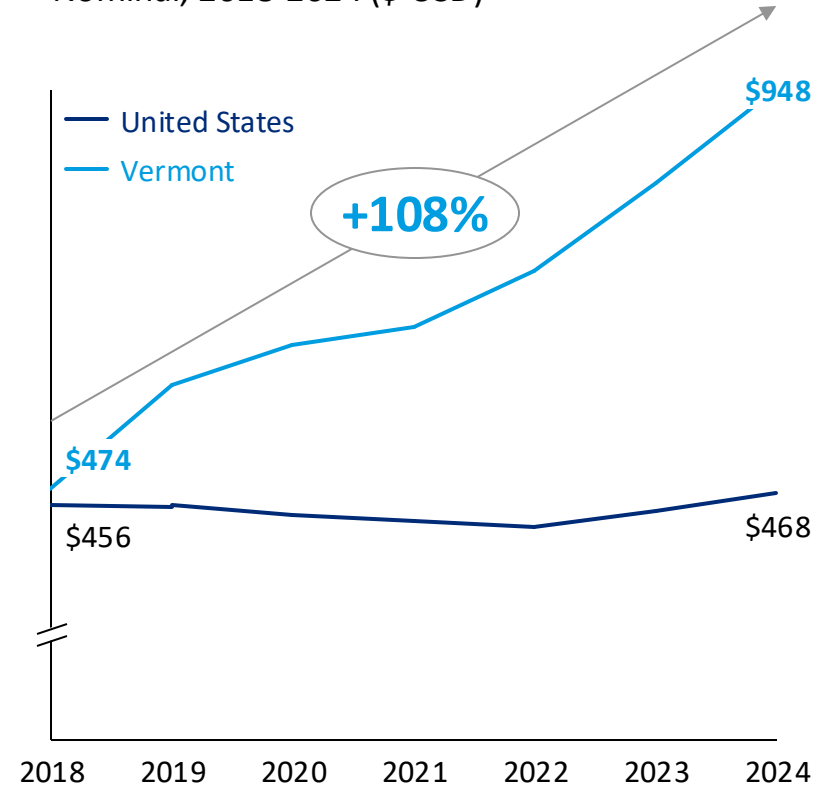
Median household income in Vermont¹
Annual, nominal, 2018-2022 (\$ USD)



Vermont hospital approved charge increases²
System-wide, nominal, 2018-2024



Average monthly premium for lowest-cost Silver marketplace premium³⁻⁵
Nominal, 2018-2024 (\$ USD)



Source: All graphs shown are nominal values 1. [Income](#), [FRED inflation](#) 2. GMCB Vermont Hospital Budget Deliberations ([link](#), [link](#)) 3. KFF analysis of data from Healthcare.gov, state rate review websites, state plan finder tools and CMS analysis of rate changes in the benchmark silver plan, October 2023 ([link](#)), 4. GMCB analysis

Note: 5. Premiums are monthly. Premiums were analyzed using the lowest-cost premium for each metal tier (bronze, silver, and gold) and the second-lowest-cost silver (benchmark) premium for a 40-year-old in each county and weighted by county plan selections. In some state-based marketplaces, the premium data for some years are at the rating area level and are mapped to counties before weighting by county plan selections.

COMMUNITY MEMBERS SHARED SIGNIFICANT HEALTH EQUITY CHALLENGES IN BOTH THEIR CARE AND WORK ENVIRONMENTS

👏 Experiences shared (*anonymized quotes*)

Recommended actions

I Gaps in culturally competent care	<i>Due to my insurance, I have very limited access to mental health services</i>	<i>There is a weight bias and fatphobia which is making it difficult to get care and denial of surgeries for obesity</i>	<ul style="list-style-type: none"> • Invest in Healthcare Infrastructure: Invest in infrastructure such as primary care services, mental health facilities, and substance abuse provided when and where all populations can access (Develop strategies to attract more healthcare providers to the area) • Improve Provider Diversity: Increase efforts to recruit and retain healthcare providers from diverse backgrounds and who understand the local culture • Increase and Localize Mental Health Services: Develop local mental health resources and clinics to improve access
	<i>Many individuals don't go to care because the premiums and OOP are too high</i>	<i>Quality of care is not the issue; however, it is discriminatory for people who don't speak English as a first language</i>	
	<i>No one tells patients about financial services or campaigns available to support their healthcare</i>	<i>Ongoing training at ALL levels of staff and health providers is needed surrounding stigma free language & sensitivities, and LGBTQ+ care</i>	
II Gaps in culturally competent and psychologically safe working environment	<i>There is a noticeable lack of diverse perspectives at meetings</i>	<i>Keeping staff is a function of addressing the cost of living, inflation, and ability to find affordable housing</i>	<ul style="list-style-type: none"> • Respect and Support for Healthcare Workers: Implement programs to improve workplace culture, such as respect training and mental health support for staff and emphasize need to create a supportive and safe working environment for all • Address Workforce Issues: Continue investments in workforce development, offer competitive salaries, and reduce administrative burdens to retain healthcare professionals
	<i>Violence in ED in common</i>	<i>Mental health numbers are increasing, and it is posing a risk to our staff</i>	
	<i>As a nurse, I feel disrespected often</i>	<i>Childcare is critically important, especially for physicians and the maintenance of their positions.</i>	
III Lack of coordination with care givers and community services	<i>I have to call up to 31 EMS agencies to have a patient transferred</i>	<i>EMR systems don't talk to each other and it's difficult to transfer from one center to another</i>	<ul style="list-style-type: none"> • Coordinate Community Service Opportunities: Explore opportunities with community orgs to provide community education on healthcare processes, such as choosing a Medicare plan, in highly accessible ways and better coordinate services between the hospital and organizations including housing, transportation, and appointment scheduling • Enhance Technology: Review future HIE and current EMR capabilities and document known system gaps requiring updates to ensure interoperability
	<i>There is misinformation in the process for choosing a Medicare plan</i>	<i>We need a centralized EMR system with closed loop referrals within our communities</i>	

ALL VERMONT HOSPITALS FACE SIGNIFICANT OPERATIONAL AND FINANCIAL CHALLENGES

Operational challenges



Physician shortages
and difficulty
in recruiting staff
since COVID-19



Low volume of
procedures to
sustain operational
excellence



Old infrastructure
needing repair/
replacement



Capacity consumed
by caring for people
with unmet social
needs

Financial challenges



Increased
labor, supply, and
drug costs



Depleting capital
reserves unable to
cover expenses and
future investments



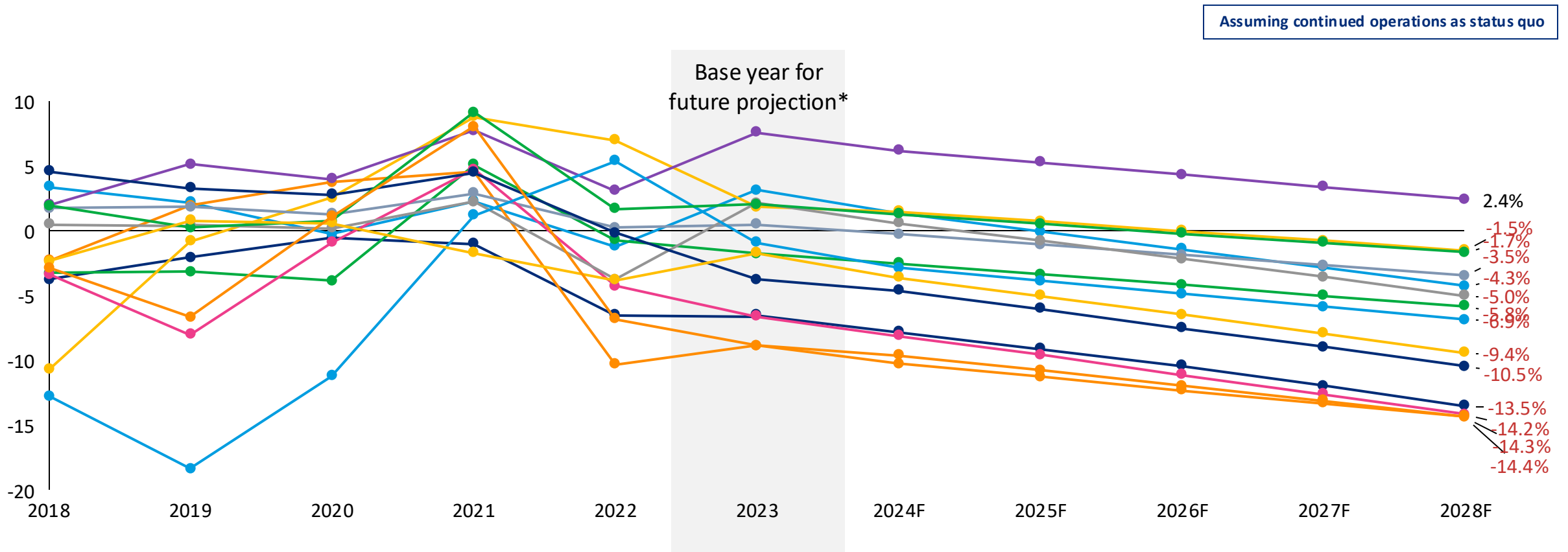
Increasing
complications with
reimbursement



Lower bond ratings
and increased costs
of capital

THE TREND OF DECLINING FINANCES IS EXPECTED TO CONTINUE, WITH ALL BUT ONE HOSPITAL PROJECTED TO REPORT A LOSS IN 2028

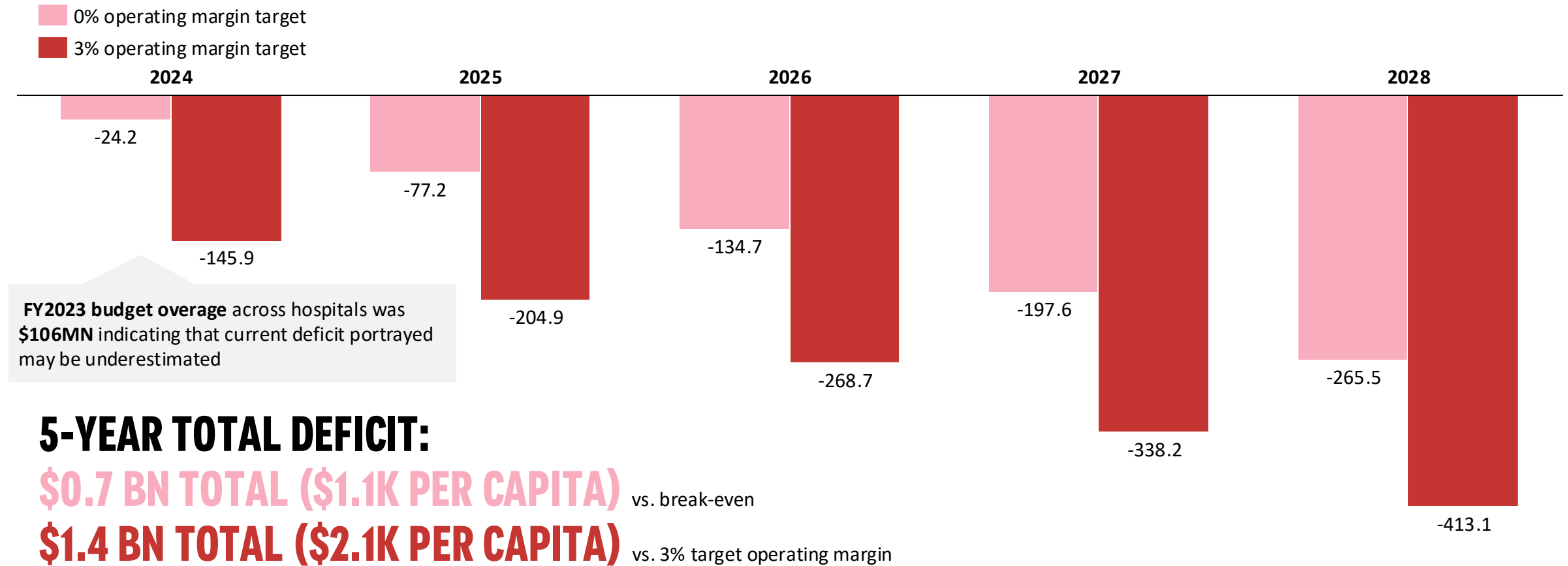
Vermont hospital operating margin forecasts, assuming 3.5% non-340B revenue growth and 5% expense growth annually
(%, 2018-2028F)



*Gifford Medical Center using hypothetical 2023 jump-off assuming 1.84% operating margin for FY2023

ACROSS ALL VT HOSPITALS: CUMULATIVE LOSSES OVER A 5-YEAR PERIOD WILL REQUIRE AN ADDITIONAL \$0.7BN TO BREAK EVEN, ASSUMING 3.5% REVENUE, 5% EXPENSE GROWTH

Financial deficit vs. revenue needed to achieve 0% or 3% operating margin, assuming 3.5% revenue and 5% expense growth¹
 2024F-2028F, USD MN

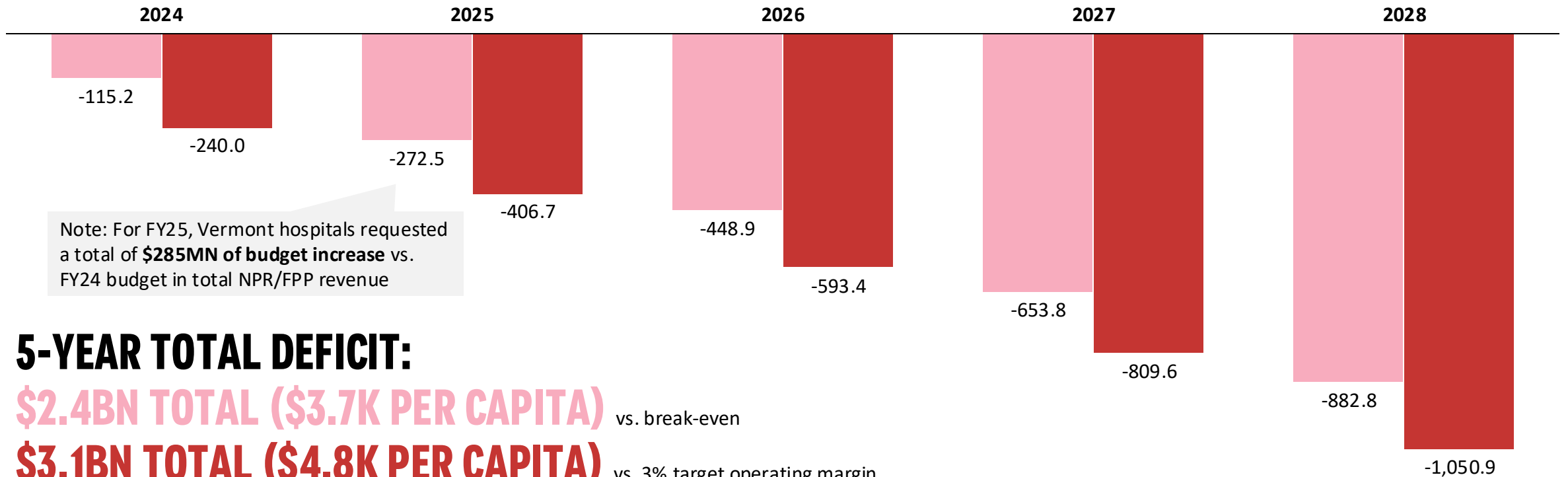


1. Assuming non-340B revenue annual growth rate at 3.5% and 5% operating expense rate growth from 2023 baseline 2. Projection were based on FY2023 actuals as baseline (except Gifford Medical Center using a 1.84% operating margin hypothetical baseline for FY23)
 Source: [GMCB hospital financial records](#), GCMC FY 2025 Budget Request (accessed August 2024), Oliver Wyman analysis

ACROSS ALL VT HOSPITALS: CUMULATIVE LOSSES OVER A 5-YEAR PERIOD WILL REQUIRE AN ADDITIONAL \$2.4BN TO BREAK EVEN, ASSUMING 3.5% REVENUE, 7-8% EXPENSE GROWTH

Financial deficit vs. revenue needed to achieve 0% or 3% operating margin, assuming 3.5% revenue and 7-8% expense growth¹
 2024F-2028F, USD MN

0% operating margin target
 3% operating margin target

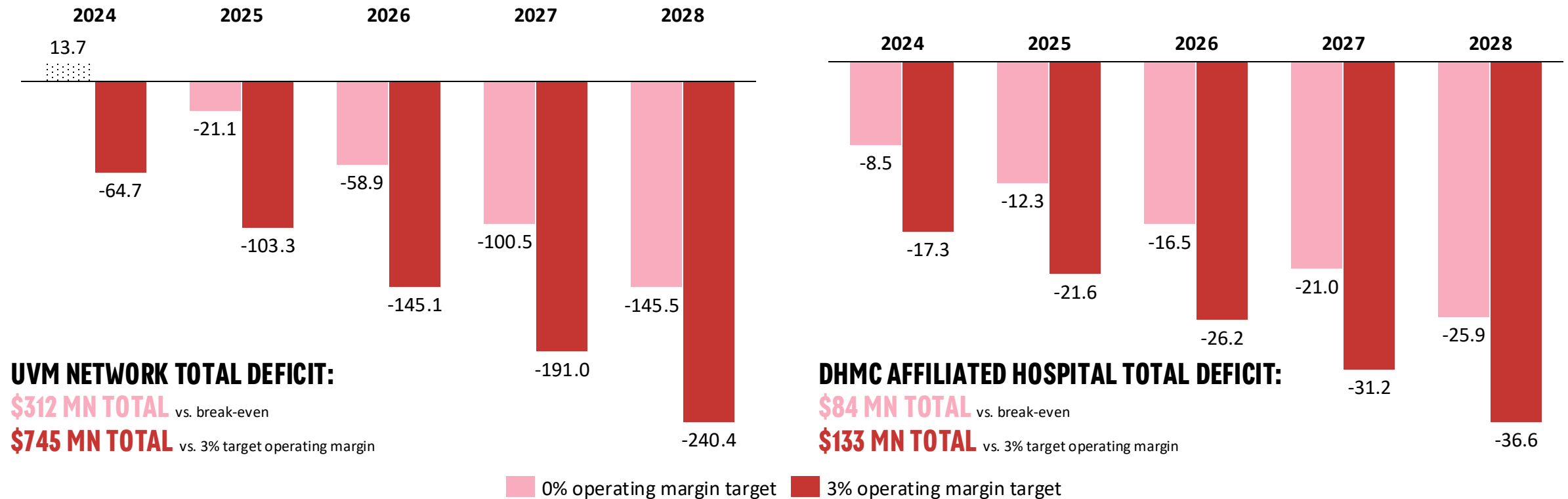


1. Assuming 340B payments remain constant, with growth due to inflation only at 3%, 3.5% annual non-340B revenue growth, 10% annual expense growth on non-MD salaries and benefits, 5% annual expense growth on physician fees, salaries, and benefits, and 7% growth in other operating expenses from 2024 onwards 2. Projection were based on FY2023 actuals as baseline (except Gifford Medical Center using a 1.84% operating margin hypothetical baseline for FY23)

Source: [GMCB hospital financial records](#), GMCB FY25 budget requests (accessed August 2024), Oliver Wyman analysis

UVM AND DH AFFILIATED HOSPITALS ARE RESPONSIBLE FOR MORE THAN HALF OF THE STATE-TOTAL DEFICITS (1 OF 2)

Financial deficit vs. revenue needed to achieve 0% or 3% operating margin, assuming 3.5% revenue and 5% expense growth¹
 2024F-2028F, USD MN

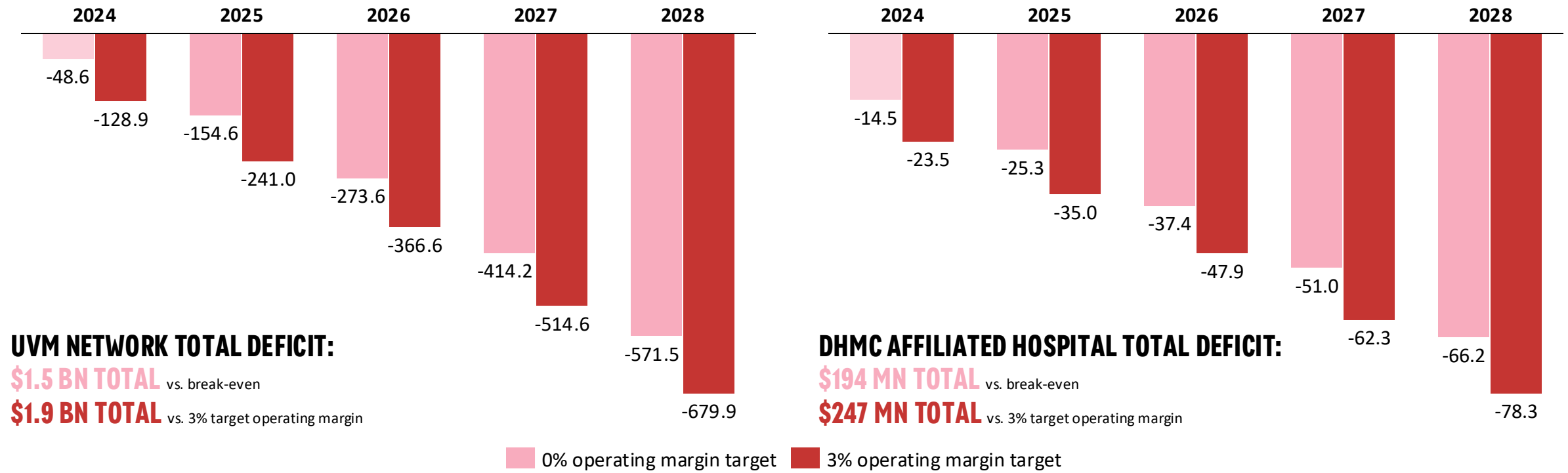


Hospital systems are responsible for individual hospital budgets and should play an active role in enabling transformation

1. Assuming non-340B revenue annual growth rate at 3.5% and 5% operating expense rate growth from 2023 baseline 2. Projection were based on FY2023 actuals as baseline (except Gifford Medical Center using a 1.84% operating margin hypothetical baseline for FY23)
 Source: [GMCB hospital financial records](#), GCMB FY 2025 Budget Request (accessed August 2024), Oliver Wyman analysis

UVM AND DH AFFILIATED HOSPITALS ARE RESPONSIBLE FOR MORE THAN HALF OF THE STATE-TOTAL DEFICITS (2 OF 2)

Financial deficit vs. revenue needed to achieve 0% or 3% operating margin, assuming 3.5% revenue and 7-8% expense growth¹
 2024F-2028F, USD MN

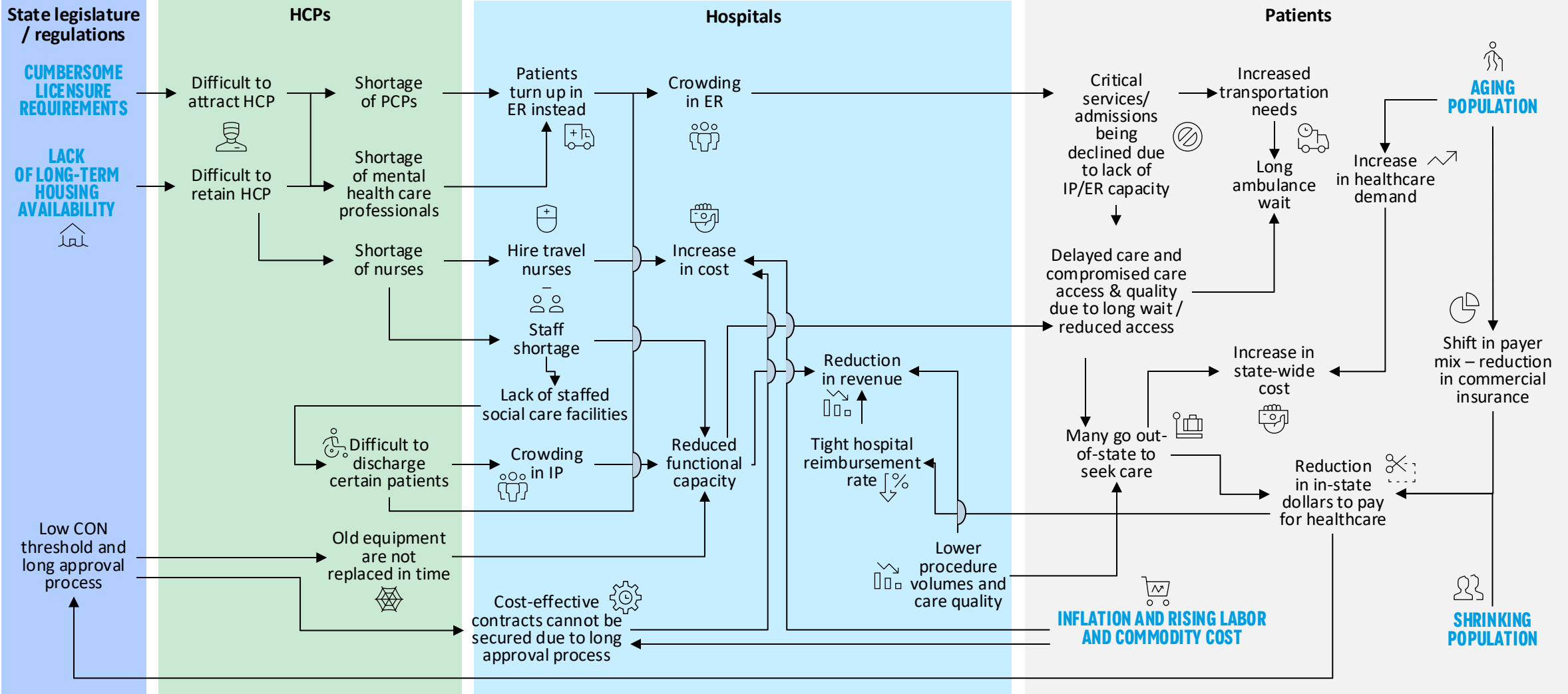


Hospital systems are responsible for individual hospital budgets and should play an active role in enabling transformation

1. Assuming 340B payments remain constant, with growth due to inflation only at 3%, 3.5% annual non-340B revenue growth, 10% annual expense growth on non-MD salaries and benefits, 5% annual expense growth on physician fees, salaries, and benefits, and 7% growth in other operating expenses from 2024 onwards 2. Projection were based on FY2023 actuals as baseline (except Gifford Medical Center using a 1.84% operating margin hypothetical baseline for FY23)

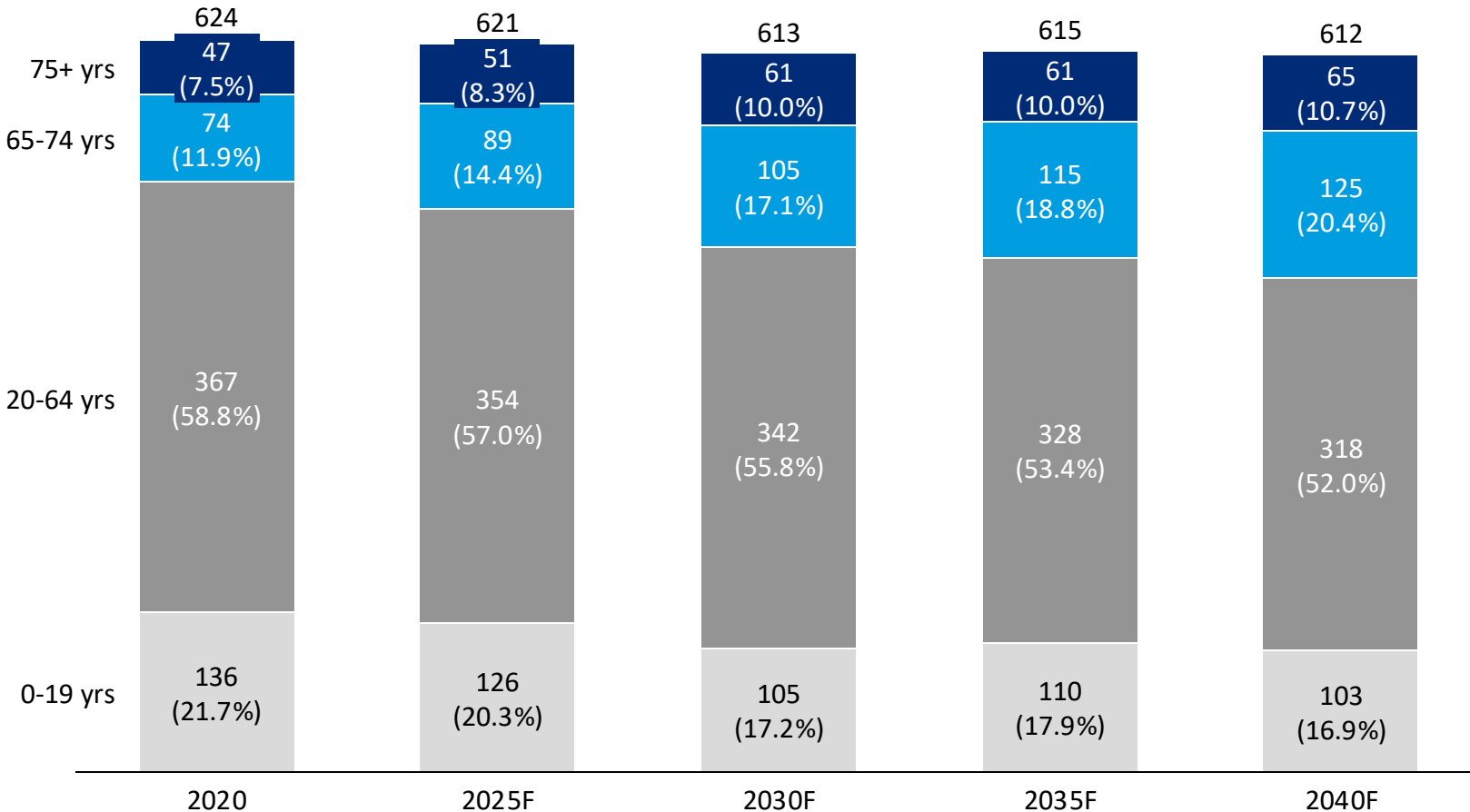
Source: [GMCB hospital financial records](#), GMCB FY25 budget requests (accessed August 2024), Oliver Wyman analysis

EXTERNAL FORCES WILL CONTINUE TO PUT EVEN MORE STRAIN ON VERMONT'S INTERCONNECTED HEALTHCARE SYSTEM



AS VERMONT AGES, POPULATION HEALTH NEEDS WILL BECOME MORE MEDICALLY COMPLEX AND COMMERCIAL CROSS-SUBSIDY WILL BECOME CHALLENGING

Projected Vermont population break-down¹
2020-2040F, in thousands



Population is aging and shrinking with **65+ year olds increasing by 57%**, reducing working force and increasing Medicare eligible patients



Working age population will decline by 13%, making it impossible to sustain healthcare payments with commercial premiums



Cancer, heart disease, and stroke-related hospitalizations will increase as population ages



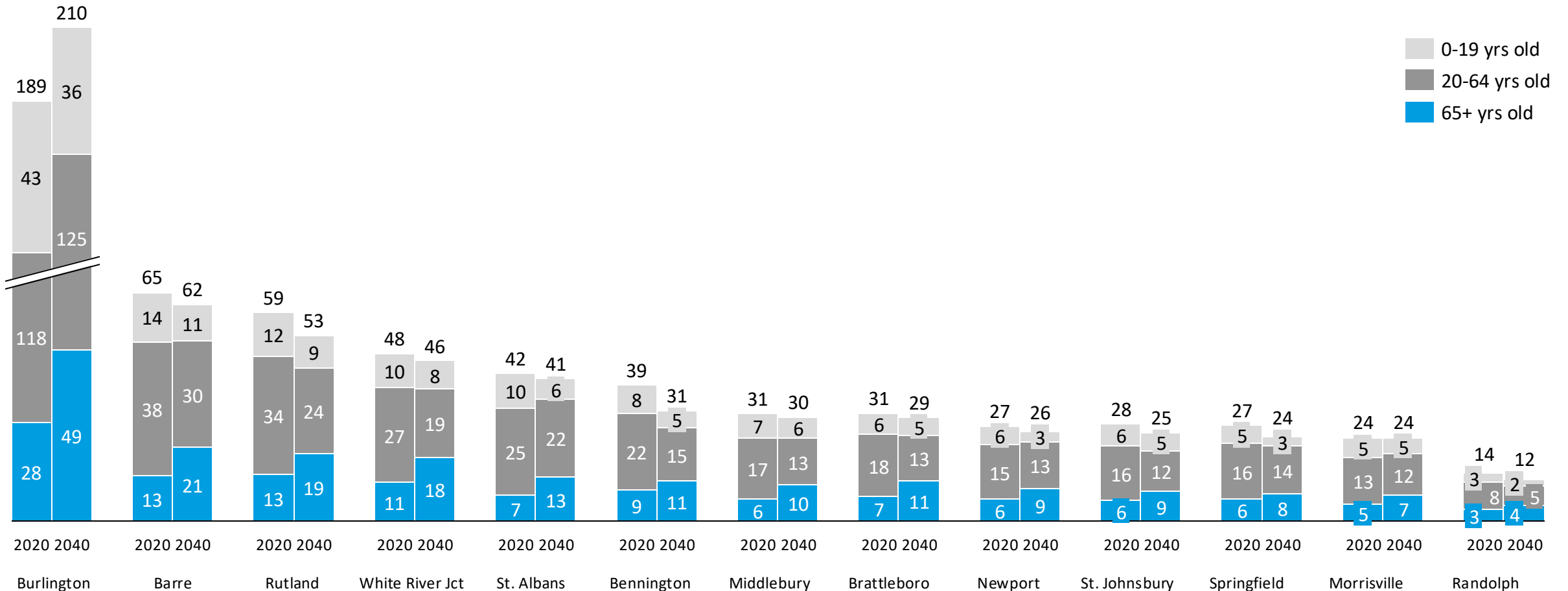
There will be increased demand for long term care, memory care, and assisted living facilities as well as physician visits

Sources: MPR VT Population by HSA, Oliver Wyman analysis
© Oliver Wyman

VERMONT'S POPULATION IS PROJECTED TO SHRINK AND AGE; TREND IS EXPECTED ACROSS ALL HSAS EXCEPT BURLINGTON

Projected Vermont population by HSA¹

In thousands, 2020-2040F




Source: 1. MPR VT Population by HSA, Oliver Wyman analysis


MORE FUNDING INTO THE SYSTEM IS UNLIKELY TO RESOLVE THE PROBLEM, NOR A VIABLE SOLUTION FINANCIALLY


Simple solutions will not work...


...Because

Easy solution
More funding to get more providers to meet access needs

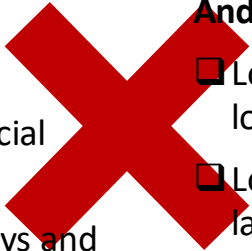
 Vermont OOP max, deductibles, and Commercial premiums are already high and Vermonters cannot afford annual double digit increases in insurance premium costs. Higher taxation is unlikely to be a viable solution either due to potential risk of driving residents and businesses out of state

 Rural nature of Vermont and shrinking population means that, in many parts of the state, the population size and density do not support a hospital with full-time full-spectrum of specialties being sustained

 With limited supply to healthcare professionals in the market, increasing demand will likely drive up price more than attracting new professionals into Vermont and clinical productivity is low.

 **But this requires:**

- Higher taxation
- Higher commercial insurance
- Increased co-pays and deductible
- ...



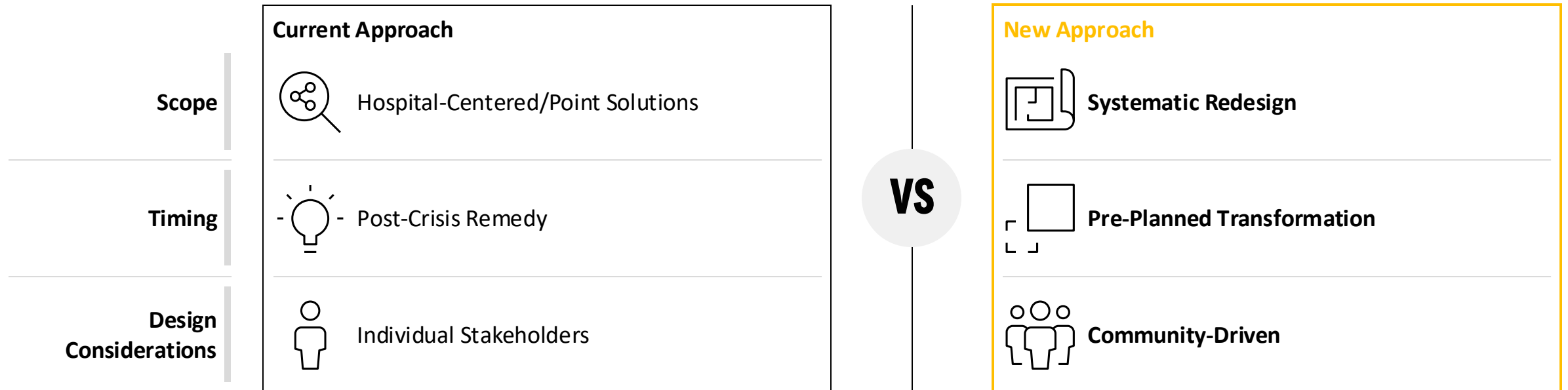
And implies:

- Lower efficiency due to lower population density
- Lower care quality due to lack of sufficient volume to main physician expertise
- ...

NEW APPROACHES NEED TO BE CONSIDERED TO DRIVE SIGNIFICANT TRANSFORMATION AT THE STATE, SYSTEM, AND HOSPITAL LEVELS



How should the approach change?



04

STATE-LEVEL RECOMMENDATIONS

TRANSFORMATION EFFORTS FACE MAJOR CHALLENGES AND REQUIRE SOLUTIONS

Challenges

Potential Solutions



Governance

- Continuing community engagement, negotiation and support required
- AHS and GMCB are under-resourced for these activities

- Clarify roles for AHS and GMCB in the process and ongoing efforts
- Fund additional staff/outside support



State Level Investments

- Investments in Social Determinants of Health and Public Health
 - Housing and Transportation
- Enablers of High Performing Health Systems
 - Interconnection of EMRs, timely information for providers

- Reduce barriers to and increase funding for affordable housing and transportation
 - Increase funding for VITL or an alternative method for linking EMRs and transmitting medically pertinent information between all providers



Hospital/Health System Transformation

- Current System emphasizes inpatient/hospital-based care
- Currently funding model does not support transformation

- Use this report on Act 167 as basis for further planning
- Move care from hospital to home and community as appropriate
- Modify funding methods to support changes required



Access to Quality Mental Health, Primary and Specialty Care

- Care fragmentation is universal; access is poor
- Poor availability of long-term care
- No alignment of incentives or expectations across all providers

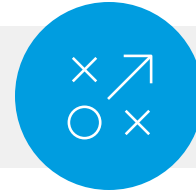
- Align payments to goals of access, quality, appropriate use of resources (including hospital use)

1. TRANSFORMATION IS COMPLEX AND REQUIRES CLARITY IN GOVERNANCE ROLES



1. Agency of Human Services

- Improve efficiency of AHS by consolidating efforts directed at same populations
- Reduce administrative complexity and paperwork for applicants and providers
- Accelerate construction of affordable housing/transportation
- Facilitate and fund EMS Regionalization
 - Fund broadband access for EMTs (e.g. Starlink)
- Expand workforce efforts
- Re-evaluate efforts at VITL and complete changes by FY 2026
- Convene community stakeholders to evaluate, choose and implement ways to move care out of the inpatient hospital and into the home and community (Act 167 Report)
- Convene community stakeholders from several communities to decide on regionalization of health services (Act 167 Report)
- **Support Needed:** Project Management Office and Facilitation Support



Green Mountain Care Board

- Add Division of Planning and Effectiveness
 - Calculate impacts of changes in the sites of care on hospital budgets, prices to consumers and availability of long-term care
 - Monitor access to and affordability of community providers
 - Monitor progress of transformation / assist AHS in calculations
 - Monitor progress on Quality / Access/ Equity measures
 - Access to Services
 - Low volume procedures
 - Physician work effort
 - Measures of equity in access to health services and health
 - Move payment model for all providers to reference-based pricing over next 3-5 years
- Modify hospital budgets to account for movement of services to a regional model
- Require alignment of Quality / Access / Equity metrics across all payers and Agencies and link to payment for all healthcare providers
- Link payments to Primary Care providers to those of Hospitals
- **Support Needed:** Project Management Office and analytic support while additional staff are hired and automation is installed

STATEWIDE INITIATIVES ACROSS KEY DOMAINS CAN LAY THE GROUNDWORK FOR GREATER ACCESS AND EQUITY AND ENABLE SMOOTH TRANSFORMATION AT THE PROVIDER LEVEL



Enhance state-wide transportation

- For community members to and from acute and urgent appointments and from the ED
- For patients with appropriate means of transport between facilities (EMS and other types of transportation)



Build housing

- For the unhoused and under-housed
- For special group needs
- For people recruited to work in Vermont



Expand workforce and access

- Develop active pipeline for new workers
- Expand roles for different professions



Simplify and streamline administration

- Upgrade IT infrastructure & system inter-operability
- Align Agency of Human Services agencies with Health Service Areas and meet regularly with hospitals and providers
- Fully computerize and integrate Agency of Human Services subunits
- Further simplify prior authorization, CON process and Medicaid billing



Improve access to appropriate levels of care in each community

- Reconfigure provider resources to better meet community need and achieve financial stability
- Enhance provision to telehealth to include kiosks, home-based monitoring, etc.
- Embed equitable access to care in workflow

RECOMMENDED STATEWIDE INITIATIVES WOULD BUILD ON VERMONT'S PROGRAMS / INITIATIVES CURRENTLY UNDERWAY

Select initiatives only, non-exhaustive



Medical data infrastructure improvement

- ✓ Improved master patient index
- ✓ 5-year strategic plan
- ❑ 'Unified data space' data aggregator
- ❑ Provider single sign-on
- ❑ Co-develop use case with providers
- ❑ Provider 'self-help' data analysis tool
- ❑ Collaborate with payers to obtain pharmacy data
- ❑ Modernize integrating enrolment eligibility (*legislative effort, 5-year runway*)



Licensure streamlining

- ✓ Joined Social Work Licensure Compact ([link](#))
- ✓ Joined interstate counselling and PSYPACT ([link](#))
- ✓ Allowed mental health professionals without master degree to practice psychotherapy under Roster of Non-licensed, Non-certified Psychotherapists
- ✓ In 2020, approved short-term prescription extension by pharmacist (until consultation, up to 5 days, one time only)
- ❑ Act 117 to review MH licensure in VT to streamline and further remove barriers to licensure (study due Dec'24)



Mental health / substance use support

- ✓ Mobile crisis response (since Jan'24, [link](#))
- ✓ New psychiatric residential treatment facilities ([youth](#), [forensic](#))
- ✓ Centralized dispatch from 988
- ✓ 6 new delivery system projects, funded by \$100k by OneCare ([link](#))
- ✓ \$1 million, one-year CCBH Planning Grant (extended to March'25) ([link](#))
- ✓ DMH Vision 2030 on MH integration across the healthcare setting ([link](#))
- ❑ DMH global referral checklist
- ❑ Seek alternative to hospital-based administration of court ordered medication



Elderly care support

- ✓ Age Strong Vermont Plan ([link](#))
- ✓ SNF bed board (from March'24)
- ✓ 3 Adult Services Division complex care nurses to help with care coordination
- ✓ Nursing facility retrospective rate adjustments
- ✓ Rate review for residential care, assisted living, home health, and adult day ([link](#))
- ✓ Root cause analysis for hospital case managers to address complex discharges
- ❑ Further expedite new application process for long-term care Medicaid eligibility process
- ❑ Reduce minimum occupancy threshold on nursing homes ([link](#))
- ❑ Seek to bring iCare to Vermont

Key: ✓ Completed ❑ Ongoing Red – priority for completing the work

05

HEALTHCARE DELIVERY SYSTEM RECOMMENDATIONS

HEALTHCARE REDESIGN BLUEPRINT: SHIFT UNNECESSARY CARE OUT OF THE HOSPITAL AND DELIVER SPECIALIZED CARE IN REGIONAL CENTERS TO REDUCE SYSTEM COST

Hospital Settings

Recommendation



- Develop regionalized specialty care

In order to

Make more specialized services available to regional communities

Non-Hospital Setting

Recommendation



- Provide housing, mobile care, and home/community-based care
- Enhance primary care and alternative primary care

In order to

Better serve patient health and social needs in lower cost settings

Treat acute needs that cannot be addressed in other settings

Goal: Deliver care outside of hospital except most acute needs

Move **most care** outside of the hospital (except complex medical/surgical care)

Successful healthcare redesign requires Vermont to

1

Modernize transportation and Emergency Medical Services

2

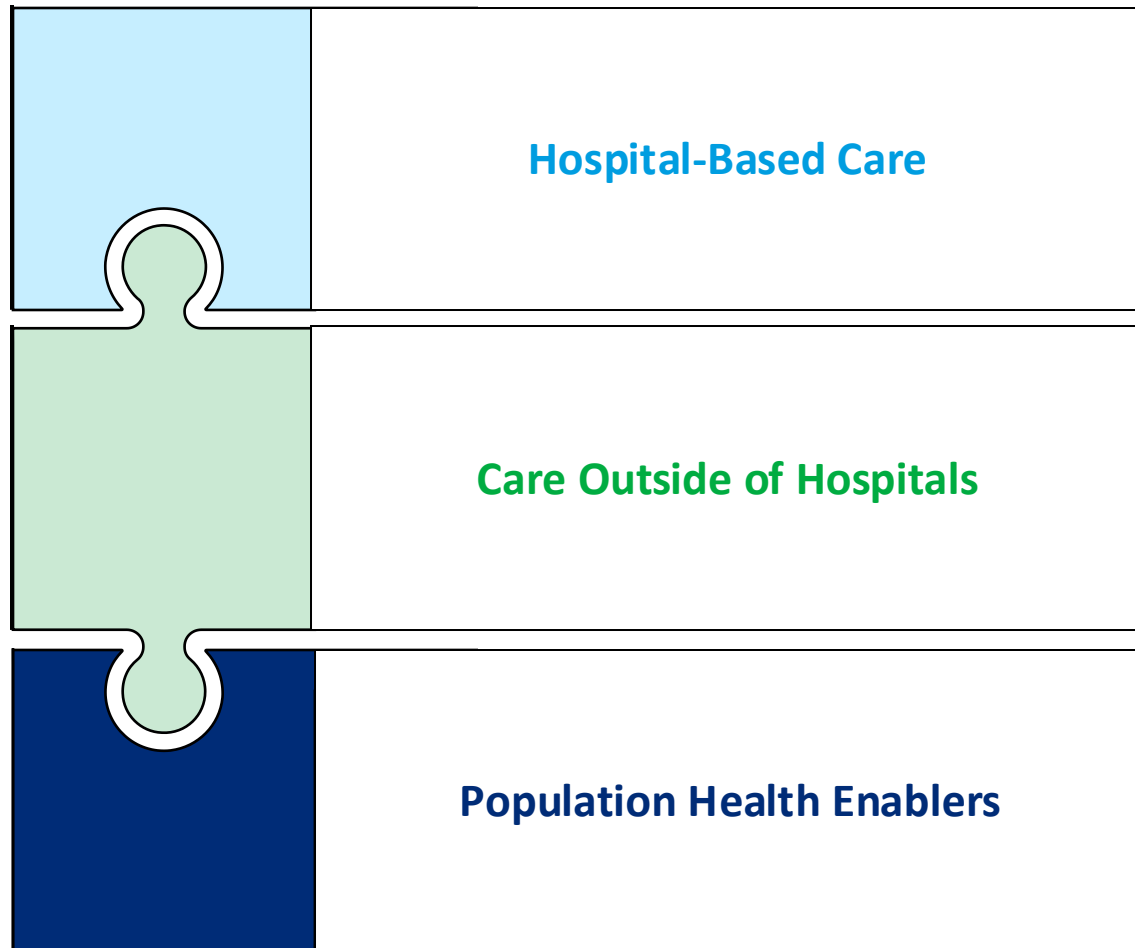
Embed updated/modern technology

3

Pay providers based on access, quality, efficiency and equity

HEALTHCARE REDESIGN TAKES A MULTI-FACETED APPROACH TO REIMAGINE HOW HEALTHCARE IS DESIGNED

Key Facets of Healthcare Redesign



- Establish regionalized specialized centers
- Accelerate cost reduction efforts in hospital care
- Expand non-hospital-based access and treatment options
- Increase support for FQHC, Patient Centered Medical Home, other primary care providers, and mental health and substance abuse services
- Develop capacity for home-based care
- Provide safe housing for Vermonters
- Align financial incentives across the system
- Coordinate care, information flow, and transportation services to ensure patients receive appropriate level of care

PERCEPTION VERSUS REALITY IN VERMONT HEALTHCARE AND PAYMENT

Perception



Vermont has an “All Payer” Model

Vermont has a Statewide ACO (OneCare)

Vermont has a State Health Information Exchange (VITL)

Vermont does not have enough Primary Care Providers

Reality



- > • The “All Payer” system does not include FFS Medicare or 40% of the commercially insured
- > • OneCare participation is voluntary and doesn’t include several hospitals and many community-based providers
- > • OneCare has been unable to provide the information needed to guide patient care and anticipate their needs
- > • Participation in VITL is voluntary and many community-based providers are not included
- > • VITL lacks pharmacy claims data and is not viewed as “user friendly”
- > • If Primary Care Providers were supported to see 3 patients per hour, there are enough for well into the future. (HRSA recognizes no Health Profession Shortage Areas in Vermont)

REGIONALIZATION PLAN AIMS TO RE-TRAFFIC PATIENTS TO SPECIALIZED CENTERS WHERE CENTRALIZED CLINICAL EXPERTISE ENSURES CARE QUALITY AND COST EFFECTIVENESS

Vermont's system regionalization plan aims to coordinate specialty services across hospitals with the following goals:

- ✓ Return as much care to the community as possible
- ✓ Provide specialized services at an appropriate level, within the reach of most Vermonters
- ✓ Create areas of sufficient population size to support needed professionals and equipment
- ✓ Assist hospitals in re-purposing inpatient units

Regionalized Specialty Centers will support Vermont redesign plan by:

- Maintaining Centers of Excellence (COEs) in multiple specialties
- Receiving referrals from emergency departments / urgent care clinics to accommodate patients from other hospitals' closed inpatient units

Regional Specialty Centers for Care include Centers of Excellence in specialties such as:

- Obstetrics
- Adult Psychiatry
- Neurology
- Acute General Surgery
- Rehabilitation

Supported By:

- ★ Regionalized / Full-Time EMS transportation

**Illustrative list, not comprehensive*

WE DEVELOPED A LIST OF RECOMMENDED/POTENTIAL CENTERS OF EXCELLENCE (COE SITES) BASED ON EXISTING HOSPITAL EXPERTISE AND POSSIBLE SYSTEM CHANGES

Purpose of COEs:

- COEs will drive patient volumes to hospitals with relevant expertise and support Vermont's specialty regionalization plan

Rationale for Recommended COE Sites:

- Existing patient volumes and specialized expertise
- Financial position to support inpatient beds
 - Hospitals unable to sustain inpatient beds are recommended to become COEs for mental health and specialized elderly care services

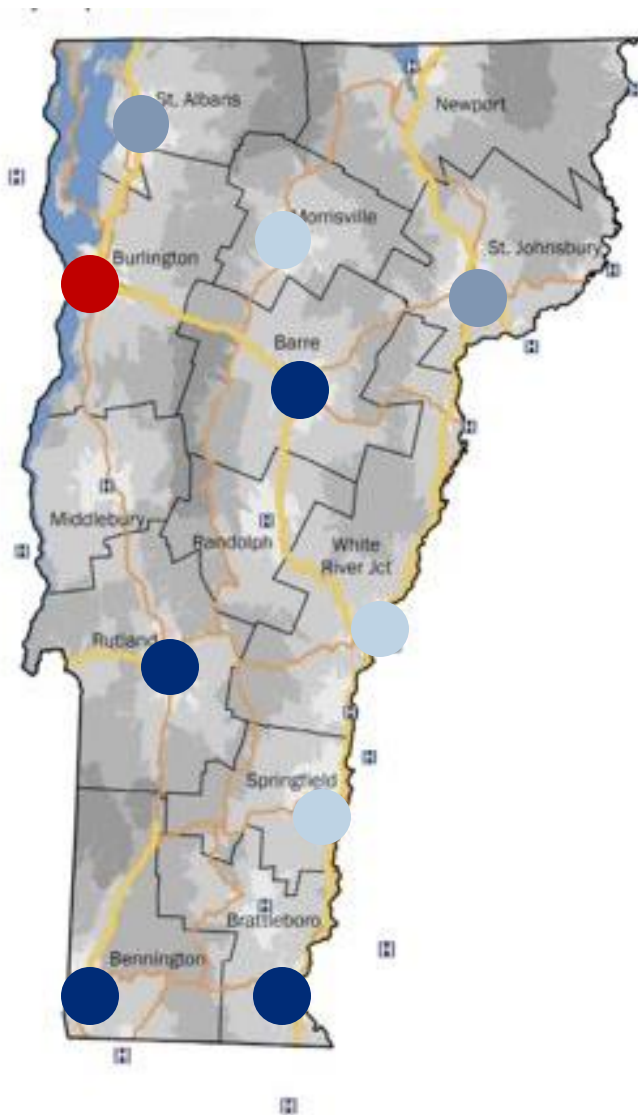
Further discussions are needed to finalize the redesign plan and COE sites including:

- Health system strategy and consolidation
- Inpatient bed repurposing (e.g., mental health / specialized elderly care)
- HSA reconfiguration to balance population needs and travel distances

List of specialties considered for COE regionalization

Surgery	Acute General	Cancer (Complex)
	Cancer (Non-Complex)	Minimally Invasive
	Robotic	
Specialty Services	Infusion Therapy	Neurology
	Orthopedics	Radiation Therapy
	Rheumatology	
Women's Health	Obstetrics	
Mental Health	Emergency Dept	Psych {Adolescent}
	Psych (Adult)	Psych (Pediatric)
Specialized Elder Care	Geriatrics	Hospice
	Memory Care	Rehabilitation
	Skilled Nursing	

10 OUT OF 13 CURRENT HSAS ARE RECOMMENDED TO HAVE CENTERS OF EXCELLENCE

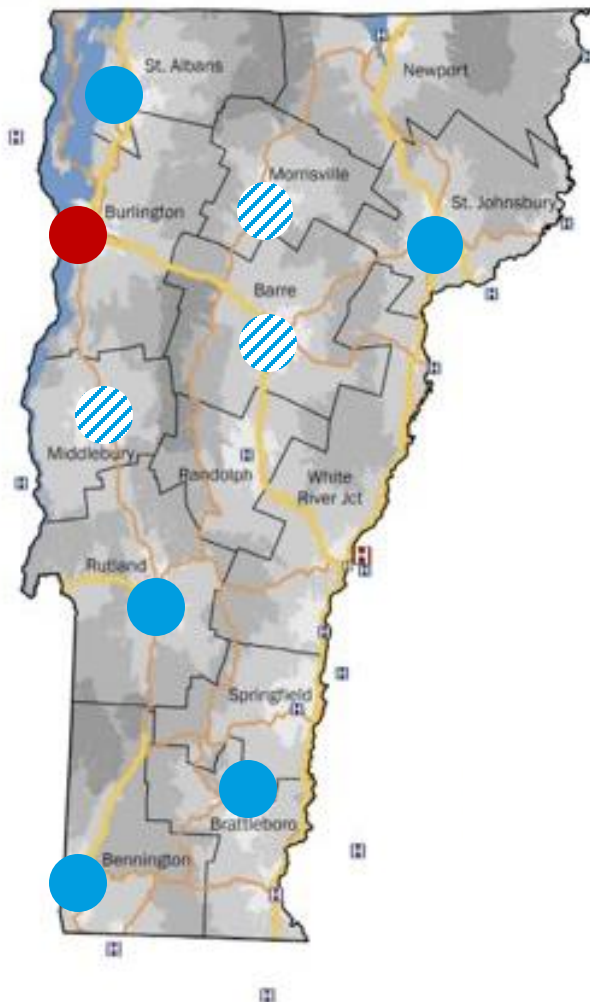


HSA	Hospital/Institution	COEs	COE Specialties
Burlington	Univ. Vermont Medical Center	16	All COE specialties except Acute General Surgery, Mental Health ED, Psych-Pediatric, Skilled Nursing
Bennington	Southwestern Vermont Medical Center	9	Cancer Surgery (Non-Complex), Geriatric Care, Infusion Therapy Clinic, Minimally Invasive Surgery, Orthopedics, Psych-Adult, Psych-Adolescent, Radiation Therapy, Rheumatology
Barre	Central Vermont Medical Center	5	Geriatric Care, Infusion Therapy Clinic, Neurology, Psych-Adult, Radiation Therapy
Brattleboro	Brattleboro Memorial Hospital	6	Acute General Surgery, Cancer Surgery (Non-Complex), Geriatric Care, Orthopedics, Rheumatology, Robotic Surgery
St. Albans	Northwestern Medical Center	4	Cancer Surgery (Non-Complex), Infusion Therapy Clinic, Neurology, Radiation Therapy
St. Johnsbury	Northeastern Vermont Regional Hospital	4	Cancer Surgery (Non-Complex), Infusion Therapy Clinic, Minimally Invasive Surgery, Radiation Therapy
Rutland	Rutland Regional Medical Center	5	Acute General Surgery, Geriatric Care, Minimally Invasive Surgery, Neurology, Psych-Adult
Springfield	Springfield Hospital	2	Memory Care, Psych-Adult
Morrisville	Copley Hospital	2	Orthopedics, Rheumatology
White River Junction	Mt. Ascutney Hospital and Health Center	1	Rehabilitation

Additional COE designations for other specialties and other hospitals (Grace Cottage, Gifford Medical Center, North Country Hospital, and Porter Medical Center) require further discussion as a part of Vermont's regionalization plan

SURGERY: 6 RECOMMENDED SITES FOR SURGICAL CENTERS OF EXCELLENCE AND 3 ADDITIONAL SITES UNDER CONSIDERATION

Geographic Distribution of Surgical COEs



Aims of COE designations:

- Divert patients to lower cost sites of care (e.g., community hospitals, ASUs)
- Send patients to sites with sufficient volumes to support facilities
- Treat patients at sites with required capabilities / equipment (e.g., robotic surgery)

Further discussion is needed to determine:

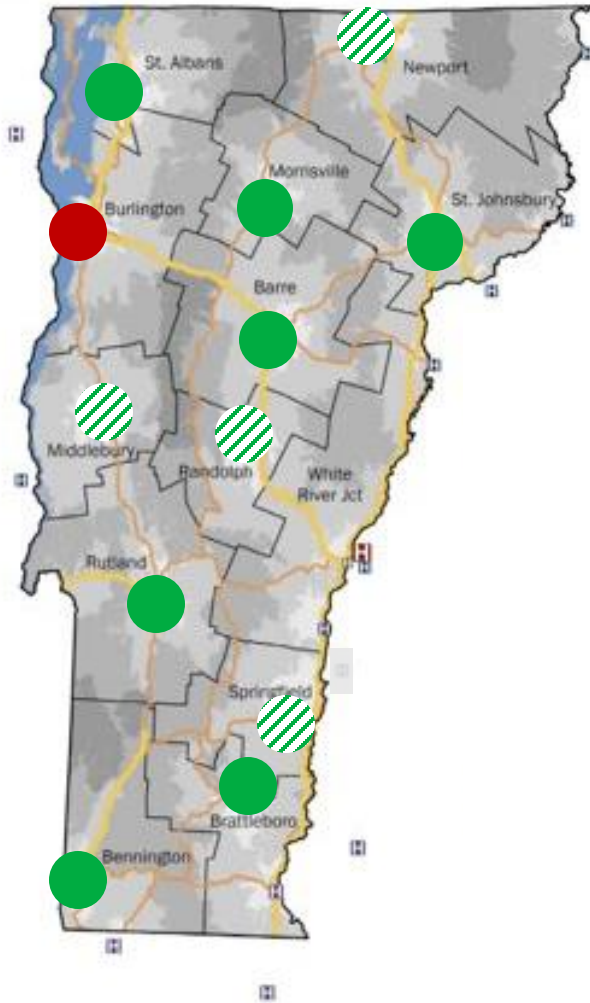
- Additional COE designations at sites with sufficient volumes
- Locations for free-standing ambulatory surgical units (ASUs)

Recommended Surgical Centers COEs

Specialties	Hospital
Acute General Surgery	<ul style="list-style-type: none"> • Brattleboro Memorial Hospital • Rutland Regional Medical Center
Robotic Surgery	<ul style="list-style-type: none"> • Brattleboro Memorial Hospital • Univ. Vermont Medical Center
Cancer Surgery Complex	<ul style="list-style-type: none"> • Univ. Vermont Medical Center
Cancer Surgery Non-Complex	<ul style="list-style-type: none"> • Brattleboro Memorial Hospital • Northeastern Vermont Regional Hospital • Northwestern Medical Center • Southwestern Vermont Medical Center • Free-standing ambulatory surgical units (ASUs)
Minimally Invasive Surgery	<ul style="list-style-type: none"> • Northeastern Vermont Regional Hospital • Rutland Regional Medical Center • Southwestern Vermont Medical Center • Univ. Vermont Medical Center • Free-standing ambulatory surgical units (ASUs)

SPECIALTY SERVICES: 8 RECOMMENDED SITES FOR SPECIALTY COES AND 4 ADDITIONAL SITES UNDER CONSIDERATION

Geographic Distribution of Specialty COEs



Aims of COE designations:

- Treat patients at facilities that currently offer specialties
- Minimize travel distances for care that requires frequent appointments (e.g., infusions)
- Designate COEs most relevant for aging population needs (e.g., neurology, orthopedics)

Further discussion is needed to determine:

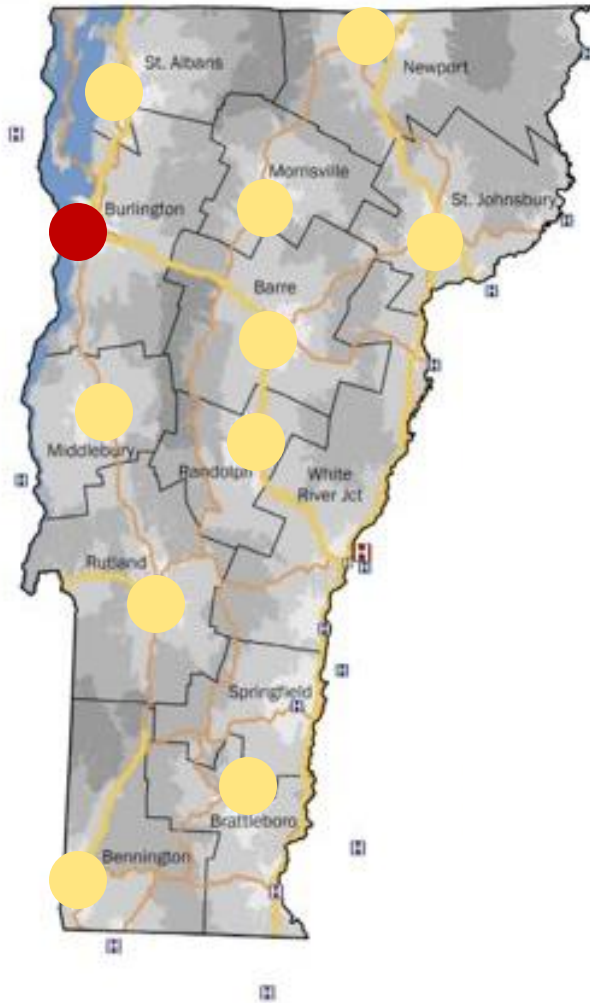
- *Additional COE designations at sites with sufficient volumes*

Recommended Specialty COEs

Specialties	Hospital
Infusion Therapy Clinic, Radiation Therapy	<ul style="list-style-type: none"> • Central Vermont Medical Center • Northeastern Vermont Regional Hospital • Northwestern Medical Center • Southwestern Vermont Medical Center • Univ. Vermont Medical Center
Neurology	<ul style="list-style-type: none"> • Central Vermont Medical Center • Northwestern Medical Center • Rutland Regional Medical Center • Southwestern Vermont Medical Center • Univ. Vermont Medical Center
Orthopedics / Rheumatology	<ul style="list-style-type: none"> • Brattleboro Memorial Hospital • Copley Hospital • Southwestern Vermont Medical Center • Univ. Vermont Medical Center

WOMEN'S HEALTH: UVM IS RECOMMENDED AS AN OBSTETRICS COE WITH 8 ADDITIONAL SITES UNDER CONSIDERATION

Geographic Distribution of Women's Health COEs



Aims of COE designation:

- Establish COE that is well equipped to treat complex births

Further discussion is needed to determine:

- *Maintaining COE designation at sites with sufficient volumes*
- *Locations for free-standing birthing centers*

Recommended Women's Health COEs

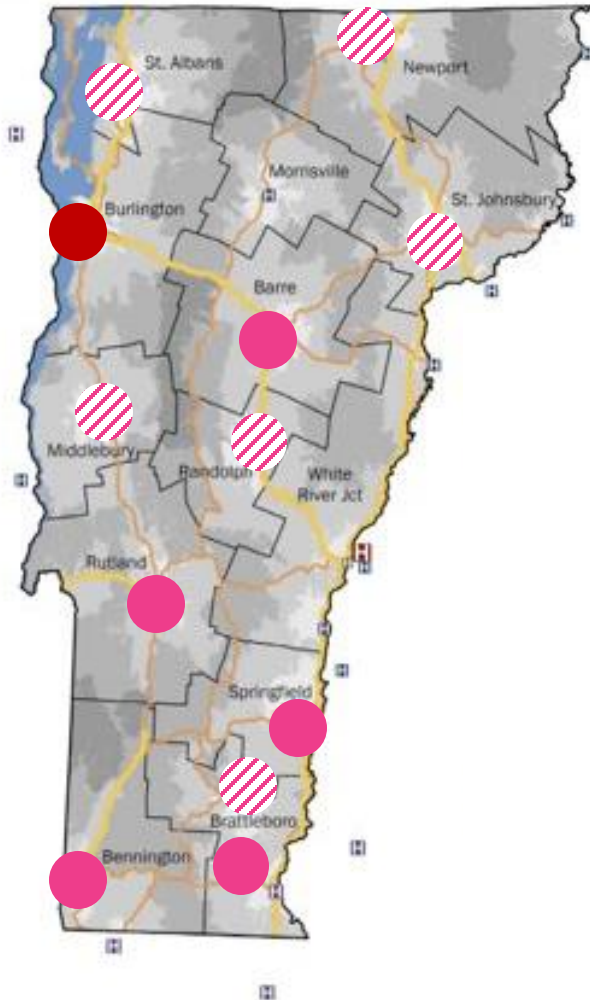
Specialties	Hospital
Obstetrics	• Univ. Vermont Medical Center

Existing Obstetrics Sites:

- All existing obstetrics sites will remain in place in the near-term
- Several existing units are near or below 240 deliveries a year.
- **Free-standing birthing centers** could be established to **replace closed inpatient obstetrics units**

MENTAL HEALTH: 6 RECOMMENDED SITES FOR MENTAL HEALTH COES WITH 6 ADDITIONAL SITES UNDER CONSIDERATION

Geographic Distribution of Mental Health COEs



Aims of COE designation:

- Treat patients at facilities that currently offer inpatient psychiatric care

Further discussion is needed to determine:

- *Additional COE designations at sites with sufficient volumes*
- *Locations of mental health EDs to receive, treat, and refer patients suffering from mental illness*
- *Plan for repurposing closed inpatient units*

- Recommended COE Sites
- ◌ Potential COE Sites- Pending Further Discussion

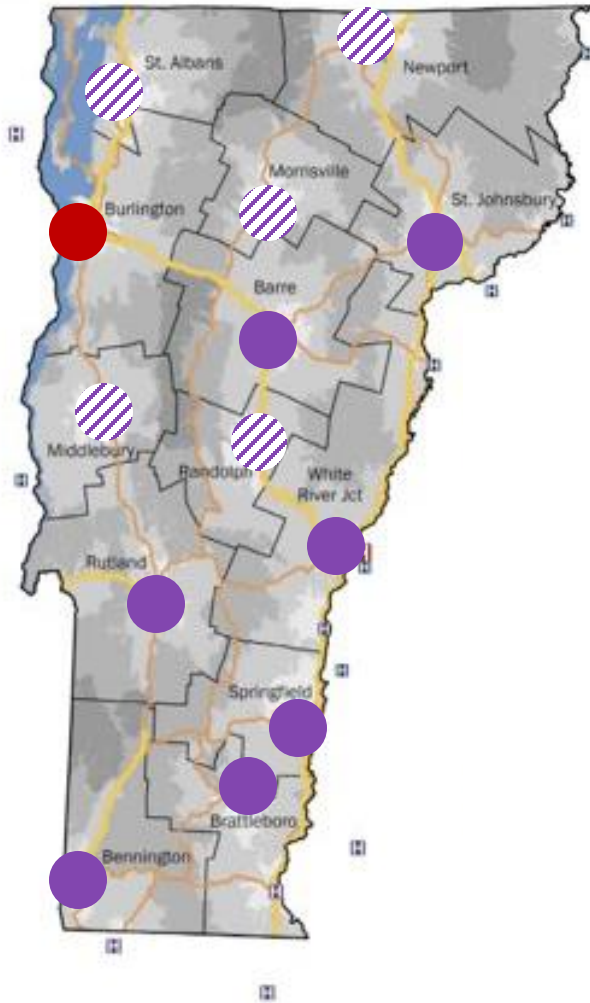
Recommended Mental Health COEs

Specialties	Hospital
Mental Health ED	<ul style="list-style-type: none"> • <i>To determined by the Agency of Human Services</i>
Psych-Adult	<ul style="list-style-type: none"> • Brattleboro Retreat* • Central Vermont Medical Center • Rutland Regional Medical Center • Southwestern Vermont Medical Center • Springfield Hospital • Univ. Vermont Medical Center
Psych-Adolescent	<ul style="list-style-type: none"> • Brattleboro Retreat* • Southwestern Vermont Medical Center • Univ. Vermont Medical Center
Psych-Pediatric	<ul style="list-style-type: none"> • Brattleboro Retreat*

*Brattleboro Retreat is an inpatient psychiatric hospital in Vermont, which was out of scope for full exploration in this report. This hospital contributes significantly to inpatient psychiatric bed capacity (licensed for 149 beds) and should be included in future COE discussions.

ELDERLY CARE: 8 RECOMMENDED ELDER CARE COES WITH 5 ADDITIONAL SITES UNDER CONSIDERATION

Geographic Distribution of Specialized Elder Care COEs



Aims of COE designation:

- Offer treatment modalities needed for acute elderly care
- Treat patients at facilities that offer sub-acute care or regularly treat sub-acute needs
- Build capacity for specialized elder care for aging population needs (e.g. memory care, SNF)








Further discussion is needed to determine:

- *Additional COE designations given high demand for specialized elder care*
- *Plan for repurposing closed inpatient units for sub-acute care*

Recommended Specialized Elder Care COEs

Specialties	Hospital
Geriatric Care	<ul style="list-style-type: none"> • Brattleboro Memorial Hospital • Central Vermont Medical Center • Rutland Regional Medical Center • Southwestern Vermont Medical Center • Univ. Vermont Medical Center • <i>Several other sites – pending discussion</i>
Hospice	<ul style="list-style-type: none"> • Univ. Vermont Medical Center • <i>Several other sites – pending discussion</i>
Memory Care	<ul style="list-style-type: none"> • Springfield Hospital • Univ. Vermont Medical Center • <i>Several other sites – pending discussion</i>
Rehabilitation	<ul style="list-style-type: none"> • Mt. Ascutney Hospital and Health Center • Univ. Vermont Medical Center • <i>Several other sites – pending discussion</i>
Skilled Nursing	<ul style="list-style-type: none"> • <i>Pending further discussion</i>

HOSPITAL COST REDUCTION STRATEGIES ARE REQUIRED TO SUPPORT INVESTMENTS FOR FUTURE SYSTEM REDESIGN

Recommended action	Sub-category	Descriptions/detailed options	Rationale/impact
 Seek operational synergy	 Improve EMR functionality	Speed up adoption of VITL and embed into hospital workflow	✓ Improve efficiency of patient care
		Increase connectivity between hospital systems	✓ Reduce duplication of testing
	 Expand tele-health	Use of tele-pharmacy to support pharmacy technicians and nurses in outlying hospital/delivery sites	
 Seek cost synergy	 Pursue group purchase	Pursue group purchasing (supplies, drug purchasing, insurance and group employee benefits) - <i>Ongoing</i>	✓ Reduce hospital operating expense
	 Centralize services	Centralize interpretative and linguistic services across all agencies with single phone number, website	<i>Cost-benefit analyses should be conducted to ascertain whether centralization creates savings in the long-run when all direct and indirect costs are considered</i>
		Centralize laundry services and/or kitchen to prepare flash frozen meals for delivery to hospitals, SNFs, adult day care	
		Centralize central sterile supply for operating rooms <i>[Northwestern, Southwestern and Rutland only]</i>	
		Consider sub-contracting dietary and house-keeping services	
	 Share staffing	Build a regional ambulatory surgery centers with 4-6 operating/procedure rooms and a recovery area to replace aged small inpatient ORs	
		Develop mobile health services with resources and cooperation between several HSAs	
		Allow smaller hospitals to form a corporation to jointly employ a "regional physician group" (esp. medical specialists) which could rotate MDs among the locations and provide internal telehealth support to the EDs	✓ Maintain patient access to essential yet low-volume services whilst allowing for potential specialization
		Develop a statewide nurse pool to manage per-diem and flex nursing staff to address nursing staffing needs across multiple locations to reduce reliance on travel / agency staff	
		Centralize laboratory services, telepathology for surgical services	✓ Reduce staff cost
Centralize radiology interpretation			
Centralize monitoring for critically ill patients (e.g. sitters)			
Centralize monitoring for patients at home			
Share executive staff, operational staff (e.g. HR, quality, Infection Control, etc) and IT security staff between small hospitals	✓ Reduce staff cost		

OUTSIDE OF THE HOSPITAL, FACILITIES AND WORKFORCE WILL NEED TO EXPAND TO SUPPORT ACCESS AND TREATMENT OPTIONS

FACILITIES



- Free-standing diagnostic facility (radiology/ultrasound)
- Free-standing ambulatory surgery center
- Freestanding birthing centers
- Kiosks for telehealth access in community sites (e.g., in grocery stores)
- Mobile unit for migrant workers and others without transportation (medical/dental services)
- Dispensing machines in hospital ED for commonly prescribed non-scheduled drugs
- Use of community pharmacies for vaccines, venipuncture, routine refill of chronic medications (non-scheduled drugs), treatment of common illness under protocol (use of rapid diagnostic tests)

PEOPLE



- Pharmacists used in new roles
- Professional EMS/paramedics used to deliver home-based care
- Nurse case managers / navigators to help patients with complex medical problems
- Additional community health workers trained in preventative measures
- Immigrants with professional training allowed to practice in Vermont
- Permit nurses to function at top of license
- Provide training in culture sensitivity, gender identity, and mental health sensitivity to all patient-facing clinical staff

HOME CARE INFRASTRUCTURE MUST BE DEVELOPED TO DIVERT PATIENTS FROM HOSPITAL TO HOME BASED SETTING

1 Provide **primary care diagnostic options** using **telehealth**

2 Facilitate home-based **renal dialysis** and **ventilator support**

3 Support **home-based cancer care** and other services
(e.g. Huntsman Cancer Center at Salt Lake City)

4 Consider **“Hospital at Home”** (e.g. MGH, multiple others)

5 Develop **“ED at Home”** (e.g. Atrius Health, Boston)

REQUIRES:

1 Broadband internet

2 Stable electrical supply

3 Clean water and available sewage

4 Central monitoring capability

5 Adequate support in the home (family, home services etc.)

6 Clinician visit daily (Medicare requires two visits per day)

7 Availability of transportation to and from care

8 Appropriate payment for services








INCREASED SUPPORT IS NEEDED IN PRIMARY CARE, SUBSTANCE USE, AND MENTAL HEALTH CONDITIONS TO MANAGE COMPLEX POPULATIONS

- 1 Train and provide adequate support staff
- 2 Improve electronic health record performance and interoperability or replace systems
- 3 Improve performance of VITL to provide timely and accurate clinical information – *in progress*
- 4 Add nurse case managers to manage patients with complex medical problems - *in progress*
- 5 Provide capability for IV infusions and inhalation therapy
- 6 Add capacity for X-rays and mammograms
- 7 Add pharmacists/Pharm D. In larger clinics
- 8 Provide telehealth consultative capacity to primary care site
- 9 Hire staff from minorities with language and social capabilities



ENABLERS SUCH AS PAYMENTS AND COORDINATED CARE ARE KEY IN SUPPORTING SYSTEM REDESIGN

Conditions necessary for succeeding with population-based payments





-  Tight **alignment of financial incentives** among all participants.
-  **Sharing of accurate and timely clinical information and financial performance** with all participants
-  **Adequate resources for primary care, mental health and preventive services** in the community
-  **Availability of referrals to specialists and needed diagnostic tests**
-  **Availability of appropriate levels of care other than acute inpatient beds** (inpatient and outpatient mental health services, extended care facilities)
-  Ability of **tertiary and other referral facilities to accept patient transfers** for needed care
-  Availability of **appropriate transportation** for patients to and between facilities

The end-game for population health is movement of care out of the hospital and shift of hospitals to more intensive care






06

HOSPITAL RECOMMENDATIONS

VERMONT HOSPITALS FACE DIFFERENT LEVELS OF FINANCIAL AND OPERATIONAL CHALLENGES AND SOME ARE IN NEED OF URGENT RE-STRUCTURING

Category	Description	Rationale	Hospital List	
	Major Restructuring Needed	<i>Unlikely to financially sustain inpatient operations given population dynamics</i>	<ul style="list-style-type: none"> Minimal growth potential and poor financial position requiring significant subsidization to improve Aging physical plant needing upkeep / replacement Low procedure / admission volumes due to shrinking / insufficient populations, care sought outside HSA Nearby facility available to care for inpatients* 	<ul style="list-style-type: none"> Gifford Medical Center Grace Cottage Hospital North Country Hospital Springfield Hospital
	Changes to Existing Service Lines	<i>Potential to grow through inpatient transfers from other facilities</i>	<ul style="list-style-type: none"> Financial trends show potential for improvement through targeted cost management programs and / or service line reconfiguration Existing procedure volumes and projected population needs are sufficient to support certain specialties 	Potential to become a regional specialty center: <ul style="list-style-type: none"> Brattleboro Memorial Hospital Copley Hospital Northeastern Vermont Regional Hospital Northwestern Medical Center Rutland Regional Medical Center
	Significant Cost Reductions	<i>Potential to grow ambulatory surgery volume</i>	<ul style="list-style-type: none"> Total administrative costs significantly exceed academic medical center benchmarks Current spend drives a significant portion of Vermont's state commercial expenses 	Regionalization plans and service line strategy will be driven by parent system's service priorities: <u>DHMC system</u> : Mt. Ascutney Hospital and Health Center, Southwestern Vermont Medical Center <u>UVM Network</u> : Central Vermont Medical Center, Porter Medical Center
	Significant Cost Reductions	<i>Significant driver of state-wide healthcare costs (>55% of VT's total hospital commercial spend)</i>	<ul style="list-style-type: none"> Total administrative costs significantly exceed academic medical center benchmarks Current spend drives a significant portion of Vermont's state commercial expenses 	<ul style="list-style-type: none"> UVMMC

VERMONT HOSPITALS HAVE DIFFERENT RECOMMENDED APPROACHES FOR TRANSFORMATION

	 Hospitals requiring major restructuring	 Hospitals requiring changes to existing service lines	 Academic medical center requiring significant cost reductions
 Rationale for Transformation	<p>Current inpatient operations are unsustainable due to poor financial trends, low patient volumes, and declining / aging population</p>	<p>Existing service lines / procedural mix may not optimally match changing population health needs</p>	<p>UVMHC is driving Vermont’s statewide commercial costs, but inadequately providing access to specialty services</p>
	<p>Close or re-configure inpatient units</p>	<p>Move low volume services and / or add in demand services</p>	<p>Examine administrative, support service, and research expenses</p>
 Recommendations	<p>Repurpose facilities and staff to meet non-acute needs, e.g.</p> <ul style="list-style-type: none"> • Mental health beds • Skilled nursing facilities • Rehabilitation units • Memory care units • Other services needed for an aging population 	<p>Establish specialized regional centers to accommodate new patient volumes from other hospitals, e.g.,</p> <ul style="list-style-type: none"> • Musculoskeletal disease • Cardiovascular disease • Neurology • Acute general surgery 	<p>Employ external consultancy to drive improvements over next 18 months</p> <ul style="list-style-type: none"> • Reduce administrative costs (including admin and providers supporting non-patient care) • Identify and eliminate low volume specialty services / clinics • Improve overall clinical productivity to >60th percentile

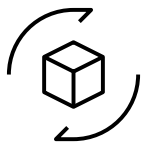
AT-RISK HOSPITALS WERE IDENTIFIED BASED ON CURRENT FINANCIAL POSITION AND ABILITY TO REVERSE FINANCIAL TRENDS

All at-risk hospitals are in poor financial positions. Future trends are unlikely to be reversed without significant funding infusions.

Poor financial health is expected to persist due to the following factors:

Limited Revenue Growth

Threats to maintaining current patient volume



- Nearby facilities have adequate capacity, efficiency, and resources to care for current HSA population
- Sizable number of patients migrate to other hospitals (out of state, outside of HSAs) to receive care

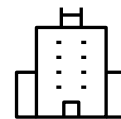
Limited potential for patient volume growth



- Low inpatient volumes are not expected to grow due to declining patient populations
- Significant portion of current inpatient admissions are better suited to be treated in other settings

Limited Ability to Manage Costs

Operating costs



- Aged physical plants require expensive upkeep and/or replacement
- Small facility does not have sufficient scale to efficiently staff and maintain facilities

Administrative costs



- Administrative staff and associated costs disproportionately drive costs due to the lack of economies of scale

AT RISK HOSPITALS SHOULD CONSIDER REPURPOSING FACILITIES AND STAFF TO PROVIDE CARE TO LOCAL COMMUNITIES THROUGH DIFFERENT MODELS



Explore restructuring options over the next 2 years

At risk hospitals are unlikely to sustain current inpatient units and must explore restructuring options to achieve financial sustainability

AT RISK HOSPITALS:

1. Grace Cottage
2. Gifford
3. North Country
4. Springfield

Restructuring options

Develop plans to re-purpose facilities and clinical staff from closed inpatient units

	1 Rural Emergency Hospital (REH) Maintain emergency department and minimal IP beds to manage transfers to regional centers	2 Community Ambulatory Care Center (CACC) Grow ambulatory services and offer extended urgent care hours to manage hospital transfers	3 Care at Home Support Support partner hospital’s care-at-home program through referrals and back-end services
IP	2 beds + SNF	SNF + Rehab + Mental Health	n/a
ED	24 hr ED	16 hr Urgent Care	24 hr ED or 16 hr Urgent Care
OP	Ambulatory Surgery + prospective payment	Ambulatory Surgery	Ambulatory Surgery
Rx, Diagnostics	Free-standing diagnostic facilities and pharmacy serving community or expanded hours		Free-standing diagnostic/pharmacy provision



UPON RESTRUCTURING, HOSPITAL STAFF FROM INPATIENT UNITS CAN EASILY BE RE-DEPLOYED AT HEALTHCARE FACILITIES AND WITHIN THE COMMUNITY

While hospital restructuring will require significant changes, Vermont’s workforce will still be in demand as workforce shortages persist, hospitals restructure their services, and community-based programs grow

If at risk hospitals close inpatient units, staff may be redeployed in the following ways

- 1 Repurposed at restructured facilities (e.g., REH, CACC, Care at Home support)
- 2 Provide additional capacity to specialty regional centers
- 3 Redeploy workforce in different roles in community-based programs

Examples of Ways to Redeploy Hospital Staff in Community-Based Settings

Types of roles	Types of staff	Potential examples of new roles
 Direct patient care	Specialists	Outpatient consultations / surgeries
	Primary care, advanced practitioners (e.g., NP, PAs)	Telehealth, home health, care at home consultations
	Other clinicians (e.g., nurses, social workers)	Care coordination, in home consultations, case management
 Support staff	Administration	Community program support, community program coordination
	Other facility services (e.g., housekeeping, maintenance)	Mobile health transport, affordable housing development, ASU maintenance

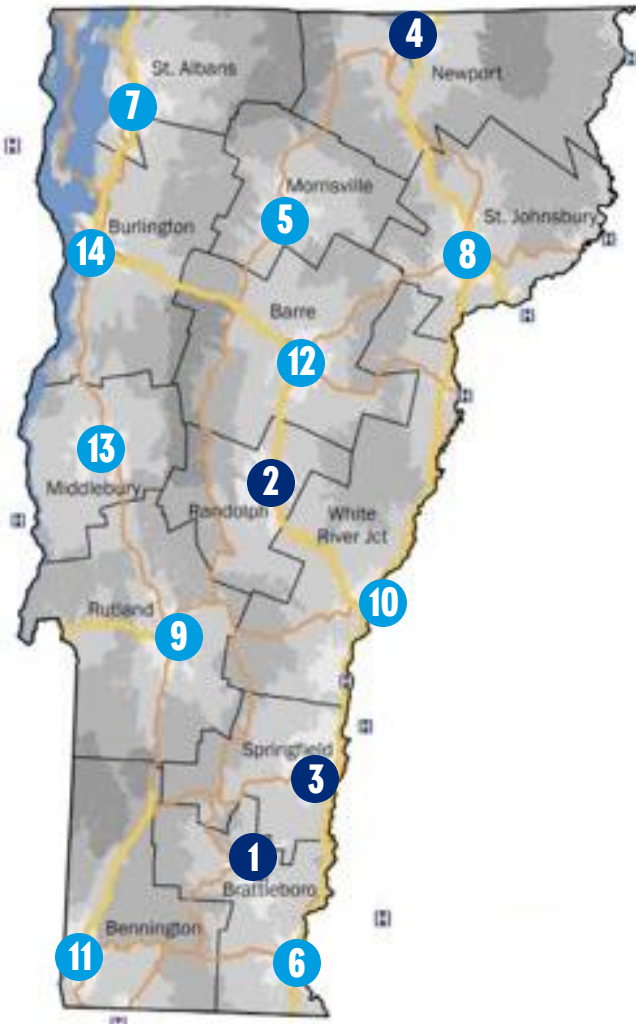
SYSTEM CHANGES AND PREPARATIONS ARE NEEDED TO ENABLE ORDERLY INPATIENT UNIT CLOSURES WHERE PATIENT CARE COULD CONTINUE IN OTHER SETTINGS

To proactively plan for hospital closures, system changes must be initiated to:

Corresponding System Changes

<p>1</p>	<p>Refer inpatients to regionalized specialty centers</p>	<p>Merge or Redesign HSAs HSA boundaries need to be reconfigured based on new CAH make-up and ability for population to sufficiently support services</p>
		<p>Coordinate Regionalized EMS EMS require regionalization to accommodate patient referrals to regionalized specialty centers</p>
<p>2</p>	<p>Address patients' acute healthcare needs within a reasonable distance</p>	<p>Establish Free Standing Centers and Ambulatory Surgery Centers Centralized freestanding birthing centers, diagnostics centers should be built to increase capacity</p>
		<p>Designate Centers of Excellence Centers of Excellence should be determined to develop plan for treating patient's specialty needs</p>
<p>3</p>	<p>Address community members' social needs previously treated in the hospital setting</p>	<p>Extend Community Programs Community programs must grow to meet population needs previously addressed within the hospital</p>

IF AT RISK HOSPITALS CLOSE THEIR INPATIENT UNITS, THEIR INPATIENTS WILL NEED TO BE REFERRED TO OTHER REGIONAL SPECIALTY CENTERS



VERMONT
DEPARTMENT OF HEALTH
Published December 2019
AHS.VDHGIS@vermont.gov

HSA	Hospital/Institution	
1	Brattleboro	Grace Cottage
2	Randolph	Gifford Medical Center
3	Springfield	Springfield Hospital
4	Newport	North Country Hospital
5	Morrisville	Copley Hospital
6	Brattleboro	Brattleboro Memorial Hospital
7	St. Albans	Northwestern Medical Center
8	St. Johnsbury	Northeastern Vermont Regional Hospital
9	Rutland	Rutland Regional Medical Center
10	White River Junction	Mt. Ascutney Hospital and Health Center
11	Bennington	Southwestern Vermont Medical Center
12	Barre	Central Vermont Medical Center
13	Middlebury	Porter Medical Center
14	Burlington	Univ. Vermont Medical Center

Inpatient units repurposed to:

- Specialized elderly care and / or mental health services

Refer current inpatients to:

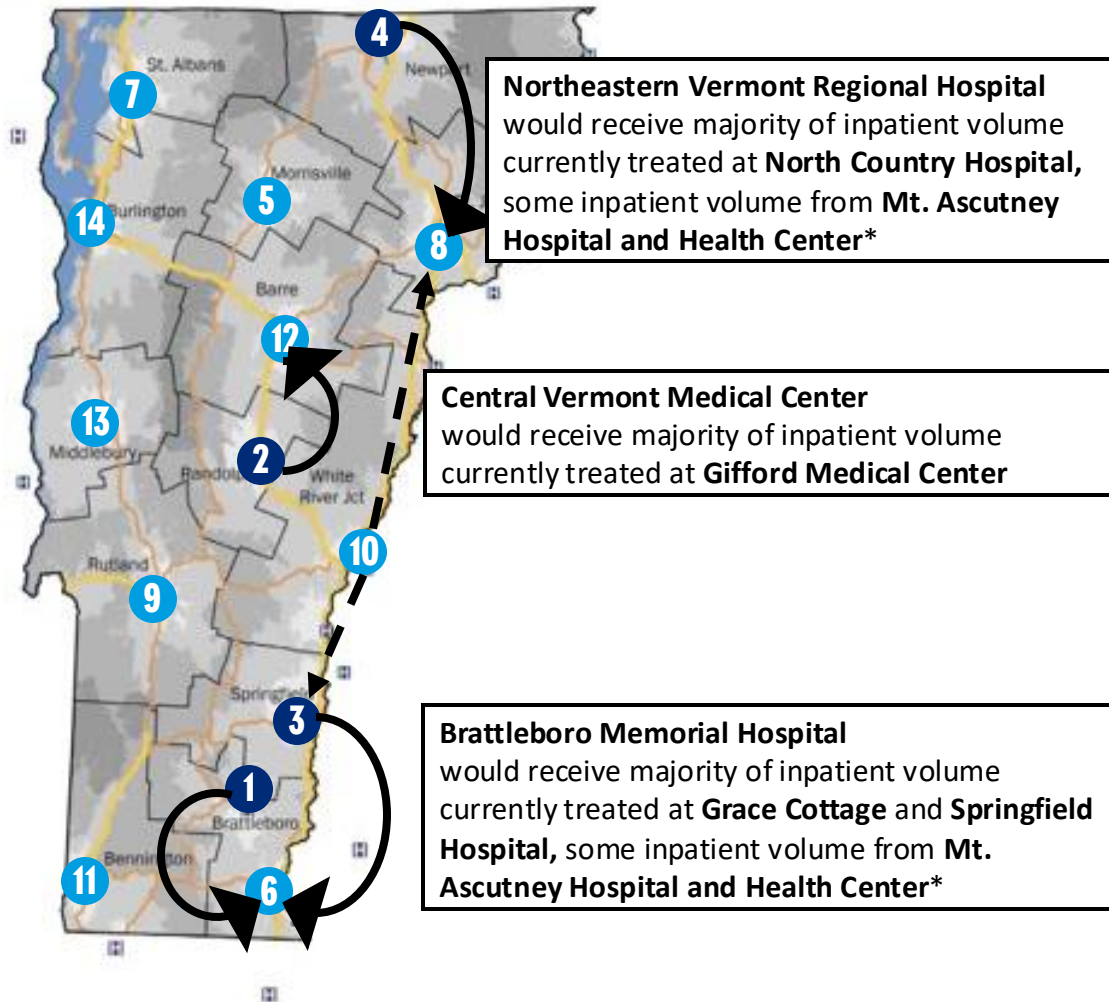


Regionalized specialty care centers including COEs for:

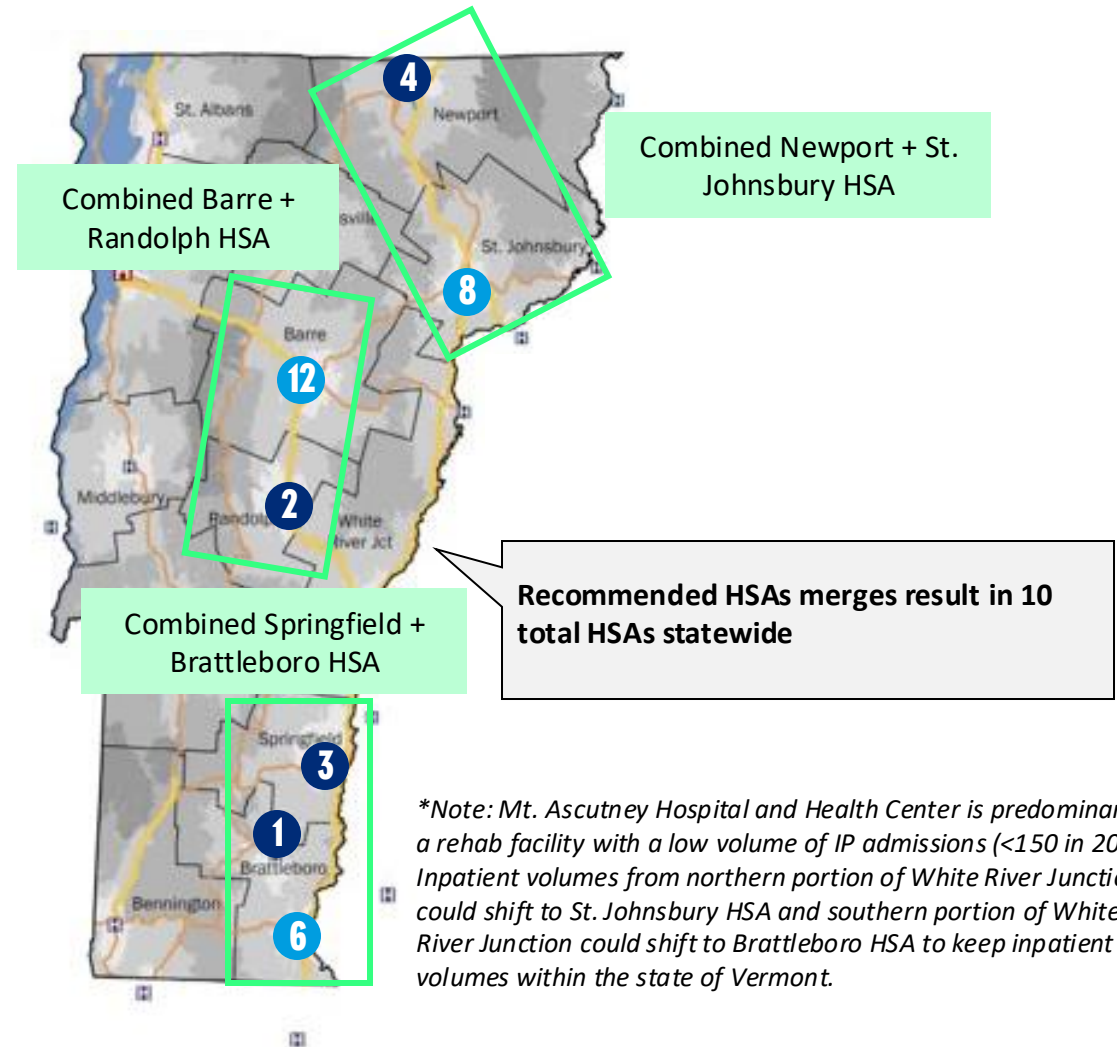
- Surgery
- Specialty services
- Women's health
- Etc.

HSAS COULD MERGE TO MATCH VERMONT'S FUTURE HOSPITAL FOOTPRINT

Potential Shifts in Patient Volume



Potential HSAs Mergers



NON AT-RISK HOSPITALS WILL REQUIRE CHANGES TO EXISTING SERVICE LINES FOR FUTURE FINANCIAL SUSTAINABILITY

Rationale

Relative to “at risk hospitals”, other hospitals show potential for financial sustainability after reconfiguring service lines and implementing targeted cost management programs

Recommendations

1. Service Line Configuration

Close examination of existing hospital services is needed to maximize profitability potential and leverage individual hospital specialized expertise

✓ *Grow new and existing services / procedures to:*

- Accommodate patient volumes from closed inpatient units
- Provide services aligned with changing population needs / demographics (e.g., aging population)
- Expand low-cost specialty service offerings within VT (e.g., IP services at community hospitals vs. academic medical center, surgeries at ASUs)
- Provide specialized services within a reachable distance

✗ *Discontinue low volume services / procedures to:*

- Improve hospital profitability from services/procedures that generate sufficient revenue to cover overhead expenses
- Permit reallocation of resources and attentions to newer, more complex services
- Ensure that services offered have sufficient volumes to maintain clinical excellence

2. Cost Management

Cost management programs are recommended to:

- Achieve cost synergies through shared and / or centralized services
- Obtain economies of scale through focus on higher volume / specialized services

What are some key readiness activities hospitals will need to do to support changes?



Statewide

- Participate in AHS-led state regionalization discussions to develop plans to meet patient health needs across Vermont and designate COEs
- Participate in and support programs to move appropriate care out of the hospital



Cross-Hospital

- Develop infrastructure (e.g., patient transport, supporting technology) needed to manage patient referrals from urgent care / EDs
- Collaborate with other hospitals to enter group purchasing agreements and consolidate back-office functions
- *As applicable:* Coordinate with parent health system (UVM, Dartmouth Health system) to develop reconfiguration plans aligned with system priorities

THE WORK EFFORT OF MANY PHYSICIANS FALLS BELOW NATIONAL BENCHMARKS

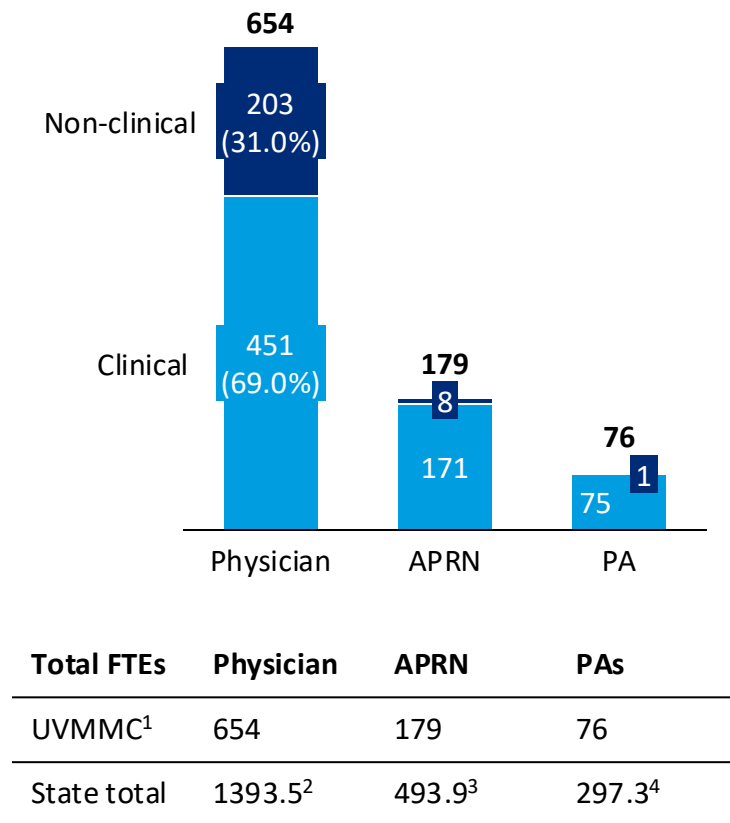
Hospital / Facility	Benchmark Category	Percentage of Specialties
CVMC	Below 25 th percentile	75%
NVRH	Below 25 th percentile	71%
Brattleboro Memorial Hospital	Below 25 th percentile	57%
NMC	Below 25 th percentile	50%
Porter	Below 25 th percentile	35%
Mt. Ascutney	Above 25 th percentile	All
Gifford	Below 50 th percentile	33%
Copley		
Grace Cottage	Not reported ¹	
Springfield		

Source: Data reported to GMCB on August 2023

1. Hospitals / facilities marked as N/A did not report results

UVMHC'S CURRENT CLINICAL PRODUCTIVITY PRESENTS SIGNIFICANT OPPORTUNITY FOR IMPROVEMENT FOR STATEWIDE PHYSICIAN ACCESS AND HEALTHCARE COST

Break-down of UVMHC provider FTE¹
FTE, 2023



UVM is the largest employer of physicians in Vermont and a significant driver for cost and access

~46% of all physician FTEs in Vermont are employed by UVMHC

~56% of Vermont's commercial healthcare spend in hospitals are on UVMHC, ~66% on UVM network hospitals⁵

~31% of UVMHC's physician FTEs are spent on non-clinical activities, e.g.:

- Administrative roles e.g., faculty positions at the medical school
- Research duties e.g., study coordination or clinical trial care / monitoring

Further investigation is required to ascertain the value of physician FTEs currently spent on non-clinical activities for the state of Vermont, e.g.:

1. How well is the medical school developing a pipeline of physicians for the state of Vermont and servicing rural communities?
2. How relevant is UVM's clinical research to the health needs of Vermonters?

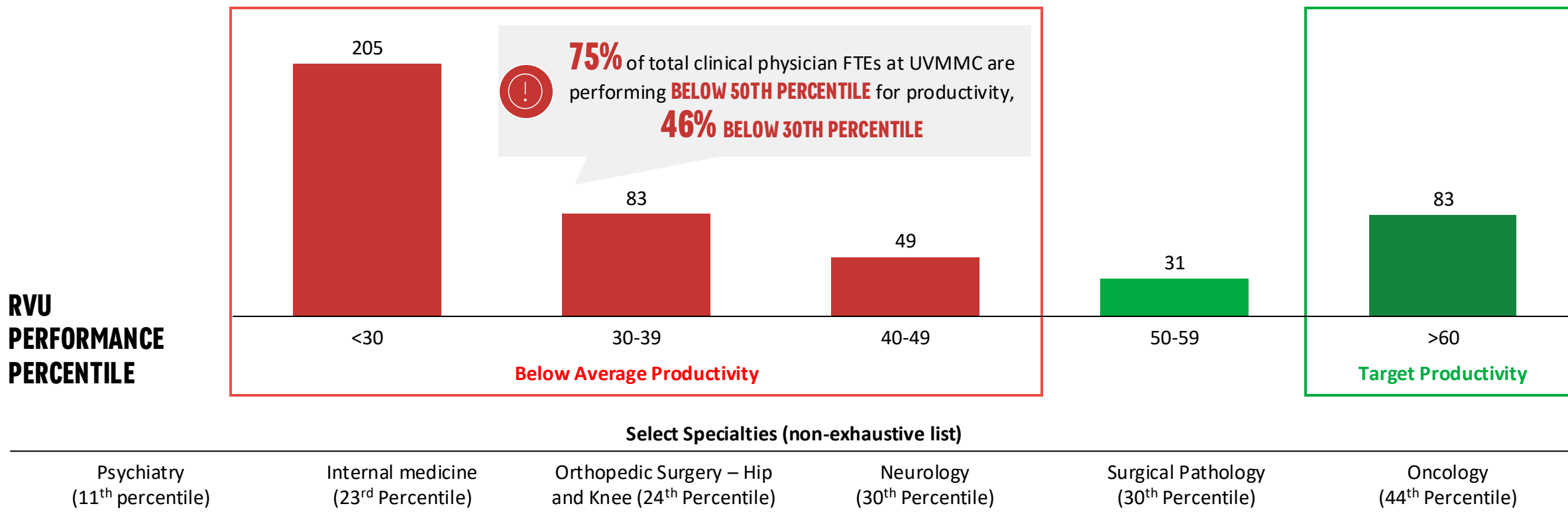
1. UVMHC clinical FTE and total provider FTEs in FY 2023 from self-reported clinical productivity performance to GMCB, 2. Statewide physician FTEs in 2022 3. Statewide APRN FTEs in 2019 4. Statewide PA FTEs in 2020, 5. OW analysis on GMCB financial records for FY2023
Source: UVMHC self-reported RVU Performance in 2023 as reported to Green Mountain Care Board in August 2024, GMCB financial records, OW Analysis, [Vermont Department of Health 2022 Physician Census](#), [Vermont Department of Health 2019 Advance Practice Registered Nurses Census Report](#), [Vermont Department of Health 2020 Physician Assistant Census Report](#)

UVMHC'S CLINICAL PHYSICIAN FTES SIGNIFICANTLY UNDERPERFORM IN PRODUCTIVITY VS. BENCHMARK, WITH 75% OF PHYSICIANS PERFORMING BELOW THE 50TH PERCENTILE

UVMHC self-reported clinical physician productivity performance in 2023

Total clinical physician FTEs by RVU percentile rank (based on Sullivan Cotter productivity survey)

- UVMHC had 654 physician FTEs in FY23, of which 451 are clinical FTEs

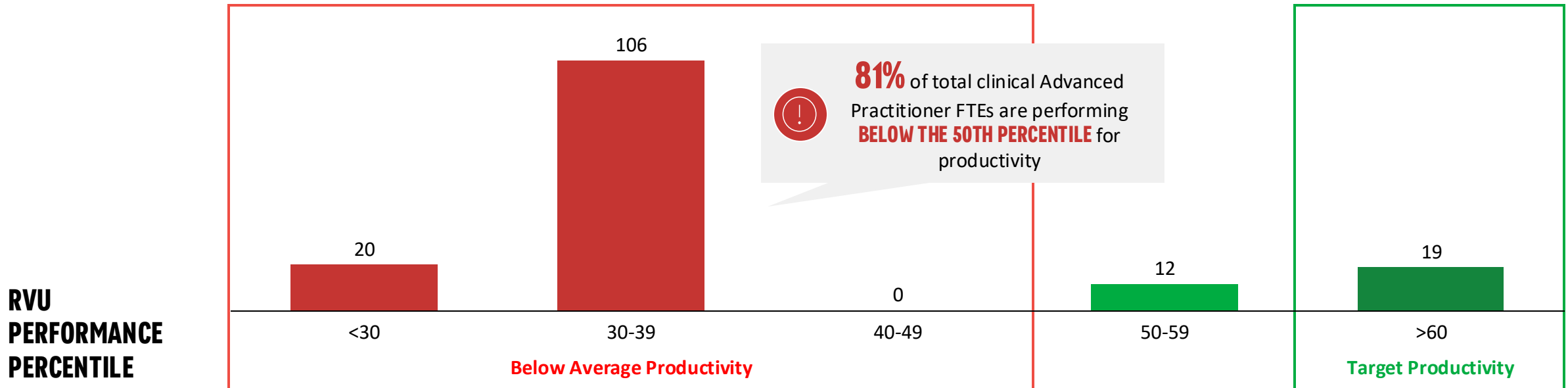


Source: UVMHC self-reported RVU Performance in 2023 as reported to Green Mountain Care Board in August 2024, OW Analysis, [Vermont Department of Health 2022 Physician Census Report](#)

UVMHC'S CLINICAL ADVANCED PRACTITIONERS SIGNIFICANTLY UNDERPERFORM IN PRODUCTIVITY WITH 81% OF THEM PERFORMING BELOW THE 50TH PERCENTILE

UVMHC self-reported clinical physician assistant and nurse practitioner productivity performance in 2023
Count of clinical FTEs by RVU percentile rank (based on Sullivan Cotter productivity survey)

- UVMHC's had 157 NP and PA advanced practitioner FTEs in FY 2023¹



Note: 1. All APP FTEs as submitted except APP Audiologist, APP certified nurse midwife, APP certified registered nurse anesthetist, APP child psychologist, APP neuropsychology, APP psychologist, APP social worker
Source: UVMHC RVU Performance in Most Recent Year 2023 as reported to Green Mountain Care Board in August 2024, OW Analysis

REGARDLESS OF TRANSFORMATION CHANGES, ALL HOSPITALS SHOULD DRIVE CHANGE THROUGH SEVERAL “NO REGRETS MOVES”

Hospital “No Regrets” Moves

Regardless of individual hospital recommendations, all hospitals should explore the activities in the following domains during the interim period (2025-2027).



Expand Access

- Expand rural outreach programs for primary care and preventative services
- Expand use of telehealth for Emergency Room, Urgent Care, and specialists
- Establish programs to target high needs groups/individuals (e.g., health at home, PACE)



Manage Costs

- Utilize consortiums to increase purchasing power and leverage economies of scale (e.g., back office, specialty physician group, state-wide nurse pool)






Prepare for Future Redesign

- Develop capability for remote monitoring and patient follow-up
- Develop regionalized EMS transportation services and enhance patient transportation (Medicare waivers are available)

06.1

RECOMMENDATIONS FOR HOSPITALS REQUIRING MAJOR RESTRUCTURING

HOSPITAL RECOMMENDATIONS

Category	Description	Rationale	Hospital List
 Major Restructuring Needed	<i>Unlikely to financially sustain inpatient operations given population dynamics</i>	<ul style="list-style-type: none"> Minimal growth potential and poor financial position requiring significant subsidization to improve Aging physical plant needing upkeep / replacement Low procedure / admission volumes due to shrinking / insufficient populations, care sought outside HSA Nearby facility available to care for inpatients* 	<ul style="list-style-type: none"> Gifford Medical Center Grace Cottage Hospital North Country Hospital Springfield Hospital
 Changes to Existing Service Lines	<p><i>Potential to grow through inpatient transfers from other facilities</i></p> <p><i>And / Or</i></p> <p><i>Potential to grow ambulatory surgery volume</i></p>	<ul style="list-style-type: none"> Financial trends show potential for improvement through targeted cost management programs and / or service line reconfiguration Existing procedure volumes and projected population needs are sufficient to support certain specialties 	<p>Potential to become a regional specialty center:</p> <ul style="list-style-type: none"> Brattleboro Memorial Hospital Copley Hospital Northeastern Vermont Regional Hospital Northwestern Medical Center Rutland Regional Medical Center <p>Regionalization plans and service line strategy will be driven by parent system's service priorities:</p> <p><u>DHMC system</u>: Mt. Ascutney Hospital and Health Center, Southwestern Vermont Medical Center</p> <p><u>UVM Network</u>: Central Vermont Medical Center, Porter Medical Center</p> <ul style="list-style-type: none"> UVMMC
 Significant Cost Reductions	<p><i>Significant driver of state-wide healthcare costs (>55% of VT's total hospital commercial spend)</i></p>	<ul style="list-style-type: none"> Total administrative costs significantly exceed academic medical center benchmarks Current spend drives a significant portion of Vermont's state commercial expenses 	

GIFFORD MEDICAL CENTER – CURRENT SITUATION

Hospital Situation

Surrounding Population¹	Randolph HSA population forecasted to decline, aged population (65+ years old) is projected as 37.8% of total HSA population by 2040
Primary Care Physicians²	Number of PCPs needed estimated as 11 primary care FTEs needed by 2040 (assuming 35 clinical hours/week and 3 visits/hour)
Emergency Department Visits^{3,4}	5,146 Total ED visits in 2022, 28.5% are avoidable (VHCURES); 7,494 Total ED Visits, 33.2% avoidable (VUHDDS)
Inpatient Admissions^{4,5}	742 Acute IP admissions in 2022, 16.4% are preventable (VHCURES)
Deliveries⁶	OB deliveries are currently below minimum threshold (192 in 2022)
Low Volume Surgeries⁷	Colectomy, femoral hernia repair, lysis of adhesions, small bowel resection, deliveries, total hip replacement

GMC is confident that their quality outcomes are exceptional based on the latest PQC-VT Perinatal Public Health reports despite low volume

Financials

Operating Margin⁸	2023 operating margin was – 8.3%, with operating loss at \$4.7 MM
Projections⁹	FY2028 forecast assuming 5% expense growth, 7-8% expense growth: \$1.3 MN loss, 6.0 MM loss Cumulative financial support required to break even over 2024-2028: \$0.3MN-\$13.6 MM
FY 2025 Budget Request⁸	2025 budget request for GMCB is \$1.3 MM increase in commercial revenue vs. FY24 budget

GMC believes 2023 is an outlier year due to new EMR, rebuild of revenue cycle operations and chargemaster and expect margin to be positive for 2024

Rescue Efforts

Results¹⁰	Return of patients to capacity and other service changes yields estimated similar financial losses from \$6.0MN loss to \$6.5MN loss in 2028, insufficient to return hospital margin to positive (assuming 7-8% expense growth scenario)
-----------------------------	--

Source: 1. MPR VT Population by HSA, Oliver Wyman analysis; 2. National health statistics on PCP visits ([link](#)), MPR VT Population by HSA, Oliver Wyman analysis; 3. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis, VUHDDS data and VAHHS analysis. 4. VHCURES IP admission counts and VHCURES avoidable percentages for ED and IP are used in subsequent financial analyses of potentially avoidable care. VHCURES ED and IP counts are likely an under-estimate due to incomplete coverage of VHCURES dataset. Please refer to VUHDDS or hospital data for accurate counts; 5. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis; 6. Vital Statistics 2022 Report, OW analysis; 7. MPR Low Volume Service Analysis using VUHDDS data, 2020 & 2021 Vermont State Vital Statistics, Hospital feedback (May 2024), OW assumptions on low volume thresholds; 8. GMCB hospital financial records; 9. GMCB hospital financial records and Oliver Wyman analysis. Projections exclude FY2023 financials (considered an anomaly year by GMC related to expenses from EMR implementation). 10. Oliver Wyman analysis

GIFFORD MEDICAL CENTER OPTIONS

Initially proposed by OW + hospital feedback (June 2024)



MUST DO

Hospital only

- Stop doing colectomy, lysis of adhesions, repair of perforated peptic ulcer, and hernia procedures except inguinal and femoral
- Either increase volume of total hip replacements OR stop
- Shift IP care and emergency room to other organizations



Cross-hospital *(unlikely to improve financials)*

- Execute on shared services with other hospitals
- Strongly consider formation of a regional specialty medical group with other hospitals



Hospital note: Gifford is also an FQHC and REH can't be the same system. Would value clarification with AHS.



POSSIBILITIES/OPTIONS

Service category	Option 1: Rural Emergency Hospital (REH)	Option 2: "Community Ambulatory Care Center" (CACC)
IP	2 bed + SNF	SNF/Rehab/ Mental Health
ED	24hr ED	16hr UrgiCare
OP	Ambulatory surgery + prospective payment	Ambulatory Surgery
Diagnostic/ Pharmacy Provision	Provide free-standing diagnostic facilities and pharmacy for community and providers	

AND

- Develop PACE program
- Consider free-standing birthing center to attract more patients

GIFFORD MEDICAL CENTER - OW FINAL RECOMMENDATIONS

Solutions for Interim Period (2025- 2027)

Gifford Medical Center	<ul style="list-style-type: none"> • Examine options for conversion of all inpatient beds to: 1. Mental Health, 2. Geriatric Psychiatry, or 3. Memory Care • Explore models for expanding telehealth/remote monitoring • Stop doing colectomy, lysis of adhesions, repair of perforated peptic ulcer, and hernia procedures (except inguinal and femoral) • Increase volume of total hip replacements OR stop total hip replacements
Cross-Hospital	<ul style="list-style-type: none"> • Change staffing of ED to a non-physician model with support from another hospital • Consider conversion to an Urgicare rather than ED • Combine all back office and support functions into New England Collaborative Network with other CAH / unaligned PPS hospitals in Vermont • Form a consortium with CVMC to support a care in the home model and “Hospital At Home” to eligible patients through pharmacy and diagnostic provisions • Use consortium to provide mobile rural clinics/services in combined HSA • Strongly consider formation of a regional specialty medical group with other hospitals
Community-Based	<ul style="list-style-type: none"> • Collaborate with local EMS and neighbouring hospitals to develop plans to coordinate regional EMS services • Explore programs aimed at serving high risk patients, e.g., PACE/SASH

Worst Case Scenarios

Alternatives to Current Inpatient Design	<ul style="list-style-type: none"> • Hospital closes all inpatient units • Hospital converts to Rural Emergency Hospital designation (likely not supportable in the area) • Hospital arranges OB services to be provided at Rutland and/or CVMC • Operate as a subunit to provide multi-specialty ambulatory services including free-standing diagnostic testing, infusion center
HSA Reconfigurations	<ul style="list-style-type: none"> • Combine Randolph and Barre HSAs

GRACE COTTAGE HOSPITAL – CURRENT SITUATION

Hospital Situation

Surrounding Population¹	Brattleboro HSA population forecasted to decline, aged population (65+ years old) is projected as 39.1% of total HSA population by 2040
Primary Care Physicians²	Number of PCPs needed estimated as 28 primary care FTEs needed by 2040 (assuming 35 clinical hours/week and 3 visits/hour)
Emergency Department Visits^{3,4}	3,637 Total ED Visits in 2022 (hospital input); 2,455 Total ED visits in 2022, 31.0% are avoidable (VHCURES); 3,695 Total ED Visits, 34.1% avoidable (VUHDDS)
Inpatient Admissions^{4,5}	98 Acute IP admissions in 2022 (hospital input); 73 Acute IP admissions in 2022, 32.9% are preventable (VHCURES)
Deliveries⁶	N/A does not have OB deliveries
Low Volume Surgeries	N/A does not surgical specialties
Other Services	Small medical staff, does not have specialty care

Financials

Operating Margin⁷	2023 operating margin was – 8.9%, with operating loss at \$2.3 MM
Projections⁸	FY2028 forecast assuming 5% expense growth, 7-8% expense growth: \$4.6 MN loss, 9.9 MM loss Cumulative financial support required to break even over 2024-2028: \$17.8MN-\$32.5 MM
FY 2025 Budget Request⁷	2025 budget request for GMCB is \$1.9 MM increase in commercial revenue vs. FY24 budget

Rescue Efforts

Results⁹	Return of patients to capacity and other service changes yields estimated similar financial losses (from \$9.9MN loss to \$10.6 MN loss) in 2028, insufficient to return hospital margin to positive under a 7-8% expense growth scenario
----------------------------	---

Source: 1. MPR VT Population by HSA, Oliver Wyman analysis; 2. National health statistics on PCP visits ([link](#)), MPR VT Population by HSA, Oliver Wyman analysis; 3. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis, VUHDDS data and VAHHS analysis. 4. Hospital input IP admission counts and VHCURES-analyzed avoidable percentages for ED and IP are used in subsequent financial analyses of potentially avoidable care. VHCURES ED and IP counts are likely an under-estimate due to incomplete coverage of VHCURES dataset. Please refer to VUHDDS or hospital data for accurate counts; 5. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis; 6. Vital Statistics 2022 Report, OW analysis; 7. GMCB hospital financial records; 8. GMCB hospital financial records and Oliver Wyman analysis; 9. Oliver Wyman analysis

GRACE COTTAGE HOSPITAL OPTIONS

Initially proposed by OW (June 2024)



MUST DO

Hospital only

- Shift IP acute care beds to other organizations



Cross-hospital *(unlikely to improve financials)*

- Execute on shared services with other hospitals
- Strongly consider formation of a regional specialty medical group with other hospitals



**POSSIBILITIES/
OPTIONS**

Service category	Option 1: Rural Emergency Hospital (REH)	Option 2: "Community Ambulatory Care Center" (CACC)
IP	2 bed + SNF	SNF/Rehab/ Mental Health
ED	24hr ED	16hr UrgiCare
OP	Ambulatory surgery + prospective payment	Ambulatory Surgery
Diagnostic/ Pharmacy Provision	Provide free-standing diagnostic facilities and pharmacy for community and providers	

AND

- Develop PACE program

OPTIONS PROPOSED BY GRACE COTTAGE HOSPITAL

Proposed by Grace Cottage Hospital (June 2024)



MUST DO

Hospital only



- Construction of new primary care clinic space with urgent care capabilities
- Expansion of imaging capabilities with existing machinery
- Acute to expand to include select dialysis patients, trachs, CPAP/BIPAP etc
- Renovation underway currently to expand footprint for outpatient rehab (PT/OT) as demand is very high

Cross-hospital *(unlikely to improve financials)*



- Planned discussion with UVM on process improvements for referral process to better offload appropriate patients from UVM
- Exploring regionalized SANE program with BMH and “wrap around” programming including post service community-based counseling
- Exploring expanding inpatient referrals



POSSIBILITIES/ OPTIONS

- Exploring partnership opportunity with Senior Life Solutions for intensive outpatient geriatric psych
- Explore small number of beds as rehab to long term care level 2 swing
- Potential expansion of Medicaid referral pool (pending discussion with state Medicaid director on long term care application process and pain points for Medicaid patients and process streamlining)

Investment required:

- Shared EMR such as Epic’s community link program, hosted by UVM
- State involvement and leadership around Medicaid patient care

GRACE COTTAGE HOSPITAL - OW FINAL RECOMMENDATIONS

Solutions for Interim Period (2025- 2027)

<p>Grace Cottage</p>	<ul style="list-style-type: none"> • Examine options for conversion of all inpatient beds to: 1. Mental Health, 2. Geriatric Psychiatry, or 3. Memory Care • Change staffing of ED to a non-physician model with support from another hospital. Consider conversion to an Urgicare rather than ED • Explore models for expanding telehealth/remote monitoring
<p>Cross-Hospital</p>	<ul style="list-style-type: none"> • Combine all back office and support functions into New England Collaborative Network with other CAH / unaligned PPS hospitals in Vermont as in Cross Hospital Recommendations • Form a consortium with Springfield Hospital and Brattleboro Memorial Hospital to support a care in the home model and “Hospital At Home” through pharmacy and diagnostic provisions for eligible patients • Use consortium to provide mobile rural clinics/ services in combined HAS • Strongly consider formation of a regional specialty medical group with other hospitals
<p>Community-Based</p>	<ul style="list-style-type: none"> • Collaborate with local EMS and neighbouring hospitals to develop plans to coordinate regional EMS services • Explore programs aimed at serving high risk patients e.g., PACE / SASH

Worst Case Scenarios

<p>Alternatives to Current Inpatient Design</p>	<ul style="list-style-type: none"> • Hospital closes all inpatient units • Hospital converts to Urgicare clinic and uses inpatient beds for eldercare needs (Geriatric Psych, Memory Care, etc.) • Operate as a subunit of Brattleboro Memorial Hospital to provide ambulatory services
<p>HSA Reconfigurations</p>	<ul style="list-style-type: none"> • Send inpatients to Brattleboro Memorial hospital within Brattleboro HSA

NORTH COUNTRY HOSPITAL – CURRENT SITUATION

Hospital Situation

Surrounding Population¹	Newport HSA population forecasted to decline, aged population (65+ years old) is projected as 36.1% of total HSA population by 2040
Primary Care Physicians²	Number of PCPs needed estimated as 24 primary care FTEs needed by 2040 (assuming 35 clinical hours/week and 3 visits/hour)
Emergency Department Visits^{3,4}	10,748 Total ED visits in 2022, 37.0% are avoidable (VHCURES); 14,491 Total ED Visits (incl. 14,186 OP and 305 IP), 39.5% avoidable (VUHDDS)
Inpatient Admissions^{4,5}	954 Acute IP admissions in 2022, 16.1% are preventable (VHCURES)
Deliveries⁶	OB deliveries are currently below minimum threshold (153 in 2022)
Low Volume Surgeries⁷	Femoral hernia repair, small bowel resection and deliveries

NCH has protocols in place and participates in quality initiatives around obstetric services

Financials

Operating Margin⁸	2023 operating margin was – 8.9%, with operating loss at \$8.8 MM
Projections⁹	FY2028 forecast assuming 5% expense growth, 7-8% expense growth: \$17.3 MN loss, 28.9 MM loss Cumulative financial support required to break even over 2024-2028: \$69MN-\$101 MM
FY 2025 Budget Request⁸	2025 budget request for GMCB is \$8.7 MM increase in commercial revenue vs. FY24 budget

NCH already decided to stop performing total knee and total hip replacement procedures

Rescue Efforts

Results¹⁰	Return of patients to capacity and other service changes yields estimated similar financial losses (from \$28.9MN loss to \$30.6MN loss) in 2028, insufficient to return hospital margin to positive under a 7-8% expense growth scenario
-----------------------------	---

Source: 1. MPR VT Population by HSA, Oliver Wyman analysis; 2. National health statistics on PCP visits ([link](#)), MPR VT Population by HSA, Oliver Wyman analysis; 3. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis, VUHDDS data and VAHHS analysis. 4. VHCURES IP admission counts and VHCURES avoidable percentages for EP and IP are used in subsequent financial analyses of potentially avoidable care. VHCURES ED and IP counts are likely an under-estimate due to incomplete coverage of VHCURES dataset. Please refer to VUHDDS or hospital data for accurate counts; 5. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis; 6. Vital Statistics 2022 Report, OW analysis; 7. MPR Low Volume Service Analysis using VUHDDS data, 2020 & 2021 Vermont State Vital Statistics, Hospital feedback (May 2024), OW assumptions on low volume thresholds; 8. GMCB hospital financial records; 9. GMCB hospital financial records and Oliver Wyman analysis; 10. Oliver Wyman analysis

NORTH COUNTRY HOSPITAL OPTIONS

Initially proposed by OW (June 2024)



MUST DO

Hospital only

- Stop doing total joint replacement/repair of perforated ulcer/spinal surgery
- Shift birthing to other organizations except urgent/emergent deliveries
- Recruit primary care providers urgently



Cross-hospital *(unlikely to improve financials)*

- Execute on shared services with other hospitals
- Strongly consider formation of a regional specialty medical group with other hospitals
- Expand telehealth support for emergency room/ UrgiCare and specialists



POSSIBILITIES/OPTIONS

Service category	Option 1: Rural Emergency Hospital (REH)	Option 2: "Community Ambulatory Care Center" (CACC)
IP	2 bed + SNF	SNF/Rehab/ Mental Health
ED	24hr ED	16hr UrgiCare
OP	Ambulatory surgery + prospective payment	Ambulatory Surgery
Diagnostic/ Pharmacy Provision	Provide free-standing diagnostic facilities and pharmacy for community and providers	



- **Develop PACE program**

OPTIONS PROPOSED BY NORTH COUNTRY HOSPITAL

Proposed by North Country Hospital (June 2024)



MUST DO

Hospital only

- Stop femoral hernia repair
- Recruit primary care providers urgently

Hospital decisions:

- Has already stopped performing total knee and total hip replacement procedures
- Has chosen to keep OB (has protocols in place and participate in quality initiatives around obstetric services)
- Emphasis has been placed on minimizing small bowel resection numbers



Cross-hospital *(unlikely to improve financials)*

- Execute on shared services with other hospitals
- Strongly consider formation of a regional specialty medical group with other hospitals
- Expand telehealth support for emergency room/ UrgiCare and specialists

Additional ongoing hospital work:

- In discussion joint executive team & further coordination with St. Johnsbury
- Looking to “piggyback” onto UVMs’ EPIC System



POSSIBILITIES/ OPTIONS

- Develop PACE program
- Consider adding septic transfers back to hospital to current services

NORTH COUNTRY HOSPITAL - OW FINAL RECOMMENDATIONS

Solutions for Interim Period (2025- 2027)

<p>North Country Hospital</p>	<ul style="list-style-type: none"> • Examine options for conversion of all inpatient beds to 1) mental health, 2) Geriatric Psychiatry, or 3) Memory Care • Change staffing of ED to a non-physician model with support from another hospital. Consider conversion to an Urgicare rather than ED • Expand telehealth support for emergency room/ UrgiCare and specialists • Stop doing total joint replacement/repair of perforated ulcer/spinal surgery, shift birthing to other organizations except urgent/emergent deliveries • Recruit primary care providers urgently
<p>Cross-Hospital</p>	<ul style="list-style-type: none"> • Combine all back office and support functions into Northeastern Vermont Regional Hospital or the New England Collaborative Network formed with other CAH and unaligned PPS hospitals in Vermont as in Cross Hospital Recommendations • Form a consortium with Northeastern Vermont Regional Hospital or New England Collaborative Network to support a care in the home model and “Hospital At Home” through pharmacy and diagnostic provisions for eligible patients • Use consortium to provide mobile rural clinics / services in combined HSA • Strongly consider formation of a regional specialty medical group with other hospitals
<p>Community-Based</p>	<ul style="list-style-type: none"> • Collaborate with local EMS and neighbouring hospitals to develop plans to coordinate regional EMS services • Explore programs aimed at serving high risk patients e.g., PACE / SASH

Worst Case Scenarios

<p>Alternatives to Current Inpatient Design</p>	<ul style="list-style-type: none"> • Hospital closes all inpatient units • Hospital converts to Rural Emergency Hospital designation (likely not supportable in the area) • Hospital arranges routine OB services to be provided at St. Johnsbury • Operates as a subunit of NVRH to provide multi-specialty ambulatory services including ASU, free-standing diagnostic testing, infusion center
<p>HSA Reconfigurations</p>	<ul style="list-style-type: none"> • Combine Newport and St. Johnsbury HSAs

SPRINGFIELD HOSPITAL – CURRENT SITUATION

Hospital Situation

Surrounding Population¹	Springfield HSA population forecasted to decline, aged population (65+ years old) is projected as 31.7% of total HSA population by 2040
Primary Care Physicians²	Number of PCPs needed estimated as 22 primary care FTEs needed by 2040 (assuming 35 clinical hours/week and 3 visits/hour)
Emergency Department Visits^{3,4}	8,274 Total ED visits in 2022, 30.5% are avoidable (VHCURES); 12,950 Total ED Visits, 33.2% avoidable (VUHDDS); 13,191 Total ED visits in 2023 (hospital input)
Inpatient Admissions^{4,5}	622 Acute IP admissions in 2022, 17.0%* are preventable (VHCURES)
Deliveries⁶	N/A does not have OB deliveries
Low Volume Surgeries⁷	Colectomy, femoral hernia repair, lysis of adhesions, hernia procedures except inguinal and femoral, and total hip replacements

Financials

Operating Margin⁸	2023 operating margin was – 0.9%, with operating loss at \$0.6 MM
Projections⁹	FY2028 forecast assuming 5% expense growth, 7-8% expense growth: \$5.0 MN loss, 10.4 MM loss Cumulative financial support required to break even over 2024-2028: \$16.5MN-\$31.2 MM
FY 2025 Budget Request⁸	2025 budget request for GMCB is \$6.7 MM increase in commercial revenue vs. FY24 budget

Rescue Efforts

Results¹⁰	Return of patients to capacity and other service changes yield estimated improvement in finances from \$10.4MN loss to \$7.2MN loss in 2028, insufficient to return hospital margin to positive under a 7-8% expense growth scenario Current focus on recruiting surgeons and increasing orthopedic volumes from New Hampshire
-----------------------------	---

Source: 1. MPR VT Population by HSA, Oliver Wyman analysis; 2. National health statistics on PCP visits ([link](#)), MPR VT Population by HSA, Oliver Wyman analysis; 3. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis, VUHDDS data and VAHHS analysis, hospital input; 4. VHCURES IP admission counts and VHCURES avoidable percentages for EP and IP are used in subsequent financial analyses of potentially avoidable care. VHCURES ED and IP counts are likely an under-estimate due to incomplete coverage of VHCURES dataset. Please refer to VUHDDS or hospital data for accurate counts; 5. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis; 6. Vital Statistics 2022 Report, OW analysis; 7. MPR Low Volume Service Analysis using VUHDDS data, 2020 & 2021 Vermont State Vital Statistics, Hospital feedback (May 2024) , OW assumptions on low volume thresholds; 8. GMCB hospital financial records; 9. GMCB hospital financial records and Oliver Wyman analysis; 10. Oliver Wyman analysis

SPRINGFIELD OPTIONS

Initially proposed by OW (June 2024)



MUST DO

Hospital only

- Shift IP acute care and repurpose IP beds
- Stop doing Total colectomy, Femoral Hernia repair, Lysis of adhesions, hernia other than inguinal or femoral, and total hip replacements
- Increase total knee replacements



Cross-hospital *(unlikely to improve financials)*

- Execute on shared services with other hospitals
- Strongly consider formation of a regional specialty medical group with other hospitals



POSSIBILITIES/OPTIONS

Service category	Option 1: Rural Emergency Hospital (REH)	Option 2: "Community Ambulatory Care Center" (CACC)
IP	2 bed + SNF	SNF/Rehab/ Mental Health
ED	24hr ED	16hr UrgiCare
OP	Ambulatory surgery + prospective payment	Ambulatory Surgery
Diagnostic/ Pharmacy Provision	Provide free-standing diagnostic facilities and pharmacy for community and providers	

AND

- **Expand IP psychiatry beds** (adult and juvenile)
- **Joint venture ASC with Brattleboro Memorial Hospital** to enhance efficiency
- **Develop PACE program**

OPTIONS PROPOSED BY SPRINGFIELD HOSPITAL

Proposed by Springfield Hospital (June 2024)



MUST DO

Hospital only



- Obtain CMS waiver to expand mental health beds beyond 10 beds
- Grow surgery given recent recruitment of general surgeons in FY24

Cross-hospital *(unlikely to improve financials)*



- Continue and expand regional collaboration with other hospitals
- Expand affiliations or shared arrangements with local FQHCs



POSSIBILITIES/ OPTIONS

- **Continue to implement current strategy, including:**
 - Volume recapture: promote and regain appropriate volumes that has been lost during financial difficulties and/or the pandemic, as primary care services and routine, CAH-appropriate care should be available locally and offers substantial cost savings to the overall system
 - Physician Recruitment: Springfield is successfully maintaining Orthopedics and ENT while growing Podiatry, Urology, Uro/Gyn, Gynecology, General Surgery. Springfield is currently seeking a collaborative relationship to bring Cardiology back
 - Strengthen Hospital infrastructure: Continue to make needed upgrades and repairs to our plant and building
 - Medical Technology: Continue to prioritize the replacement of medical technology in our OR, Imaging, Laboratory, and other clinical areas
 - Information Technology: Initiate project to analyze and upgrade our IT infrastructure and our Electronic Medical Record.

SPRINGFIELD HOSPITAL - OW FINAL RECOMMENDATIONS

Solutions for Interim Period (2025- 2027)

Springfield Hospital	<ul style="list-style-type: none"> • Examine options for conversion of all inpatient beds to 1) mental health, 2) Geriatric Psychiatry, or 3) Memory Care • Change staffing of ED to a non-physician model with support from another hospital. Consider conversion to an Urgicare rather than ED • Stop doing Total colectomy, Femoral Hernia repair, Lysis of adhesions, hernia other than inguinal or femoral, and total hip replacements • Increase total knee replacements
Cross-Hospital	<ul style="list-style-type: none"> • Combine all back office and support functions into New England Collaborative Network formed with other CAH and unaligned PPS hospitals in Vermont as in Cross Hospital Recommendations • Form a consortium with Grace Cottage and Brattleboro Memorial Hospital to support a care in the home model and “Hospital At Home” through pharmacy and diagnostic provisions for eligible patients; explore models for expanding telehealth / remote monitoring • Use consortium to provide mobile rural clinics/ services in combined HSA • Continue and expand regional collaboration with other hospitals
Community-Based	<ul style="list-style-type: none"> • Collaborate with local EMS and neighboring hospitals to develop plans to coordinate regional EMS services • If empty buildings in Springfield can be converted to low income or group housing, link with SASH program or PACE to provide support • Expand affiliations or shared arrangements with local FQHCs




Worst Case Scenarios

Alternatives to Current Inpatient Design	<ul style="list-style-type: none"> • Hospital closes all inpatient units • Hospital converts to Rural Emergency Hospital designation (likely not supportable in the area) • Operates as a subunit of BMH to provide multi-specialty ambulatory services including ASU and free-standing diagnostic testing
HSA Reconfigurations	<ul style="list-style-type: none"> • Combine Brattleboro and Springfield HSAs

06.2

**RECOMMENDATIONS FOR HOSPITALS REQUIRING
CHANGES TO EXISTING SERVICE LINES**

HOSPITAL RECOMMENDATIONS

Category	Description	Rationale	Hospital List	
	Major Restructuring Needed	<i>Unlikely to financially sustain inpatient operations given population dynamics</i>	<ul style="list-style-type: none"> Minimal growth potential and poor financial position requiring significant subsidization to improve Aging physical plant needing upkeep / replacement Low procedure / admission volumes due to shrinking / insufficient populations, care sought outside HSA Nearby facility available to care for inpatients* 	<ul style="list-style-type: none"> Gifford Medical Center Grace Cottage Hospital North Country Hospital Springfield Hospital
	Changes to Existing Service Lines	<p><i>Potential to grow through inpatient transfers from other facilities</i></p> <p><i>And / Or</i></p> <p><i>Potential to grow ambulatory surgery volume</i></p>	<ul style="list-style-type: none"> Financial trends show potential for improvement through targeted cost management programs and / or service line reconfiguration Existing procedure volumes and projected population needs are sufficient to support certain specialties 	<p>Potential to become a regional specialty center:</p> <ul style="list-style-type: none"> Brattleboro Memorial Hospital Copley Hospital Northeastern Vermont Regional Hospital Northwestern Medical Center Rutland Regional Medical Center <p>Regionalization plans and service line strategy will be driven by parent system's service priorities:</p> <p><u>Dartmouth Health</u>: Mt. Ascutney Hospital and Health Center, Southwestern Vermont Medical Center</p> <p><u>UVM Health Network</u>: Central Vermont Medical Center, Porter Medical Center</p>
	Significant Cost Reductions	<p><i>Significant driver of state-wide healthcare costs (>55% of VT's total hospital commercial spend)</i></p>	<ul style="list-style-type: none"> Total administrative costs significantly exceed academic medical center benchmarks Current spend drives a significant portion of Vermont's state commercial expenses 	<ul style="list-style-type: none"> UVMMC

BRATTLEBORO MEMORIAL HOSPITAL – CURRENT SITUATION

Hospital Situation

Surrounding Population¹	Brattleboro HSA population forecasted to decline, aged population (65+ years old) is projected as 39.7% of total HSA population by 2040
Primary Care Physicians²	Number of PCPs needed estimated as 28 primary care FTEs needed by 2040 (assuming 35 clinical hours/week and 3 visits/hour)
Emergency Department Visits^{3,4}	7,540 Total ED visits in 2022, 29.4% are avoidable (VHCURES); 13,441 Total ED Visits, 33.7% avoidable (VUHDDS)
Inpatient Admissions^{4,5}	1,079 Acute IP admissions in 2022, 15.0% are preventable (VHCURES)
Deliveries⁶	Sufficient volume of OB deliveries (271 in 2022)
Low Volume Surgeries⁷	Colectomy, femoral hernia repair, and necrotizing soft tissue infection

Financials

Operating Margin⁸	2023 operating margin was – 1.7%, with operating loss at \$1.9 MM
Projections⁹	FY2028 forecast assuming 5% expense growth, 7-8% expense growth: \$12.4 MN loss, 29.8 MM loss Cumulative financial support required to break even over 2024-2028: \$40.6MN-\$89 MM
FY 2025 Budget Request⁸	2025 budget request for GMCB is \$6.8 MM increase in commercial revenue vs. FY24 budget

Rescue Efforts

Results¹⁰	Return of patients to capacity and other service changes yield estimated improvement in finances from \$29.8MN loss to \$29.1MN loss in 2028, insufficient to return hospital margin to positive under a 7-8% expense growth scenario Current focus on primary care including transitioning primary care physicians to FQHCs and expanding same day care in primary care clinics
-----------------------------	---

Source: 1. MPR VT Population by HSA, Oliver Wyman analysis; 2. National health statistics on PCP visits ([link](#)), MPR VT Population by HSA, Oliver Wyman analysis; 3. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis, VUHDDS data and VAHHS analysis; 4. VHCURES IP admission counts and VHCURES avoidable percentages for EP and IP are used in subsequent financial analyses of potentially avoidable care. VHCURES ED and IP counts are likely an under-estimate due to incomplete coverage of VHCURES dataset. Please refer to VUHDDS or hospital data for accurate counts; 5. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis; 6. Vital Statistics 2022 Report, OW analysis; 7. MPR Low Volume Service Analysis using VUHDDS data, 2020 & 2021 Vermont State Vital Statistics, Hospital feedback (May 2024) , OW assumptions on low volume thresholds; 8. GMCB hospital financial records; 9. GMCB hospital financial records and Oliver Wyman analysis; 10. Oliver Wyman analysis

BRATTLEBORO MEMORIAL HOSPITAL OPTIONS

Initially proposed by OW + hospital feedback (June 2024)



RESULTS OF ANALYSIS

Hospital only

- Add IP dialysis
- Grow OB/GYN practices
- Consider growing orthopedics practices/add spine surgery (i.e., regional center for orthopedics)
- Grow general surgery (regional center for acute general surgery?)
- Strengthen relationship with Brattleboro EMS (ongoing relationship with Golden Cross EMS)



Cross-hospital *(unlikely to improve financials)*

- Execute on shared services with other hospitals
- Strongly consider formation of a regional specialty medical group with other hospitals
- Expand telehealth support for emergency room/ UrgiCare and specialists



POSSIBILITIES/ OPTIONS

- **Establish PACE program**
- **Obtain transfer arrangements with other referring hospitals** (e.g., Dartmouth/UVM/Springfield Massachusetts)
- **Open small 2-4 bed ICUs** with Telehealth support
- **Develop rural outreach programs** for primary care and preventative services
- **Provide pharmacy services to community** through primary care sites with 5+ providers

Additional Hospital Bright-spots and ongoing initiatives:

- BMH employs most of the PCPs in its area at the moment, but is currently working with an FQHC to transition them into FQHC arrangements (will help save ~\$1mill costs)
- Shared services work with hospitals ongoing (~\$1mill)
- Moving to different GPO to create larger saving in med-surg beds
- Exploring retail pharmacy (Looking to learn from Rutland)
- Creating staffing to demand program to enhance staffing ratio and try to float people more effectively
- Implementing AI support to reduce admin burden
- Most socially responsible hospital in Vermont, including overall and fair share surplus (tax alleviation)
- As part of 2025 budget process, adding/planning to add podiatry and cardiology in response to aging patient needs
- Movement towards same-day urgent care/same day care in primary clinic

BRATTLEBORO MEMORIAL HOSPITAL- OW FINAL RECOMMENDATIONS

Solutions for Interim Period (2025- 2027)

Brattleboro Memorial Hospital	<ul style="list-style-type: none"> • Implement cost reduction initiatives to operate at break even for Medicare payment levels
Cross-Hospital	<ul style="list-style-type: none"> • Form a consortium with Grace Cottage and Springfield Hospital to support a care in the home model and “Hospital At Home” for eligible patients; expand telehealth services and collaborate with other organizations to develop “hospital at home” model • Use consortium to provide mobile rural clinics/services in combined HAS • Strongly consider formation of a regional specialty medical group with other hospitals
Community-Based	<ul style="list-style-type: none"> • If low income or group housing can be built, link with SASH program or PACE to provide support • Strengthen relationship with Brattleboro EMS (ongoing relationship with Golden Cross EMS)

Solutions for Long-Term Period (2028+)

Brattleboro Memorial Hospital	<ul style="list-style-type: none"> • Examine options for growing inpatient beds to provide service for complex psych and other patients synergistic with Brattleboro Retreat • Add IP dialysis • Grow OB/GYN practices • Consider growing orthopedics practices/add spine surgery (i.e., regional center for orthopedics) • Grow general surgery (regional center for acute general surgery)
--------------------------------------	---

Other Considerations

HSA Reconfigurations	<ul style="list-style-type: none"> • Extend HSA north to incorporate part of southern part of White River Junction HAS and add Springfield HSA
-----------------------------	---

COPLEY HOSPITAL – CURRENT SITUATION

Hospital Situation

Surrounding Population¹	Morrisville HSA population forecasted to decline, aged population (65+ years old) is projected as 31.2% of total HSA population by 2040
Primary Care Physicians²	Number of PCPs needed estimated as 20 primary care FTEs needed by 2040 (assuming 35 clinical hours/week and 3 visits/hour)
Emergency Department Visits^{3,4}	8,783 Total ED visits in 2022, 32.8% are avoidable (VHCURES); 13,242 Total ED Visits, 35.6% avoidable (VUHDDS)
Inpatient Admissions^{4,5}	1,037 Acute IP admissions in 2022, 21.7% are preventable (VHCURES)
Deliveries⁶	Low volume of OB deliveries (194 in 2022)
Low Volume Surgeries⁷	Colectomy, lysis of adhesions, necrotizing soft tissue infection, repair of perforated peptic ulcer, and hernia procedures except inguinal and femoral

Financials

Operating Margin⁸	2023 operating margin was – 1.8%, with operating loss at \$1.7 MM
Projections⁹	FY2028 forecast assuming 5% expense growth, 7-8% expense growth: \$7.0 MN loss, \$16.5 MN loss Cumulative financial support required to break even over 2024-2028: \$23.6 MN-\$49.5 MN
FY 2025 Budget Request⁸	2025 budget request for GMCB is \$6.9 MM increase in commercial revenue vs. FY24 budget

Rescue Efforts

Results¹⁰	Return of patients to capacity and other service changes yield estimated change in finances from \$16.5MN loss to \$17.7MN loss in 2028, insufficient to return hospital margin to positive under a 7-8% expense growth scenario, substantiating the need for other cost containment initiatives
-----------------------------	--

Source: 1. MPR VT Population by HSA, Oliver Wyman analysis; 2. National health statistics on PCP visits ([link](#)), MPR VT Population by HSA, Oliver Wyman analysis; 3. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis, VUHDDS data and VAHHS analysis; 4. VHCURES IP admission counts and VHCURES avoidable percentages for EP and IP are used in subsequent financial analyses of potentially avoidable care. VHCURES ED and IP counts are likely an under-estimate due to incomplete coverage of VHCURES dataset. Please refer to VUHDDS or hospital data for accurate counts; 5. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis; 6. Vital Statistics 2022 Report, OW analysis; 7. MPR Low Volume Service Analysis using VUHDDS data, 2020 & 2021 Vermont State Vital Statistics, Hospital feedback (May 2024), OW assumptions on low volume thresholds; 8. GMCB hospital financial records; 9. GMCB hospital financial records and Oliver Wyman analysis; 10. Oliver Wyman analysis

COPLEY HOSPITAL OPTIONS

Initially proposed by OW + hospital feedback (June 2024)



RESULTS OF ANALYSIS

Hospital only

- Grow or shift birthing to other organizations
- Stop doing colectomy and other low volume procedures
- Become regional referral center for orthopedics (note: Gifford and North Country are currently doing low volumes and have patients they can transfer out)



Cross-hospital *(unlikely to improve financials)*

- Execute on shared services with other hospitals
- Expand telehealth support for emergency room and specialists
- Strongly consider formation of a regional specialty medical group with other hospitals



POSSIBILITIES/OPTIONS

Service category	Option 1: Maintain IP and grow volume with transfer agreements
IP	IP acute care beds
ED	24hr ED
OP	Ambulatory Surgery
Diagnostic/ Pharmacy Provision	Hospital-based diagnostic / pharmacy provision



- **Develop PACE program**

COPLEY HOSPITAL - OW FINAL RECOMMENDATIONS

Solutions for Interim Period (2025- 2027)

Copley Hospital	<ul style="list-style-type: none"> • Change staffing of ED to a non-physician model with support from another hospital. Consider conversion to an Urgicare rather than ED • Stop doing colectomy and other low volume procedures • Become regional specialty center for orthopedics (e.g., receive patient volumes from Gifford and North Country) • Expand telehealth support for emergency room and specialists
Cross-Hospital	<ul style="list-style-type: none"> • Combine all back office and support functions into New England Collaborative Network with other CAH and unaligned PPS hospitals in Vermont as in Cross Hospital Recommendations • Form a consortium with Rutland, CVMC or NVRH to provide care at home and "hospital at home" services; expand telehealth services and collaborate with other organizations to develop "hospital at home" model • Use consortium to provide mobile rural clinics/ services in combined HSA • Strongly consider formation of a regional specialty medical group with other hospitals
Community-Based	<ul style="list-style-type: none"> • Provide support and link programs aimed at serving high risk patients e.g., PACE / SASH • Collaborate with local EMS and neighboring hospitals to develop plans to coordinate regional EMS services

Solutions for Long-Term Period (2028+)

Copley Hospital	<ul style="list-style-type: none"> • Examine option to grow Orthopedics and other surgical specialties • Grow or shift birthing to other organizations
------------------------	--

Worst Case Scenarios

Alternatives to Current Inpatient Design	<ul style="list-style-type: none"> • Convert to Rural Emergency Hospital designation, repurpose inpatient beds to mental health, geriatric psychiatry, memory care, skilled nursing • Operate as free-standing ASU / birthing center with diagnostic capability
---	---

NORTHEASTERN VERMONT REGIONAL HOSPITAL – CURRENT SITUATION

Hospital Situation

Surrounding Population¹	St. Johnsbury HSA population forecasted to decline, aged population (65+ years old) is projected as 29.1% of total HSA population by 2040
Primary Care Physicians²	Number of PCPs needed estimated as 22 primary care FTEs needed by 2040 (assuming 35 clinical hours/week and 3 visits/hour)
Emergency Department Visits^{3,4}	9,128 Total ED visits in 2022, 32.7% are avoidable (VHCURES); 12,901 Total ED Visits, 34.8% avoidable (VUHDDS); 9.6% avoidable ED in 2022 (hospital input)
Inpatient Admissions^{4,5}	1,095 acute IP admissions in 2022, 20.0% are preventable (VHCURES)
Deliveries⁶	Insufficient volume of OB deliveries (194 in 2022)
Low Volume Surgeries⁷	Colectomy, femoral hernia repair, lysis of adhesions, repair of perforated peptic ulcer, and hernia procedures except inguinal and femoral

Financials

Operating Margin⁸	2023 operating margin was 0.5%, with operating gain at \$0.6 MM, FY2023 budget overage was \$2.1M
Projections⁹	FY2028 forecast assuming 5% expense growth, 7-8% expense growth: \$5.2 MN loss, 19.2 MM loss Cumulative financial support required to break even over 2024-2028: \$13.3MN-\$51.7 MM
FY 2025 Budget Request⁸	2025 budget request for GMCB is \$2.1 MM increase in commercial revenue vs. FY24 budget

Rescue Efforts

Results¹⁰	Return of patients to capacity and other service changes yield estimated change in finances from \$19.2MN loss to \$20.6MN loss in 2028, insufficient to return hospital margin to positive under a 7-8% expense growth scenario; substantiating the need for other cost containment initiatives. Current focus on expanding telehealth services
-----------------------------	--

Source: 1. MPR VT Population by HSA, Oliver Wyman analysis; 2. National health statistics on PCP visits ([link](#)), MPR VT Population by HSA, Oliver Wyman analysis; 3. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis, VUHDDS data and VAHHS analysis, hospital analysis using Blueprint codes for avoidable ED visits; 4. VHCURES IP admission counts, VHCURES avoidable percentages for EP and IP, and hospital input of avoidable ED percentage are used in subsequent financial analyses of potentially avoidable care. VHCURES ED and IP counts are likely an under-estimate due to incomplete coverage of VHCURES dataset. Please refer to VUHDDS or hospital data for accurate counts; 5. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis; 6. Vital Statistics 2022 Report, OW analysis; 7. MPR Low Volume Service Analysis using VUHDDS data, 2020 & 2021 Vermont State Vital Statistics, Hospital feedback (May 2024) , OW assumptions on low volume thresholds; 8. GMCB hospital financial records; 9. GMCB hospital financial records and Oliver Wyman analysis; 10. Oliver Wyman analysis

NORTHEASTERN VERMONT REGIONAL HOSPITAL OPTIONS

Initially proposed by OW + hospital feedback (June 2024)



RESULTS OF ANALYSIS

Hospital only

- Stop or grow colectomy
- Stop doing femoral hernia repair, lysis of adhesions, perforated ulcers and other hernia
- Grow OB or shift to other organizations



Cross-hospital *(unlikely to improve financials)*

- Execute on shared services with other hospitals
- Strongly consider formation of a regional specialty medical group with other hospitals
- Expand telehealth support for emergency room/ UrgiCare and specialists



POSSIBILITIES/ OPTIONS

Possibilities

- **Develop joint venture** free-standing birthing unit with North Country hospital and/or Gifford Medical Center
- **Add PACE program** (pending population needs)
- **Develop rural outreach** programs for primary care and preventative services
- **Provide pharmacy services to community** through primary care sites with 5+ providers - *ongoing*
- **Expand** infusion center with telehealth support
- **Expand home dialysis program**

Already ongoing efforts

- **Increase capacity** for cardiology (non-invasive) and surgical sub-specialties - *ongoing*
- **Add** additional telehealth specialty consultations with referral centers - *ongoing*
- **SASH program** targeted at high needs groups/individuals – *ongoing*

NORTHEASTERN VERMONT REGIONAL HOSPITAL- OW FINAL RECOMMENDATIONS

Solutions for Interim Period (2025- 2027)

<p>Northeastern Vermont Regional Hospital</p>	<ul style="list-style-type: none"> • Stop performing femoral hernia repair, lysis of adhesions, perforated ulcers and other hernia procedures • Stop or grow colectomy • Expand telehealth support for emergency room/ UrgiCare and specialists
<p>Cross-Hospital</p>	<ul style="list-style-type: none"> • Combine all back office and support functions into New England Collaborative Network with other CAH and unaligned PPS hospitals in Vermont as in Cross Hospital • Form a consortium with North Country Hospital and Gifford to support a care in the home model and “Hospital At Home” for eligible patients; expand telehealth services and collaborate with other organizations to develop “hospital at home” model • Use consortium to provide mobile rural clinics / services in combined HSA • Strongly consider formation of a regional specialty medical group with other hospitals
<p>Community-Based</p>	<ul style="list-style-type: none"> • Expand mobile health clinic to Newport HSA • Collaborate with local EMS and neighboring hospitals to develop plans to coordinate regional EMS services • Explore programs aimed at serving high risk patients e.g., PACE / SASH

Solutions for Long-Term Period (2028+)

<p>Northeastern Vermont Regional Hospital</p>	<ul style="list-style-type: none"> • Start inpatient dialysis unit if / when Newport closes inpatient operations • Grow OB or shift to other organizations (e.g., OB services from Newport or northern part of White River Junction HAS) • Consider growing surgical services
--	--

Other Considerations

<p>HSA Reconfigurations</p>	<ul style="list-style-type: none"> • Combine St. Johnsbury and Newport HSAs, extend HSA south to incorporate part of northern part of White River Junction HSA
------------------------------------	---

NORTHWESTERN MEDICAL CENTER – CURRENT SITUATION

Hospital Situation

Surrounding Population¹	St. Albans HSA population forecasted to decline, aged population (65+ years old) is projected as 31.0% of total HSA population by 2040
Primary Care Physicians²	Number of PCPs needed estimated as 36 primary care FTEs needed by 2040 (assuming 35 clinical hours/week and 3 visits/hour)
Emergency Department Visits^{3,4}	15,719 Total ED visits in 2022, 32.7% are avoidable (VHCURES); 22,903 Total ED Visits, 37.9% avoidable (VUHDDS)
Inpatient Admissions^{4,5}	1,886 acute IP admissions in 2022, 22.7% are preventable (VHCURES)
Deliveries⁶	Sufficient volume of OB deliveries (329 in 2022)
Low Volume Surgeries⁷	Femoral hernia repair and lysis of adhesions

Financials

Operating Margin⁸	2023 operating margin was -6.6%, with operating loss of \$8.2 MM
Projections⁹	FY2028 forecast assuming 5% expense growth, 7-8% expense growth: \$20.9 MN loss, 44.4 MM loss Cumulative financial support required to break even over 2024-2028: \$77MN-\$142 MM
FY 2025 Budget Request⁸	2025 budget request for GMCB is \$10.9 MM increase in commercial revenue vs. FY24 budget

Rescue Efforts

Results¹⁰	Return of patients to capacity and other service changes yield estimated improvement in finances from \$44.4MN loss to \$40.3MN loss in 2028, insufficient to return hospital margin to positive under a 7-8% expense growth scenario Current focus on expanding geriatric psychiatric inpatient units (pending response from AHS secretary)
-----------------------------	---

Source: 1. MPR VT Population by HSA, Oliver Wyman analysis; 2. National health statistics on PCP visits ([link](#)), MPR VT Population by HSA, Oliver Wyman analysis; 3. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis, VUHDDS data and VAHHS analysis; 4. VHCURES IP admission counts and VHCURES avoidable percentages for EP and IP are used in subsequent financial analyses of potentially avoidable care. VHCURES ED and IP counts are likely an under-estimate due to incomplete coverage of VHCURES dataset. Please refer to VUHDDS or hospital data for accurate counts; 5. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis; 6. Vital Statistics 2022 Report, OW analysis; 7. MPR Low Volume Service Analysis using VUHDDS data, 2020 & 2021 Vermont State Vital Statistics, Hospital feedback (May 2024), OW assumptions on low volume thresholds; 8. GMCB hospital financial records; 9. GMCB hospital financial records and Oliver Wyman analysis; 10. Oliver Wyman analysis

NORTHWESTERN MEDICAL CENTER OPTIONS

Initially proposed by OW + hospital feedback (June 2024)



RESULTS OF ANALYSIS

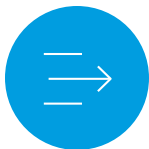
Hospital only

- Grow colectomy where possible
- Grow or stop femoral hernia repair/lysis of adhesions
- Grow OB volume – *in progress*
- Establish robust breast/prostate cancer care – *in progress*
- Open ICU beds
- Grow cardiology (except interventional) – *in progress*



Cross-hospital *(unlikely to improve financials)*

- Execute on shared services with other hospitals
- Strongly consider formation of a regional specialty medical group with other hospitals
- Expand telehealth support for emergency room/ UrgiCare and specialists



POSSIBILITIES/ OPTIONS

- Establish PACE program
- Consider free-standing diagnostic facility
- Develop rural outreach programs for primary care and preventative services

In June'24, NMC has requested to create an **inpatient unit specializing in geriatric psychiatry** and is awaiting response from the Secretary of AHS.

NORTHWESTERN MEDICAL CENTER - OW FINAL RECOMMENDATIONS

Solutions for Interim Period (2025- 2027)

Northwestern Medical Center	<ul style="list-style-type: none"> • Implement cost reduction initiatives to operate at break even for Medicare payment levels • Grow colectomy where possible • Grow or stop femoral hernia repair/lysis of adhesions • Expand telehealth support for emergency room/ UrgiCare and specialists • Implement Geriatric Psychiatry
Cross-Hospital	<ul style="list-style-type: none"> • Combine all back office and support functions into New England Collaborative Network with other CAH and unaligned PPS hospitals in Vermont as in Cross Hospital • Use consortium to provide mobile rural clinics / services in combined HSA • Strongly consider formation of a regional specialty medical group with other hospitals
Community-Based	<ul style="list-style-type: none"> • Collaborate with local EMS and neighboring hospitals to develop plans to coordinate regional EMS services • Explore programs aimed at serving high risk patients e.g., PACE / SASH

Solutions for Long-Term Period (2028+)

Northwestern Medical Center	<ul style="list-style-type: none"> • Grow OB volume – in progress • Open ICU beds • Grow cardiology (except interventional) • Establish robust breast/prostate cancer care – in progress • Expand services into northern Chittenden County
------------------------------------	---

RUTLAND REGIONAL MEDICAL CENTER – CURRENT SITUATION

Hospital Situation

Surrounding Population¹	Rutland HSA population forecasted to decline, aged population (65+ years old) is projected as 36.4% of total HSA population by 2040
Primary Care Physicians²	Number of PCPs needed estimated as 49 primary care FTEs needed by 2040 (assuming 35 clinical hours/week and 3 visits/hour)
Emergency Department Visits^{3,4}	18,216 Total ED visits in 2022, 28.4% are avoidable (VHCURES); 31,018 Total ED Visits, 30.7% avoidable (VUHDDS)
Inpatient Admissions^{4,5}	4,488 acute IP admissions in 2022, 16.5% are preventable (VHCURES); 8.4% avoidable IP stays in 2024 (hospital input)
Deliveries⁶	Sufficient volume of OB deliveries (356 in 2022)
Low Volume Surgeries⁷	Femoral hernia repair, lysis of adhesions, and repair of perforated peptic ulcer

Financials

Operating Margin⁸	2023 operating margin was 2.1%, with operating gain of \$7.4 MM, FY2023 budget overage was \$12.4M
Projections⁹	FY2028 forecast assuming 5% expense growth, 7-8% expense growth: \$20.6 MN loss, 79.9 MM loss Cumulative financial support required to break even over 2024-2028: \$44MN-\$206 MM
FY 2025 Budget Request⁸	2025 budget request for GMCB is \$10.0 MM increase in commercial revenue vs. FY24 budget

Rescue Efforts

Results¹⁰	Return of patients to capacity and other service changes yield estimated an improvement in finances from \$79.9MN loss to \$66.0MN loss in 2028, insufficient to return hospital margin to positive under a 7-8% expense growth scenario
-----------------------------	--

Source: 1. MPR VT Population by HSA, Oliver Wyman analysis; 2. National health statistics on PCP visits ([link](#)), MPR VT Population by HSA, Oliver Wyman analysis; 3. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis, VUHDDS data and VAHHS analysis; 4. VHCURES IP admission counts, VHCURES avoidable percentages for EP and IP, and hospital analysis of avoidable IP percentage are used in subsequent financial analyses of potentially avoidable care. However, RRMCM feedback noted that they do not receive reimbursement for avoidable patients, hence only variable cost implications was include. VHCURES ED and IP counts are likely an under-estimate due to incomplete coverage of VHCURES dataset. Please refer to VUHDDS or hospital data for accurate counts; 5. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis, hospital input; 6. Vital Statistics 2022 Report, OW analysis; 7. MPR Low Volume Service Analysis using VUHDDS data, 2020 & 2021 Vermont State Vital Statistics, Hospital feedback (May 2024), OW assumptions on low volume thresholds; 8. GMCB hospital financial records; 9. GMCB hospital financial records and Oliver Wyman analysis; 10. Oliver Wyman analysis

RUTLAND REGIONAL MEDICAL CENTER OPTIONS

Initially proposed by OW + hospital feedback (June 2024)



RESULTS OF ANALYSIS

Hospital only

- Grow or stop lysis of adhesions, femoral hernia repair, and repair of perforated peptic ulcer
- Tighten relationship with Rutland EMS and regionalize EMS transfer services



Cross-hospital *(unlikely to improve financials)*

- Execute on shared services with other hospitals
- Strongly consider formation of a regional specialty medical group with other hospitals
- Expand telehealth support for emergency room / UrgiCare and specialists



POSSIBILITIES/ OPTIONS

- Expand orthopaedics spine surgery procedures
- Include invasive cardiology (Dx + PTCA)
- Expand ICU beds with telehealth support
- Arrange for UVM to return patients (transfer protocols)
- Add IP dialysis

RUTLAND REGIONAL MEDICAL CENTER - OW FINAL RECOMMENDATIONS

Solutions for Interim Period (2025- 2027)

Rutland Regional Medical Center	<ul style="list-style-type: none"> • Implement cost reduction initiatives to operate at break even for Medicare payment levels • Evaluate need for expanded cancer services • Grow or stop lysis of adhesions, femoral hernia repair, and repair of perforated peptic ulcer • Expand telehealth support for emergency room / UrgiCare and specialists
Cross-Hospital	<ul style="list-style-type: none"> • Combine all back office and support functions into New England Collaborative Network formed with other CAH and unaligned PPS hospitals in Vermont as in Cross Hospital Recommendations • Use consortium with Gifford to provide mobile rural clinics/ services in combined HSA • Strongly consider formation of a regional specialty medical group with other hospitals
Community-Based	<ul style="list-style-type: none"> • Tighten relationship with Rutland EMS and regionalize EMS transfer services • Explore programs aimed at serving high risk patients e.g., PACE / SASH

Solutions for Long-Term Period (2028+)

Rutland Regional Medical Center	<ul style="list-style-type: none"> • Consider status as Level II Trauma Center • Develop capacity for increased OB volume from Gifford HSA • Consider development of an Emergency General Surgery center (to be discussed with St Johnsbury HSA) • Consider establishing a Center for Robotic Surgery
--	---

MT ASCUTNEY HOSPITAL AND HEALTH CENTER – CURRENT SITUATION



Hospital Situation

Surrounding Population¹	White River Junction HSA population forecasted to decline, aged population (65+ years old) is projected as 39.8% of total HSA population by 2040
Primary Care Physicians²	Number of PCPs needed estimated as 43 primary care FTEs needed by 2040 (assuming 35 clinical hours/week and 3 visits/hour)
Emergency Department Visits^{3,4}	3,666 Total ED visits in 2022, 36.1% are avoidable (VHCURES); 6,089 Total ED Visits, 37.7% avoidable (VUHDDS)
Inpatient Admissions^{4,5}	142 acute IP admissions in 2022, 27.5% are preventable (VHCURES); 325 acute IP admissions in 2022 (hospital input)
Deliveries⁶	N/A does not have OB deliveries
Low Volume Surgeries⁷	Colectomy and small bowel resections

Financials

Operating Margin⁸	2023 operating margin was 2.0%, with operating gain of \$1.4 MM
Projections⁹	FY2028 forecast assuming 5% expense growth, 7-8% expense growth: \$1.4 MN loss, 8.2 MM loss Cumulative financial support required to break even over 2024-2028: \$1.0MN-\$19.5 MM
FY 2025 Budget Request⁸	2025 budget request for GMCB is \$1.9 MM increase in commercial revenue vs. FY24 budget

Rescue Efforts

Results¹⁰	Return of patients to capacity and other service changes yield estimated an improvement in finances from \$8.2MN loss to \$4.6MN loss in 2028, insufficient to return hospital margin to positive under a 7-8% expense growth scenario
-----------------------------	--

Source: 1. MPR VT Population by HSA, Oliver Wyman analysis; 2. National health statistics on PCP visits ([link](#)), MPR VT Population by HSA, Oliver Wyman analysis; 3. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis, VUHDDS data and VAHHS analysis; 4. Hospital input of IP admission counts and VHCURES avoidable percentages for EP and IP are used in subsequent financial analyses of potentially avoidable care. VHCURES ED and IP counts are likely an under-estimate due to incomplete coverage of VHCURES dataset. Please refer to VUHDDS or hospital data for accurate counts; 5. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis, hospital input; 6. Vital Statistics 2022 Report, OW analysis; 7.MPR Low Volume Service Analysis using VUHDDS data, 2020 & 2021 Vermont State Vital Statistics, Hospital feedback (May 2024) , OW assumptions on low volume thresholds; 8. GMCB hospital financial records; 9. GMCB hospital financial records and Oliver Wyman analysis; 10. Oliver Wyman analysis

MT ASCUTNEY HOSPITAL AND HEALTH CENTER OPTIONS

Initially proposed by OW + hospital feedback (June 2024)



RESULTS FROM ANALYSIS

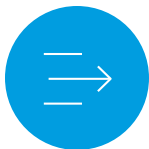
Hospital only

- Stop or grow colectomy and small bowel resection
- Continue to expand ambulatory surgery services
- Consider converting emergency room to UrgiCare center or look to expand based on shifted services
- Align regional EMS services to hospital



Cross-hospital *(unlikely to improve financials)*

- Proceed with EPIC integration
- Participate in cross-hospital state-level conversations to regionalize care



POSSIBILITIES/OPTIONS

- Consider conversion of status to rehab and ASU only
- Develop PACE program
- Expand rehab facilities
- Consider REH designation (may be difficult given regulatory requirements)

Note:

- Currently part of the DHMC system
- Cross-hospital efforts ongoing
- Future actions depend on DHMC-level coordination and decisions

MT ASCUTNEY HOSPITAL AND HEALTH CENTER - OW FINAL RECOMMENDATIONS



Solutions for Interim Period (2025- 2027)

Mount Ascutney Hospital and Health Center	<ul style="list-style-type: none"> • Change staffing of ED to a non-physician model with support from another hospital • Consider converting emergency room to UrgiCare center or look to expand based on shifted services • Expand telehealth services to increase access to care • Stop or grow colectomy and small bowel resection • Proceed with EPIC integration
Cross-Hospital	<ul style="list-style-type: none"> • Combine all back office and support functions into Dartmouth Health’s system • Use consortium to provide mobile rural clinics / services in combined HSA • Participate in cross-hospital state-level conversations to regionalize care
Community-Based	<ul style="list-style-type: none"> • Collaborate with local EMS and neighboring hospitals to develop plans to coordinate regional EMS services • Explore programs aimed at serving high risk patients e.g., PACE / SASH

Solutions for Long-Term Period (2028+)

Mount Ascutney Hospital and Health Center	<ul style="list-style-type: none"> • Continue to expand ambulatory surgery services • Grow rehab unit beyond CAH limits
--	---

Worst Case Scenarios

Alternatives to Current Inpatient Design	<ul style="list-style-type: none"> • Future to be determined by Dartmouth Health
---	---

SOUTHWESTERN VERMONT MEDICAL CENTER – CURRENT SITUATION



Hospital Situation

Surrounding Population¹	Bennington HSA population forecasted to decline, aged population (65+ years old) is projected as 27.7% of total HSA population by 2040
Primary Care Physicians²	Number of PCPs needed estimated as 28 primary care FTEs needed by 2040 (assuming 35 clinical hours/week and 3 visits/hour)
Emergency Department Visits^{3,4}	10,787 Total ED visits in 2022, 25.4% are avoidable (VHCURES); 22,272 Total ED Visits, 30.7% avoidable (VUHDDS); 2.2% avoidable ED visits with ESI level 5 (hospital input)
Inpatient Admissions^{4,5}	1,653 acute IP admissions in 2022, 19.6% are preventable (VHCURES)
Deliveries⁶	Sufficient volume of OB deliveries (391 in 2022)
Low Volume Surgeries⁷	Femoral hernia repair, repair of perforated peptic ulcer, and bariatric surgery

Financials

Operating Margin⁸	2023 operating margin was -3.8%, with an operating loss of \$7.4 MM
Projections⁹	FY2028 forecast assuming 5% expense growth, 7-8% expense growth: \$24.5 MN loss, 58.0 MM loss Cumulative financial support required to break even over 2024-2028: \$83.0MN-\$175 MM
FY 2025 Budget Request⁸	2025 budget request for GMCB is \$6.6 MM increase in commercial revenue vs. FY24 budget

Rescue Efforts

Results¹⁰	Return of patients to capacity and other service changes yield estimated an improvement in finances from \$58.0MN loss to \$57.0MN loss in 2028, insufficient to return hospital margin to positive under a 7-8% expense growth scenario. Current focus on growing capability to treat alcohol use disorder and continuing to expand community partnerships with organizations to care for alcohol use disorder
-----------------------------	--

Source: 1. MPR VT Population by HSA, Oliver Wyman analysis; 2. National health statistics on PCP visits ([link](#)), MPR VT Population by HSA, Oliver Wyman analysis; 3. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis, VUHDDS data and VAHHS analysis, hospital input; 4. Hospital input of avoidable ED percentage (ESI level 5 only), VHCURES IP counts and VHCURES avoidable percentages for EP and IP are used in subsequent financial analyses of potentially avoidable care. VHCURES ED and IP counts are likely an under-estimate due to incomplete coverage of VHCURES dataset. Please refer to VUHDDS or hospital data for accurate counts; 5. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis; 6. Vital Statistics 2022 Report, OW analysis; 7. MPR Low Volume Service Analysis using VUHDDS data, 2020 & 2021 Vermont State Vital Statistics, Hospital feedback (May 2024) , OW assumptions on low volume thresholds; 8. GMCB hospital financial records; 9. GMCB hospital financial records and Oliver Wyman analysis; 10. Oliver Wyman analysis

SOUTHWESTERN VERMONT MEDICAL CENTER OPTIONS

Initially proposed by OW + hospital feedback (June 2024)



RESULTS OF ANALYSIS

Hospital only



- Expand relationship with community health service agencies
- Develop housing options for new staff
- Add inpatient dialysis capability
- Grow or stop femoral hernia repair and repair of perforated peptic ulcer; Stop bariatric surgery
- Open ICU bed capacity with Dartmouth support
- Improve access to primary care by further embedding EMR and facilitating team-based collaboration to re-direct standard work from physician to others

Cross-hospital *(unlikely to improve financials)*



- Proceed with EPIC integration
- Expand specialty medical staff in co-operation with Dartmouth
- Work with other hospitals to develop mobile rural health services



POSSIBILITIES/OPTIONS

- **Expand mental health capacity** (note: 14 bed adolescent unit has CON submitted)
- **Consider establishing geriatric psychiatry facility / memory care facility**
- **Consider establishing cardiac labs with interventional capability**
- **Expand cancer care options**
- **Establish PACE program**

Notes:

- Cross-hospital efforts ongoing as part of DHMC system
- Future actions depend on DHMC-level coordination and decisions

Some ongoing efforts include:

- Buildout of bariatric surgery program with DHMC with aim to become COE
- Partnership with DHMC to migrate vascular services back to SVMC through Heart and Vascular Program
- Alcohol Use Disorder (AUD) Inpatient Detoxification need identified in community health needs has resulted in goal to grow capability and knowledge, with eventual aim for designated unit with specially trained staff. SVMC has also been partnering with community-based organizations to create a coordinated continuum of care for AUD

SOUTHWESTERN VERMONT MEDICAL CENTER - OW FINAL RECOMMENDATIONS



Solutions for Interim Period (2025- 2027)

<p>Southwestern Vermont Medical Center</p>	<ul style="list-style-type: none"> • Implement cost reduction initiatives to operate at break even for Medicare payment levels • Complete construction of inpatient beds for adolescent mental health • Expand telehealth services to increase access to care • Re-evaluate financial sustainability of NY facilities and operations • Grow or stop femoral hernia repair and repair of perforated peptic ulcer; Stop bariatric surgery • Improve access to primary care by further embedding EMR and facilitating team-based collaboration to re-direct standard work from physician to others • Proceed with EPIC integration • Expand specialty medical staff in co-operation with Dartmouth
<p>Cross-Hospital</p>	<ul style="list-style-type: none"> • Combine shared services with Dartmouth Health’s system to reduce expense of non-patient care services • Use consortium to provide mobile rural clinics/ services in combined HSA
<p>Community-Based</p>	<ul style="list-style-type: none"> • Collaborate with local EMS and neighboring hospitals to develop plans to coordinate regional EMS services • If low income or group housing can be built in the community, link with SASH program or PACE to provide support • Develop housing options for new staff • Expand relationship with community health service agencies

Solutions for Long-Term Period (2028+)

<p>Southwestern Vermont Medical Center</p>	<ul style="list-style-type: none"> • Consider adding beds for Geriatric Psych • Open ICU bed capacity with Dartmouth support • Add inpatient dialysis capability
---	---

CENTRAL VERMONT MEDICAL CENTER – CURRENT SITUATION



Hospital Situation

Surrounding Population¹	Barre HSA population forecasted to decline, aged population (65+ years old) is projected as 33.9% of total HSA population by 2040
Primary Care Physicians²	Number of PCPs needed estimated as 55 primary care FTEs needed by 2040 (assuming 35 clinical hours/week and 3 visits/hour)
Emergency Department Visits^{3,4}	16,376 Total ED visits in 2022, 31.2% are avoidable (VHCURES); 25,327 Total ED Visits, 33.4% avoidable (VUHDDS)
Inpatient Admissions^{4,5}	3,235 acute IP admissions in 2022, 17.8% are preventable (VHCURES)
Deliveries⁶	Sufficient volume of OB deliveries (224 in 2022)
Low Volume Surgeries⁷	Colectomy and small bowel resection

Financials

Operating Margin⁸	2023 operating margin was -6.5%, with operating loss of \$17.8 MM
Projections⁹	FY2028 forecast assuming 5% expense growth, 7-8% expense growth: \$44.0 MN loss, \$74.3 MM loss Cumulative financial support required to break even over 2024-2028: \$162MN-\$226 MM
FY 2025 Budget Request⁸	2025 budget request for GMCB is \$18.0 MM increase in commercial revenue vs. FY24 budget

Rescue Efforts

Results¹⁰	Return of patients to capacity and other service changes yield estimated an improvement in finances from \$44.0MN loss to \$40.2MN loss in 2028, insufficient to return hospital margin to positive under a 7-8% expense growth scenario. Current focus on addressing staffing needs through cross-hospital initiatives with UVMHN
-----------------------------	---

Source: 1. MPR VT Population by HSA, Oliver Wyman analysis; 2. National health statistics on PCP visits ([link](#)), MPR VT Population by HSA, Oliver Wyman analysis; 3. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis, VUHDDS data and VAHHS analysis; 4. VHCURES IP admission counts and VHCURES avoidable percentages for EP and IP are used in subsequent financial analyses of potentially avoidable care. VHCURES ED and IP counts are likely an under-estimate due to incomplete coverage of VHCURES dataset. Please refer to VUHDDS or hospital data for accurate counts; 5. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis; 6. Vital Statistics 2022 Report, OW analysis; 7. MPR Low Volume Service Analysis using VUHDDS data, 2020 & 2021 Vermont State Vital Statistics, Hospital feedback (May 2024), OW assumptions on low volume thresholds; 8. GMCB hospital financial records; 9. GMCB hospital financial records and Oliver Wyman analysis; 10. Oliver Wyman analysis

CENTRAL VERMONT MEDICAL CENTER OPTIONS

Initially proposed by OW + hospital feedback (June 2024)

Affiliated with:



RESULTS OF ANALYSIS

Hospital only

- Grow colectomy, femoral hernia repair, and lysis of adhesions
- Stop doing or grow small bowel resection
- Recover OB services leaving home HSA – *currently working to increase certified midwife program*
- Add inpatient dialysis capability
- Open ICU beds with UVM support
- Build on current efforts to expand relationship with community health service agencies – *in progress*
- Develop housing options for new staff – *partnership with developers in progress to guarantee rental*

Cross-hospital *(unlikely to improve financials)*

- Work with other hospitals to develop mobile rural health services

Notes:

- Cross-hospital efforts ongoing as part of UVM network to expand recruitment/ staffing/coordination, etc.
- Future actions depend on UVM coordination and decisions
- CVMC noted that GMCB shared a CON will not be needed to increase IP dialysis



POSSIBILITIES/ OPTIONS

- Increase inpatient and ambulatory surgical volumes by transfer from UVM - *underway*
- Increase cancer service options – *LINAC CON submitted*
- Prepare for increased volumes from Gifford and Copley HSAs
- Develop hospital-at-home capability with UVM
- Consider becoming regional referral center for acute general surgery – *on path to becoming stroke referral center*

CENTRAL VERMONT MEDICAL CENTER - OW FINAL RECOMMENDATIONS

Solutions for Interim Period (2025- 2027)

<p>Central Vermont Medical Center</p>	<ul style="list-style-type: none"> • Implement cost reduction initiatives to operate at break even for Medicare payment levels • Examine options for conversion of additional inpatient beds to 1) mental health, 2) Geriatric Psychiatry, or 3) Memory Care • Grow colectomy, femoral hernia repair, and lysis of adhesions • Stop doing or grow small bowel resection • Recover OB services leaving home HSA – currently working to increase certified midwife program
<p>Cross-Hospital</p>	<ul style="list-style-type: none"> • Combine all back office and support functions into UVM health network • Use consortium to provide mobile rural clinics / services in combined HAS • Develop Hospital at Home / Care at Home model with UVM; expand telehealth services and collaborate with UVM to develop “hospital at home” model
<p>Community-Based</p>	<ul style="list-style-type: none"> • Collaborate with local EMS and neighboring hospitals to develop plans to coordinate regional EMS services • If housing can be made available for low income or group housing, link with SASH program or PACE to provide support • Develop housing options for new staff – partnership with developers in progress to guarantee rental • Build on current efforts to expand relationship with community health service agencies – in progress

Solutions for Long-Term Period (2028+)

<p>Central Vermont Medical Center</p>	<ul style="list-style-type: none"> • Consider status as Level II / Level III Trauma Center • Prepare for increased OB volume from Randolph and/or Morrisville • Develop mobile rural clinics / services with UVM / nearby HSAs • Open ICU beds with UVM support • Add inpatient dialysis capability
--	--

PORTER MEDICAL CENTER – CURRENT SITUATION

Affiliated with:


 THE
 University of Vermont
 HEALTH NETWORK

Hospital Situation

Surrounding Population¹	Middlebury HSA population forecasted to decline, aged population (65+ years old) is projected as 66.1% of total HSA population by 2040
Primary Care Physicians²	Number of PCPs needed estimated as 26 primary care FTEs needed by 2040 (assuming 35 clinical hours/week and 3 visits/hour)
Emergency Department Visits^{3,4}	11,876 Total ED visits in 2022, 34.7% are avoidable (VHCURES); 21,568 Total ED Visits, 39.1% avoidable (VUHDDS); 12,882 Total ED visits in 2022 (hospital input)
Inpatient Admissions^{4,5}	978 acute IP admissions in 2022, 16.4% are preventable (VHCURES)
Deliveries⁶	Sufficient volume of OB deliveries (320 in 2022)
Low Volume Surgeries⁷	Colectomy, femoral hernia repair, lysis of adhesions, and hernia procedures except femoral and inguinal

Financials

Operating Margin⁸	2023 operating margin was 7.6%, with operating gain of \$9.0 MM, FY2023 budget overage was \$11.0M
Projections⁹	FY2028 forecast assuming 5% expense growth, 7-8% expense growth: \$3.5 MN loss, \$10.8 MM loss Cumulative financial support required to break even over 2024-2028: \$10.4MN (assuming 7-8% expense growth)
FY 2025 Budget Request⁸	2025 budget request for GMCB is \$1.2 MM increase in commercial revenue vs. FY24 budget

Rescue Efforts

Results¹⁰	Return of patients to capacity and other service changes yield estimated an improvement in finances from \$10.8MN loss to \$11.2MN loss in 2028, insufficient to return hospital margin to positive under a 7-8% expense growth scenario substantiating the need for other cost containment initiatives. Current focus on cross-hospital initiatives with UVMHN
-----------------------------	--

Source: 1. MPR VT Population by HSA, Oliver Wyman analysis; 2. National health statistics on PCP visits ([link](#)), MPR VT Population by HSA, Oliver Wyman analysis; 3. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis, VUHDDS data and VAHHS analysis, hospital input; 4. VHCURES IP admission counts and VHCURES avoidable percentages for EP and IP are used in subsequent financial analyses of potentially avoidable care. VHCURES ED and IP counts are likely an under-estimate due to incomplete coverage of VHCURES dataset. Please refer to VUHDDS or hospital data for accurate counts; 5. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis; 6. Vital Statistics 2022 Report, OW analysis; 7. MPR Low Volume Service Analysis using VUHDDS data, 2020 & 2021 Vermont State Vital Statistics, Hospital feedback (May 2024) , OW assumptions on low volume thresholds; 8. GMCB hospital financial records; 9. GMCB hospital financial records and Oliver Wyman analysis; 10. Oliver Wyman analysis

PORTER MEDICAL CENTER OPTIONS

Initially proposed by OW + hospital feedback (June 2024)

Affiliated with:



RESULTS OF ANALYSIS

Hospital only



- Stop doing non-emergent colectomy / femoral hernia repair / lysis of adhesion
- Grow or stop doing hernia procedures except inguinal and femoral
- Capture additional deliveries from Burlington

Cross-hospital *(unlikely to improve financials)*



- Proceed with EPIC integration
- Expand specialty medical staff in co-operation with UVM
- Work with other hospitals to develop mobile rural health services

Note:

- Cross-hospital efforts ongoing as part of UVM network
- Future actions depend on UVM coordination and decisions



POSSIBILITIES/OPTIONS

- Increase capability for cancer treatment ✓
- Assist in centralizing EMS transport system and develop non-EMS transport ✓
- Develop hospital-at-home program with UVM ✓

PMC noted working groups already exist and are in progress with these three options

PORTER MEDICAL CENTER - OW FINAL RECOMMENDATIONS

Solutions for Interim Period (2025- 2027)

<p>Porter Medical Center</p>	<ul style="list-style-type: none"> • Examine options for conversion of additional inpatient beds to 1) mental health, 2) Geriatric Psychiatry, or 3) Memory Care • Expand telehealth services to increase access to care • Stop doing non-emergent colectomy / femoral hernia repair / lysis of adhesion • Grow or stop doing hernia procedures except inguinal and femoral • Capture additional deliveries from Burlington • Proceed with EPIC integration
<p>Cross-Hospital</p>	<ul style="list-style-type: none"> • Combine back office with UVM health system • Develop mobile rural clinics / services with UVM / nearby HSAs • Expand specialty medical staff in co-operation with UVM
<p>Community-Based</p>	<ul style="list-style-type: none"> • Explore programs aimed at serving high risk patients (e.g., PACE, SASH) • Collaborate with local EMS and neighboring hospitals to develop plans to coordinate regional EMS services




Solutions for Long-Term Period (2028+)

<p>Porter Medical Center</p>	<ul style="list-style-type: none"> • Grow surgical services
-------------------------------------	--

06.3

RECOMMENDATIONS FOR UVMCMC

HOSPITAL RECOMMENDATIONS

Category	Description	Rationale	Hospital List	
	Major Restructuring Needed	<i>Unlikely to financially sustain inpatient operations given population dynamics</i>	<ul style="list-style-type: none"> Minimal growth potential and poor financial position requiring significant subsidization to improve Aging physical plant needing upkeep / replacement Low procedure / admission volumes due to shrinking / insufficient populations, care sought outside HSA Nearby facility available to care for inpatients* 	<ul style="list-style-type: none"> Gifford Medical Center Grace Cottage Hospital North Country Hospital Springfield Hospital
	Changes to Existing Service Lines	<i>Potential to grow through inpatient transfers from other facilities</i>	<ul style="list-style-type: none"> Financial trends show potential for improvement through targeted cost management programs and / or service line reconfiguration Existing procedure volumes and projected population needs are sufficient to support certain specialties 	<p>Potential to become a regional specialty center:</p> <ul style="list-style-type: none"> Brattleboro Memorial Hospital Copley Hospital Northeastern Vermont Regional Hospital Northwestern Medical Center Rutland Regional Medical Center
	Significant Cost Reductions	<i>Potential to grow ambulatory surgery volume</i>	<ul style="list-style-type: none"> Total administrative costs significantly exceed academic medical center benchmarks Current spend drives a significant portion of Vermont's state commercial expenses 	<p>Regionalization plans and service line strategy will be driven by parent system's service priorities:</p> <p><u>DHMC system</u>: Mt. Ascutney Hospital and Health Center, Southwestern Vermont Medical Center</p> <p><u>UVM Network</u>: Central Vermont Medical Center, Porter Medical Center</p> <ul style="list-style-type: none"> UVMMC

UNIVERSITY OF VERMONT MEDICAL CENTER – CURRENT SITUATION

Affiliated with:



Hospital Situation

Surrounding Population¹	Burlington HSA population forecasted to increase slightly with a total population estimated at ~210,000 by 2040
Primary Care Physicians²	Number of PCPs needed estimated as 161 primary care FTEs needed by 2040 (assuming 35 clinical hours/week and 3 visits/hour)
Affiliated Medical Staff³	Medical staff support 54 specialities, with generally low productivity (>75% of physician FTEs are performing below the 50 th percentile)
Emergency Department Visits^{4,5}	34,314 Total ED visits in 2022, 26.9% are avoidable (VHCURES); 62,259 Total ED Visits, 29.9% avoidable (VUHDDS); 10% avoidable ED visits (hospital input)
Inpatient Admissions^{5,6}	12,999 acute IP admissions in 2022, 13.3% are preventable (VHCURES)
Boarders⁷	Significant number of boarders accounting for 6,422 inpatient bed days (22.0 bed equivalents); 28,642 ED bed days (43.7-98.0 bed equivalents)
Deliveries⁸	Large volume of OB deliveries (2,297 deliveries in 2022)
Low Volume Surgeries⁹	Necrotizing soft tissue infection, repair of perforated peptic ulcer, and small bowel resection, and many other low volume procedures

Financials

Operating Margin¹⁰	2023 operating margin was 3.1%, with operating gain of \$64.6 MM, FY2023 budget overage was \$80.3MMN
Projections¹¹	FY2028 forecast assuming 5% expense growth, 7-8% expense growth: \$105 MN loss, \$486.4 MM loss Cumulative financial support required to break even over 2024-2028: \$0.2-\$1.2B
FY 2025 Budget Request¹⁰	2025 budget request for GMCB is \$62MM increase in commercial revenue vs. FY24 budget

Rescue Efforts

Results¹²	Return of patients to capacity yields estimated change in finances from \$486.4MMN to \$503.4MMN loss in 2028, insufficient to return hospital margin to positive under a 7-8% expense growth scenario, substantiating the need for other cost containment initiatives Current Focus: made the decision to stop performing Orthopedic Joint replacements
-----------------------------	---

Source: 1. MPR VT Population by HSA, Oliver Wyman analysis; 2. National health statistics on PCP visits ([link](#)), MPR VT Population by HSA, Oliver Wyman analysis; 3. UVMHC self-reported RVU Performance in 2023 as reported to Green Mountain Care Board in August 2024, OW Analysis; 4. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis, VUHDDS data and VAHHS analysis, hospital input; 5. Hospital input of avoidable ED percentage, VHCURES IP admission counts and VHCURES avoidable percentages for EP and IP are used in subsequent financial analyses of potentially avoidable care. VHCURES ED and IP counts are likely an under-estimate due to incomplete coverage of VHCURES dataset. Please refer to VUHDDS or hospital data for accurate counts; 6. Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES and MPR analysis; 7. VAHHS analysis using 2022 hospital discharge data (Discharge values for any category that were less than 5 have been excluded), Oliver Wyman analysis; 8. Vital Statistics 2022 Report, OW analysis; 9. MPR Low Volume Service Analysis using VUHDDS data, 2020 & 2021 Vermont State Vital Statistics, Hospital feedback (May 2024), OW assumptions on low volume thresholds; 10. GMCB hospital financial records; 11. GMCB hospital financial records and Oliver Wyman analysis; 12. Oliver Wyman analysis

UNIVERSITY OF VERMONT MEDICAL CENTER OPTIONS

Initially proposed by OW + hospital feedback (June 2024)



RESULTS OF ANALYSIS

Hospital only

- Evaluate low-volume procedure numbers (e.g. repair of perforated ulcer, small bowel resection, care of necrotizing soft tissue infection, and potentially femoral hernia repair)
- Stop small volume kidney transplant program
- Re-design consultant report to put diagnosis, medications, and treatment plan at the top and push reports to referring physicians
- Develop hospital-based heliport for emergency transport
- Develop state-of-the-art NICU
- Accept all patients referred from VT hospitals
- Critically examine and reduce expenses for administration, support services, and any current subsidization of research activities



Cross-hospital *(unlikely to improve financials)*



- Proceed with EPIC integration
- Work with other hospitals to develop mobile rural health services

UVMMMC noted ongoing union negotiations add additional complexity and difficulties to current financial situation and strategies for the future.





POSSIBILITIES/OPTIONS

- **Work with EMS to regionalize facilities and equipment for EMS services and develop non-EMS transport methods**
- **Develop hospital-at-home program for metropolitan Burlington**
- **Develop rotations for primary care trainees (IM / Peds / family medicine to rural hospitals)**
- **Consider development of rural general surgery program**
- **Develop PACE programs**
- **Develop a centralized monitoring facility for IP hospital beds for UVMMMC and affiliated hospitals**

FURTHER EXPLORATION IS NEEDED TO EXPLORE UVM'S PERFORMANCE ON COST AND ACCESS METRICS (1 OF 2)



We advise UVM to explore the following areas to improve the state of Vermont's healthcare costs with the counsel of an external consultancy.

Performance Areas	Recommendation	Rationale
 Overhead Costs	Reduce administrative costs	<ul style="list-style-type: none"> Total administrative costs including staff salaries significantly exceed benchmarks from other academic medical centers (>400% of peer benchmarks)¹ UVM is the single provider system driving most of Vermont' statewide commercial spend: >56% of total statewide commercial hospital spend at UVM, >67% commercial hospital spend at UVM network hospitals²
	Reduce operating costs to Medicare payment levels	<ul style="list-style-type: none"> Medicare payment to cost ratio in 2022 was lower than peer intuitions at 72% (<97% ratio indicates poor cost efficiency per MedPac 2024 report)³
 Cost of Care	Revise outpatient and inpatient treatment protocols to reduce clinical variation to achieve 10% cost savings	<ul style="list-style-type: none"> Clinical protocols can reduce care variations that lead to high-cost procedures, tests, etc.
	Evaluate financial sustainability of low volume (<50 patients) sub-specialty service lines for referrals to out-of-state medical centers, low volume procedures for other VT hospitals	<ul style="list-style-type: none"> Highly specialized services with low patient volumes (e.g., kidney transplant program) and low volume procedures (e.g., small bowel resection) below clinical excellence thresholds may not be clinically / financially sustainable
	Explore emergency department referrals to community-based hospitals or community-based settings (including non-UVM network)	<ul style="list-style-type: none"> Community-based providers deliver the same level or more appropriate level of care (e.g., outpatient / home-based settings) at a lower price
	Re-evaluate the need for population health management programs	<ul style="list-style-type: none"> State of Vermont and private payers lack basic infrastructure to support population-based programs (e.g., financial and information system infrastructure), substantiating a closer examination of program performance

1. 56% of total statewide commercial hospital spend for UVM and 67% includes UVM affiliated hospitals: Central Vermont Medical Center and Porter Medical Center based on net payer revenue and fixed prospective payments in FY 2023
 Sources: 1. GMCB Board Meeting in August 2024: analysis completed by Tom Rees, 2. GMCB Financial Records 2023, 3. GMCB Board Meeting in August 2024: analysis completed by Bartholomew-Nash & Associates, OW Analysis

FURTHER EXPLORATION IS NEEDED TO EXPLORE UVM'S PERFORMANCE ON COST AND ACCESS METRICS (2 OF 2)

We advise UVM to explore the following areas to improve the state of Vermont's healthcare costs with the counsel of an external consultancy.

Performance Areas	Recommendation	Rationale
 Efficiency	Examine physician productivity and move to >60% of Sullivan Cotter group practice specialty levels	<ul style="list-style-type: none"> >75% of UVMMMC's clinical FTEs perform below 50th percentile for Sullivan Cotter productivity benchmarks, which drive cost inefficiency since physicians are likely paid full salaries regardless of their productivity levels¹ Poor physician productivity is a significant opportunity for improvement
	Move non-productive provider and administrative staff into patient facing clinical functions	<ul style="list-style-type: none"> 203 of UVMMMC's 654 physician FTEs are dedicated to non-patient care, which contribute significantly to overhead¹ Size of non-productive FTEs could have a large impact on the state's overall utilization of physicians (state of Vermont had 1393.5 physician FTEs in 2022)²
 Access to Care	Improve access to routine specialist appointments to be available in less than 4 weeks	<ul style="list-style-type: none"> Specialty care appointments should not have wait times >4 weeks to promote community accessibility
	Review the current pricing model for telehealth support for private practitioners in rural and community-based settings	<ul style="list-style-type: none"> Telehealth services should be affordable for rural and community-based providers
	Improve access to telehealth services	<ul style="list-style-type: none"> UVM providers could be utilized in telehealth consultations to expand access to care in remote communities outside of UVM's HSA

Sources: 1. UVMMMC Self Reported RVU Performance in 2023 as reported to Green Mountain Care Board in August 2024, 2. [Vermont Department of Health 2022 Physician Census Report](#), OW Analysis

FURTHER EXPLORATION IS NEEDED TO EXPLORE UVM’S ABILITY TO EFFICIENTLY DELIVER ON ITS STATED MISSION

We recommend performing the following analyses to assess University of Vermont Health Network’s delivery on their mission:

Areas

Recommended Analyses For Further Review



Medical Education:

Review UVM’s medical education programs service to Vermont rural community health and contribution to developing Vermont’s physician pipeline

- Proportion of medical school applicants and acceptances from native Vermont residents
- Proportion of medical graduate residency applications and acceptances from native Vermont residents
- Proportion of medical school acceptances from Vermont-based colleges
- Proportion of graduate residency acceptances from Vermont-based colleges
- Percentage of medical residents employed in the state of Vermont 5 years post-residency
- Number of residency rotation sites in community-based or rural hospitals and clinics
- Total provider FTEs supporting medical school that could be repurposed for patient care



Clinical Research:

Review alignment of UVM’s clinical research focuses with Vermont’s medical needs

- Pertinence of clinical research grants on health conditions of Vermont residents
- Total administrative costs to support non-active research projects
- Total spending on grant matching to cover total clinical research costs
- Total provider FTEs supporting clinical research that could be repurposed for patient care

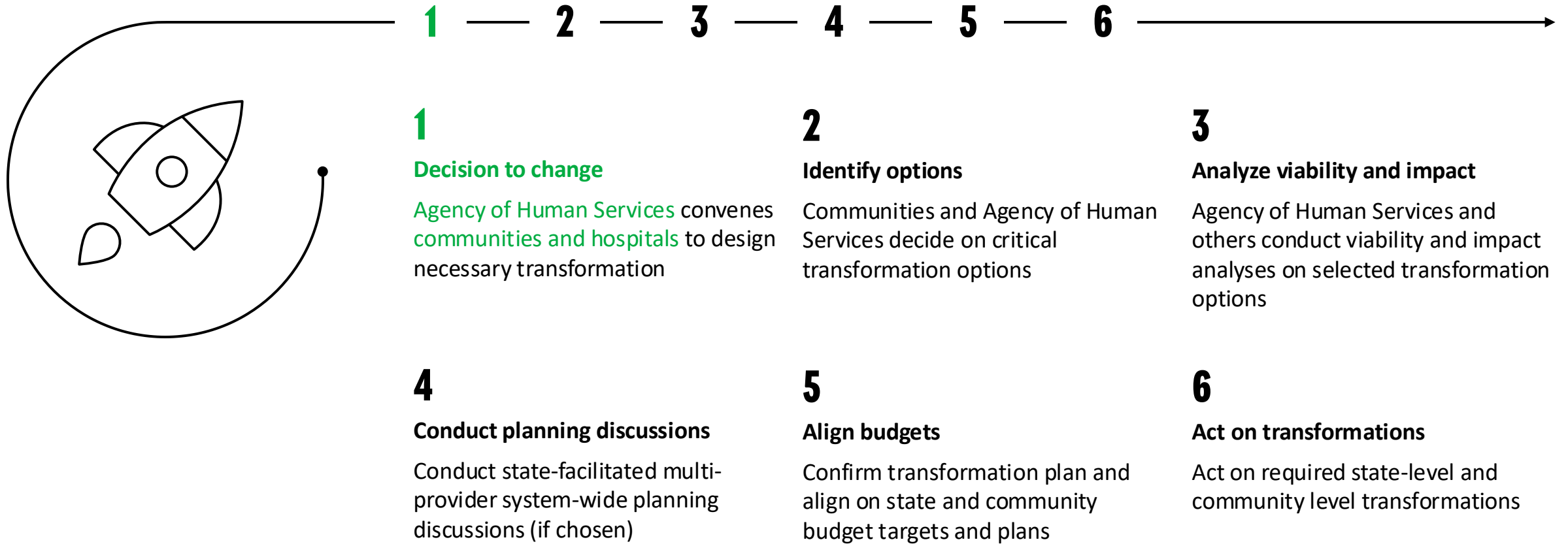
University of Vermont Health Network summarizes its mission as the following:

“Our mission is to improve the health of the people in the communities we serve by integrating patient care, education, and research in a caring environment.”

07

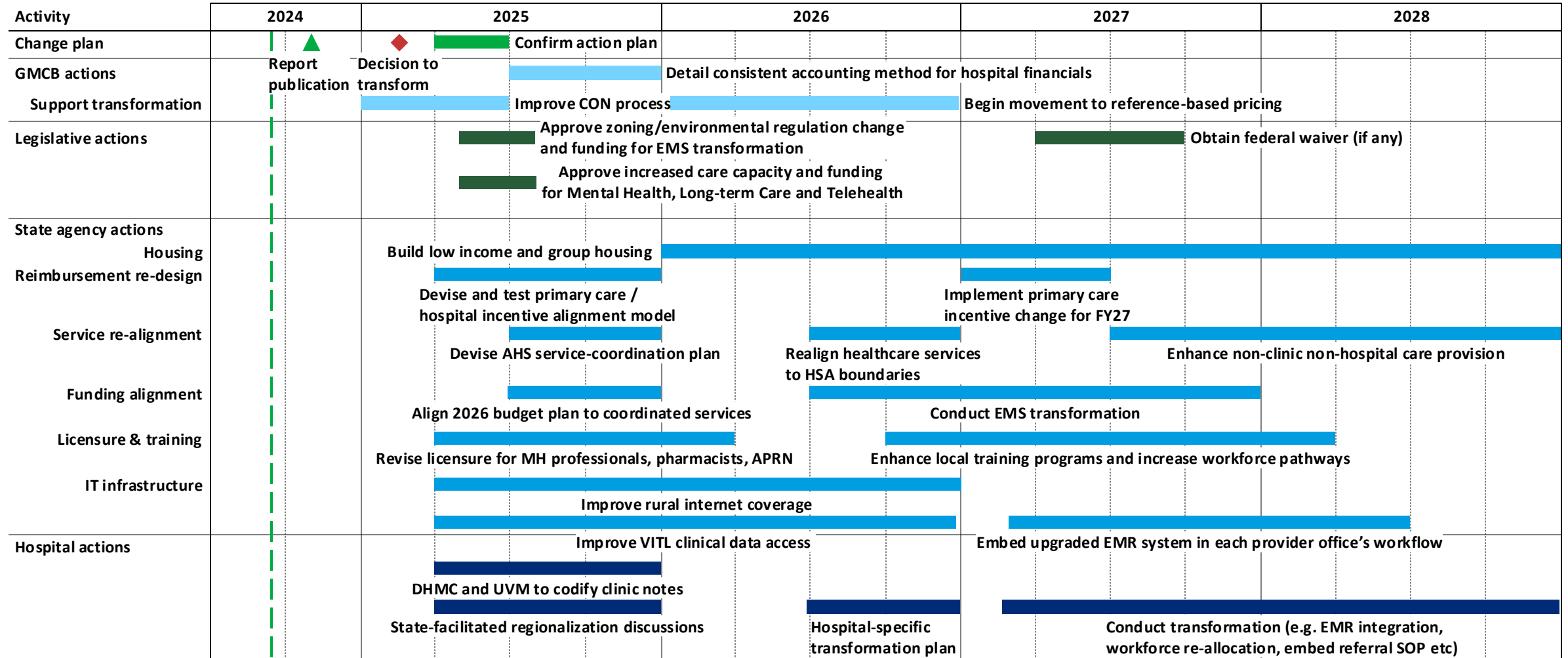
RECOMMENDED NEXT STEPS

NEXT STEP: DECIDE TO TRANSFORM AND TRANSLATE FUTURE VISION INTO APPROPRIATE LOCAL CHANGES AND IMPLEMENT



THE RUNWAY TO CHANGE WILL TAKE AT LEAST 4-5 YEARS TO COMPLETE

Illustrative action timeline, assuming positive decision to change according to current recommendation



▲ We are here

AHS-LED TOPIC-BASED TASK FORCES SHOULD BE SET UP TO CO-CREATE REALISTIC TRANSFORMATION SOLUTIONS WHILST GAINING BUY-IN THROUGHOUT

WHO

All-round stakeholders

- Hospital ED director*
- Community health
- Care coordinator
- Nurses
- EMS*
- Hospital representatives*
- Community volunteer organizations (e.g., Meals on Wheels, dementia housing, parish nurses)
- State agencies*
- Legislators*
- Etc.

* Decision makers or in control of resources

WHAT

Priority initiatives

- Regionalization of specialty care services across hospitals
- EMS professionalization and regionalization
- Improved care coordination and management for heavy utilizers (e.g. elderly, mental health, neuro-divergent and foster care)
- Dual eligible targeting, care planning and coordination
- State-wide electronic medical record coordination and optimization

HOW

Sprints

- Facilitated co-creation sessions with pre-identified key questions to answer and desired outputs to create
- Design principle-based scrum sprint co-creation sessions focused on solution creation

WHEN

Bi-weekly gatherings

- Identification of task force members by Q4'24
- Bi-weekly gatherings to work through transformation plan in H1'25
- Incorporate initial transformation proposal and resource needs for AHS budget planning for 2026
- Resource requirements due by Dec'25 ahead of legislative sessions in 2026

AHS WILL PLAY AN INTEGRAL ROLE IN DRIVING AND COORDINATING THE PLANNING AND IMPLEMENTATION OF HEALTHCARE SYSTEM TRANSFORMATION IN THE NEXT PHASE

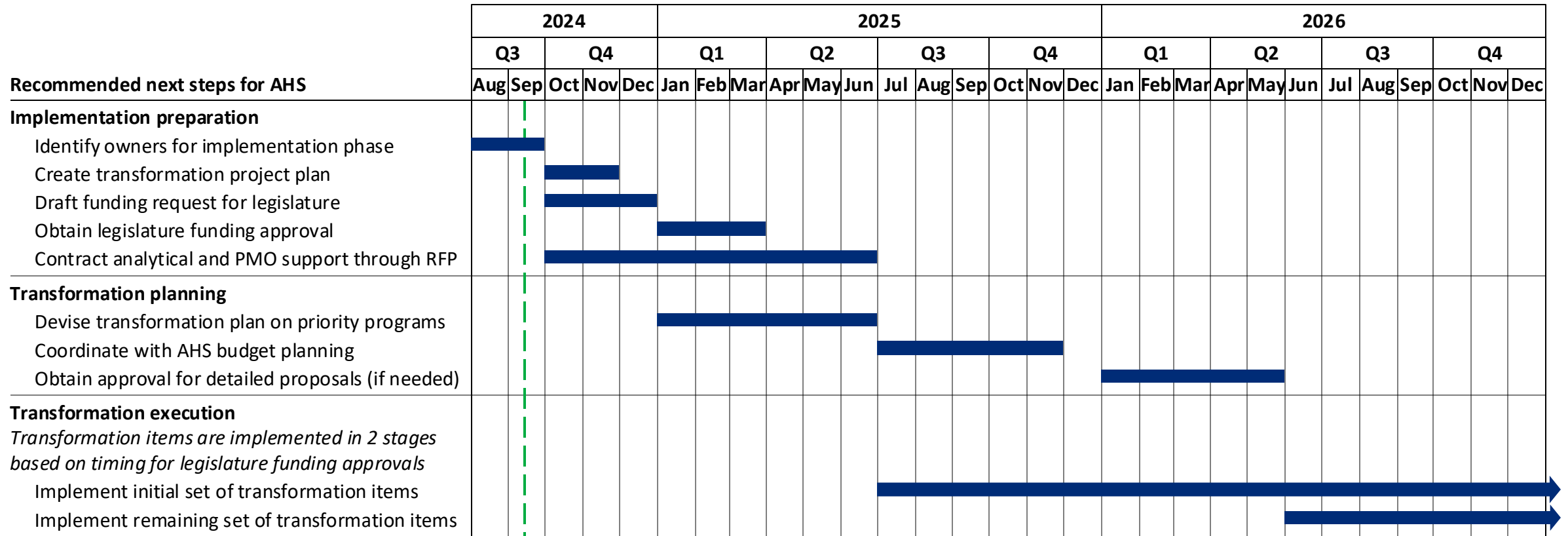
Priority transformation programs for AHS to initiate in 2025

Working groups	Objectives for transformation initiative	Key questions to address in H2'25 planning phase
1 Regionalization of specialty care services across hospitals	<ul style="list-style-type: none"> Obtain buy-in and alignment on the need for service line adjustment and coordination given rurality of Vermont and low volume challenges Align on future regionalization map and establish standard operating procedures / payment guidelines for future patient referrals Deep-dive on most at-risk hospitals and nearby hospitals 	<ul style="list-style-type: none"> <i>What does a desired and feasible future state look like by 2028?</i>
2 EMS professionalization and regionalization	<ul style="list-style-type: none"> Utilize spare EMS capacity to enhance community-based care Reimburse non “medically necessary” transportations and non-transportation care services Enhance regionalization and coordination in preparation 	<ul style="list-style-type: none"> <i>What roadblocks are there and how can they be removed?</i> <i>What are the steps of change and timeline for actions?</i>
3 Improved care coordination and management for heavy utilizers (e.g. elderly, mental health, and neuro-divergent and foster care)	<ul style="list-style-type: none"> Design and implement care coordination protocols to ensure continued access to appropriate care Identify and expand care capacity in shortage 	<ul style="list-style-type: none"> <i>How can different communities adopt the transformation?</i>
4 Dual eligible targeting, care planning and coordination	<ul style="list-style-type: none"> Set up data infrastructure to enable dual eligible patient targeting Design and implement care management programs to reduce healthcare utilization and improve outcomes 	<ul style="list-style-type: none"> <i>What further actions / resources are needed to materialize the change?</i>
5 State-wide electronic medical record coordination and optimization	<ul style="list-style-type: none"> Embed EMR data collection and record sharing in everyday workflow across providers to improve productivity and reduce admin burden Improve timeliness and usability of VITL (clinical data) 	<ul style="list-style-type: none"> <i>Which individuals should lead the on-the-ground implementation?</i>

Goal for FY'25: Devise **realistic operational details and implementation plan** for transformation initiatives

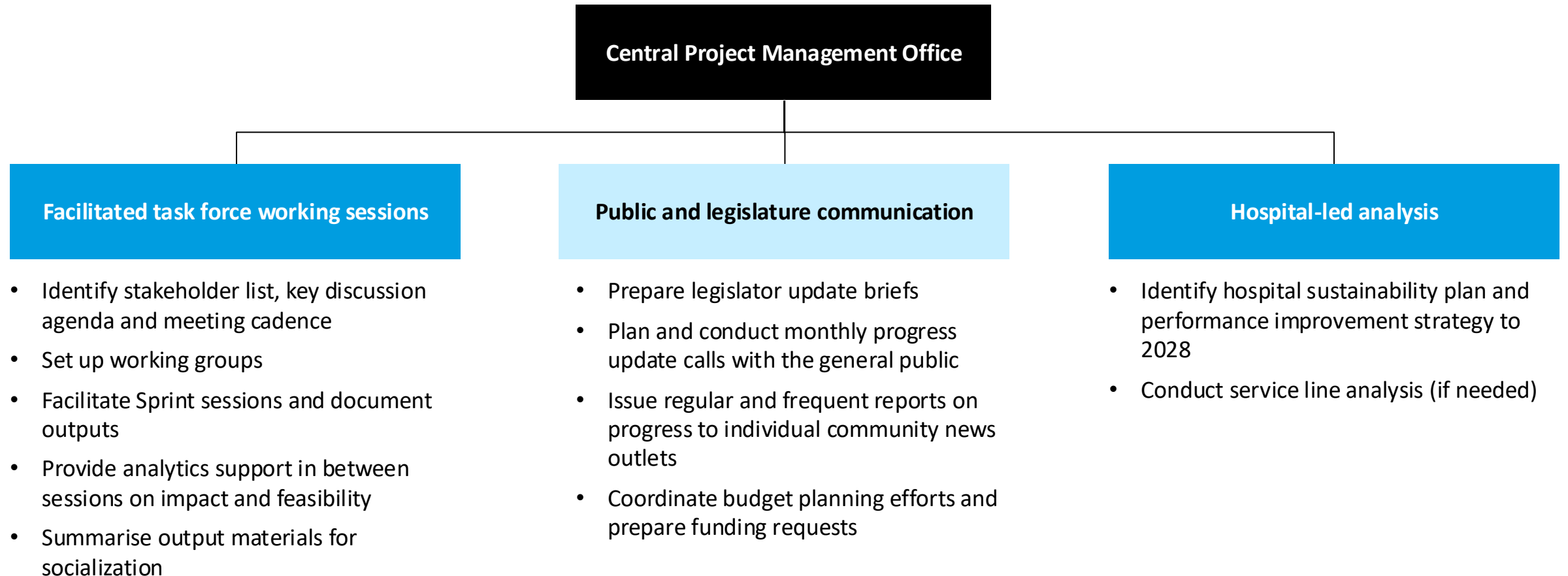
AHS'S 5 PRIORITY TRANSFORMATION PROGRAMS REQUIRE SIGNIFICANT PLANNING IN Q4'24 TO GALVANIZE MOMENTUM FOR CHANGE AND TRANSLATE INTENT TO ACTION

Workplan to implement AHS's 5 Priority Transformation Programs



We are here

THE TRANSFORMATION PHASE WILL LIKELY REQUIRE DEDICATED RESOURCES FOR CENTRAL PROJECT MANAGEMENT AND OUTPUT COORDINATION



Workload level for AHS: ■ Heavy workload ■ Medium workload ■ Light workload

THREE IMPERATIVES FOR VERMONT'S HEALTHCARE TRANSFORMATION

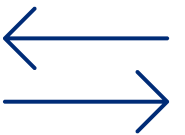
1 Build housing and other facilities and fix transportation



2 Pay PPS hospitals with reference-based pricing and move to global budgets/capitation when requirements for success are met



3 Move all care possible out of hospitals

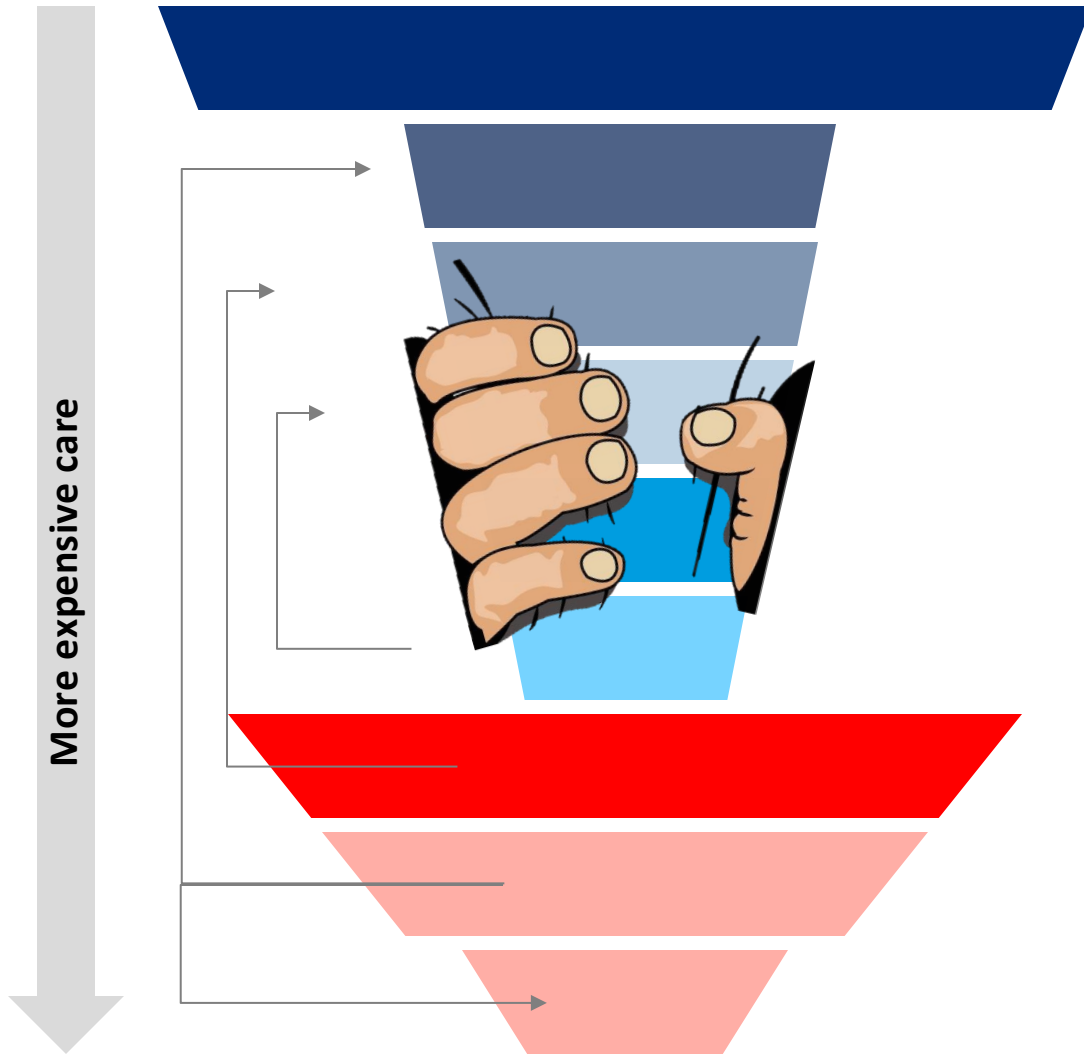


APPENDIX

A01

VERMONT HEALTHCARE EXPENDITURE ANALYSIS

IF CARE IN THE LESS EXPENSIVE PRIMARY CARE SETTING IS UNAVAILABLE, PATIENTS ARE FORCED TO GET CARE IN MORE EXPENSIVE EMERGENCY DEPARTMENTS OR HOSPITALS



Selfcare and community prevention
(social determinants of health / substance abuse prevention)

Housing/Group home/Assisted living/Home health

Institutional care
(mental health/skilled nursing facility/prison)

Primary care
Community mental health / substance abuse intervention

Urgent care

Specialty care
Ambulatory surgery

Emergency room \$

Community hospital \$ \$

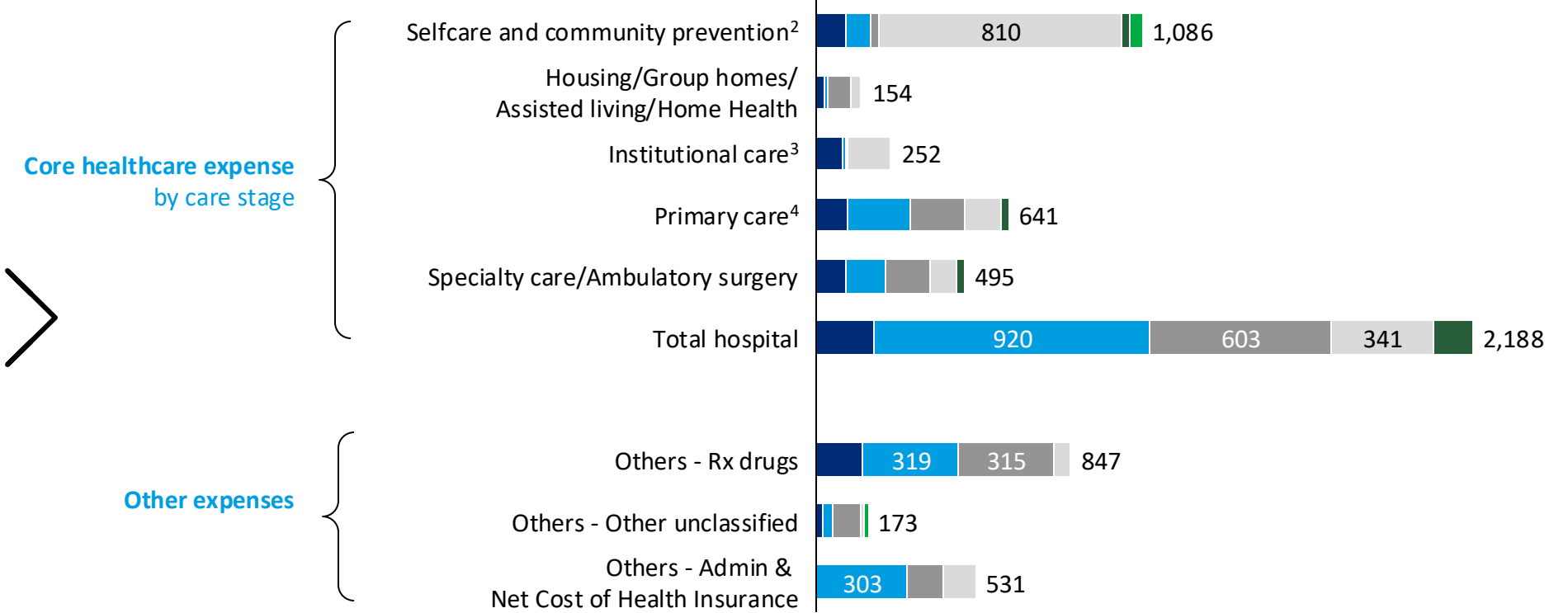
Academic medical center (e.g. UVM, Dartmouth) \$ \$ \$

IN 2020, 34% OF VERMONT'S HEALTH CARE EXPENDITURE WAS SPENT ON HOSPITALS, 17% ON SELFCARE AND COMMUNITY PREVENTION

2020 Vermont Health Care Expenditure by care stage and type¹
In USD thousands

2020 TOTAL:
\$6.4BN

Approx. \$10,000 per person per year

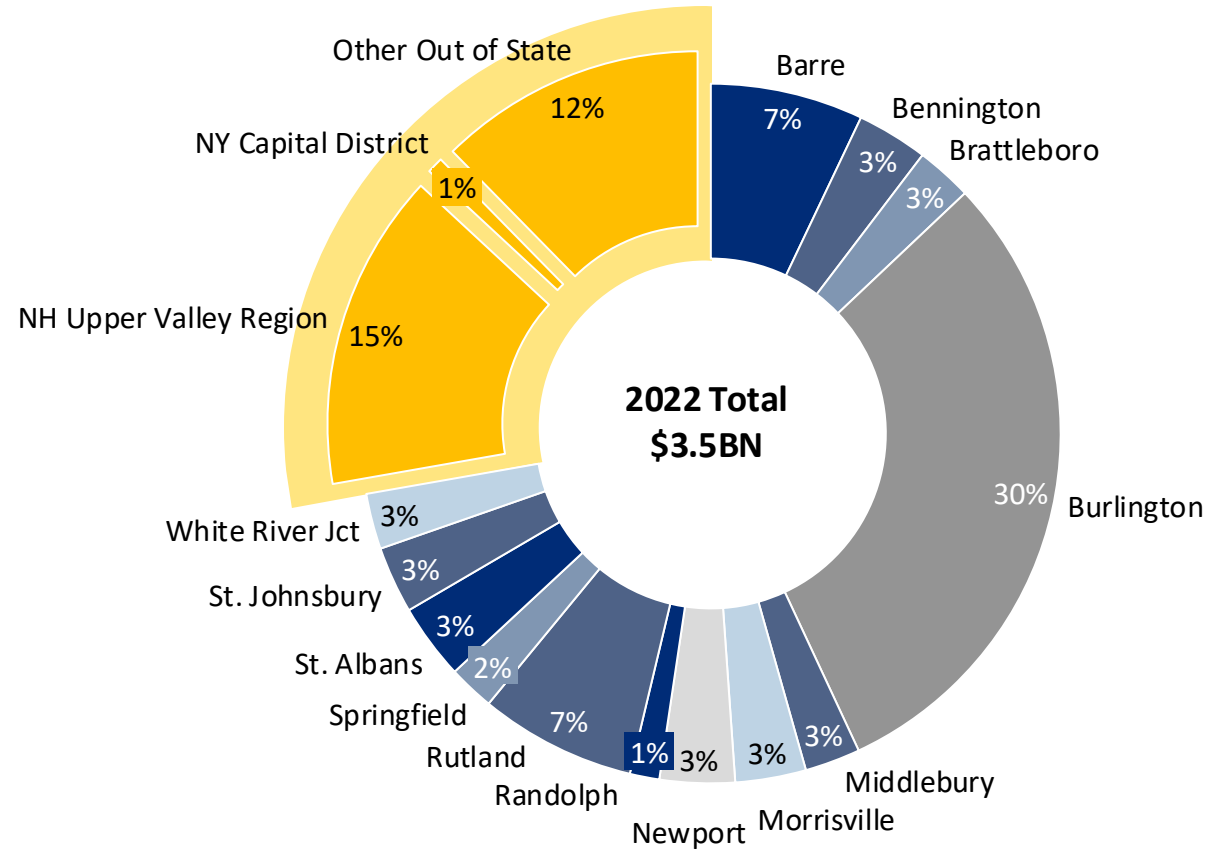


■ Out-of-Pocket
 ■ Commercial
 ■ Medicare
 ■ Medicaid
 ■ Other Government-Federal
 ■ Other Government-State & Local

1. In 2020 VT Healthcare Expenditure Resident Analysis, 'Physicians' are categorised as half primary care and half specialty care, 'Psych hospitals' (both state and private) are categorised under institutional care, 'dentists', 'vision&DME' and 'mental health & other government activities' are categorised as selfcare and community prevention, 'other professionals (licensed)' are categorised as primary care 2. Including social determinants of health and substance abuse prevention 3. including mental health, SNF, and prison, 4. Including community mental health and substance abuse intervention
Source: 2020 VT Healthcare Expenditure Resident Analysis ([link](#)), Oliver Wyman analysis

~28% OF VERMONT'S HEALTHCARE DOLLARS ARE SPENT OUTSIDE OF THE STATE

2022 Vermont Total Medical Claims by HSA of Care¹



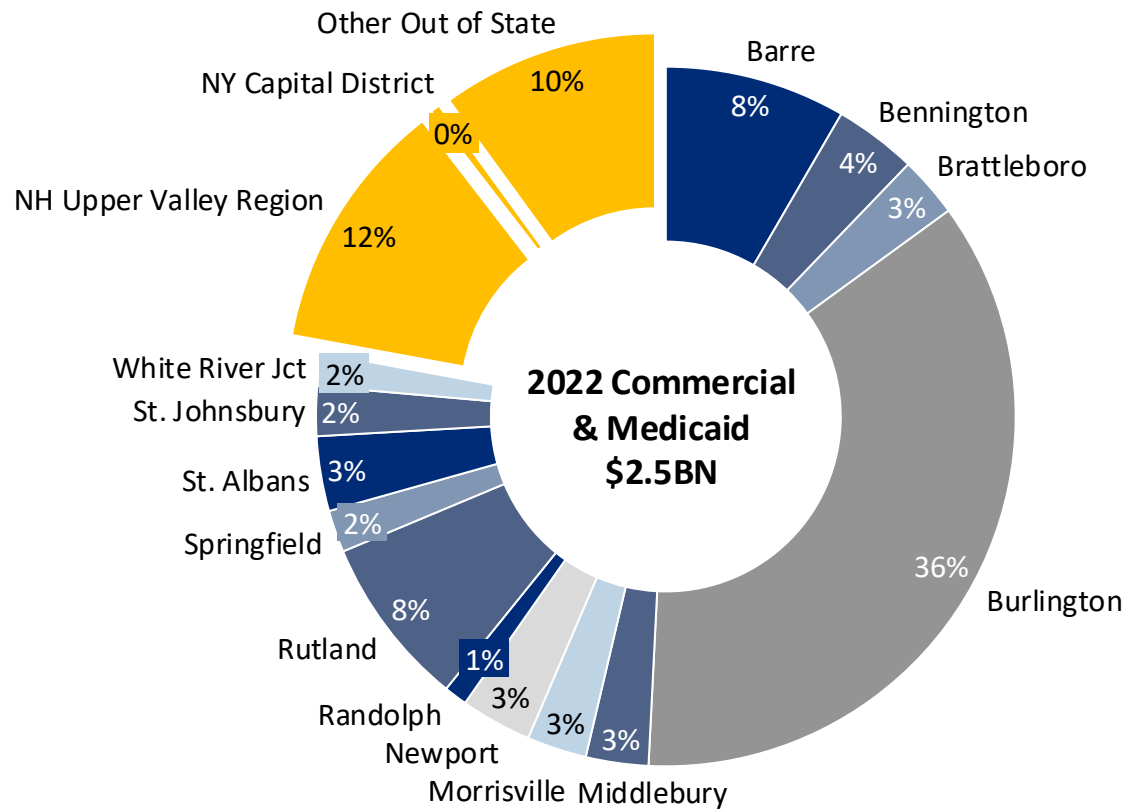
Remarks

- In 2022, \$964MN or ~28% of Vermont's healthcare fund was spent out-of-state
 - Bringing a proportion of out-of-state spending back could support local hospital financial sustainability and in-state employment
- Burlington / UVM currently receives ~30% of VT healthcare funding as the largest metropolitan area in Vermont and the biggest hospital in the state
- 13 out of 14 HSAs in Vermont currently receive 42% of state healthcare funding

1. Assuming 40% of commercial claims were missing in the VHCURES data and added back to the sum
 Source: GMCB Patient Migration Analysis Version 4 using 2022 VHCURES claims ([link](#)), Oliver Wyman Analysis

~22% OF VERMONT'S COMMERCIAL AND MEDICAID DOLLARS ARE SPENT OUTSIDE OF THE STATE

2022 Vermont Commercial and Medicaid medical claim expenditure by HSA of Care¹



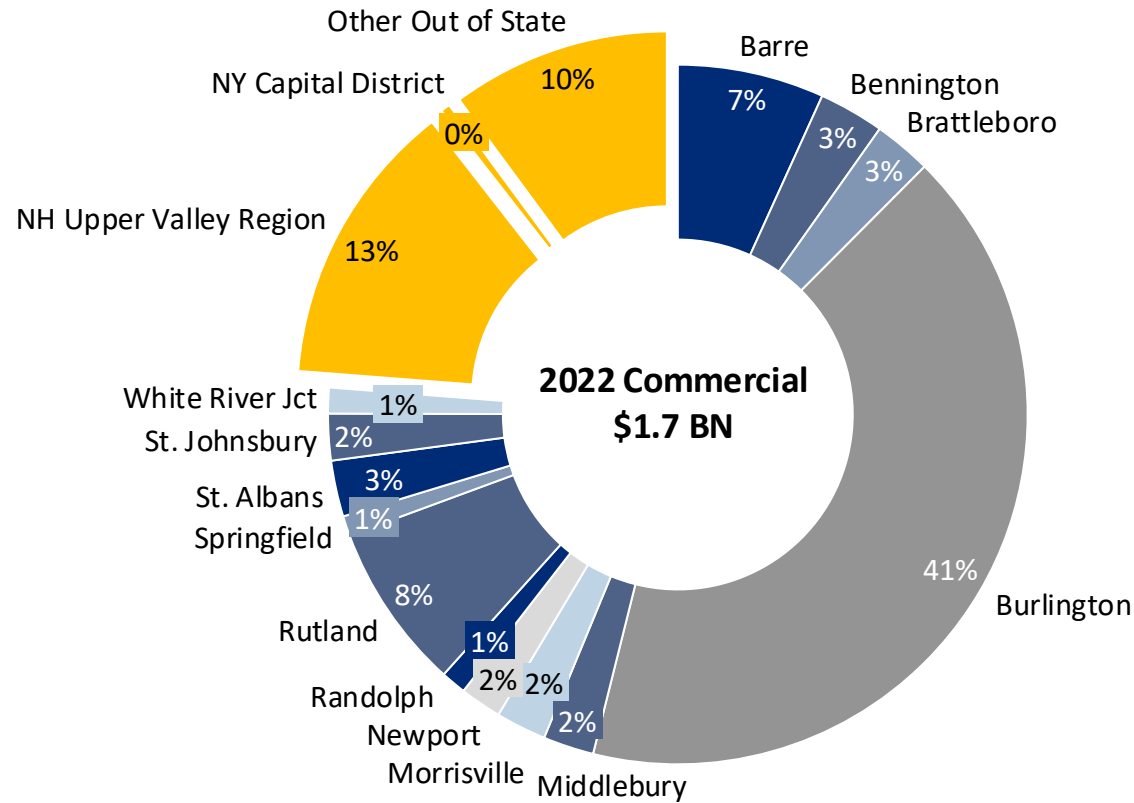
Remarks

- In 2022, \$562MN or ~22% of Vermont's Commercial and Medicaid healthcare fund was spent out-of-state
 - Bringing a proportion of out-of-state spending back could support local hospital financial sustainability and in-state employment

1. Assuming 40% of commercial claims were missing in the VHCURES data and added back to the sum
 Source: GMCB Patient Migration Analysis Version 4 using 2022 VHCURES claims ([link](#)), Oliver Wyman Analysis

~23% OF VERMONT'S COMMERCIAL DOLLARS ARE SPENT OUTSIDE OF THE STATE

2022 Vermont Commercial medical claim expenditure by HSA of Care¹



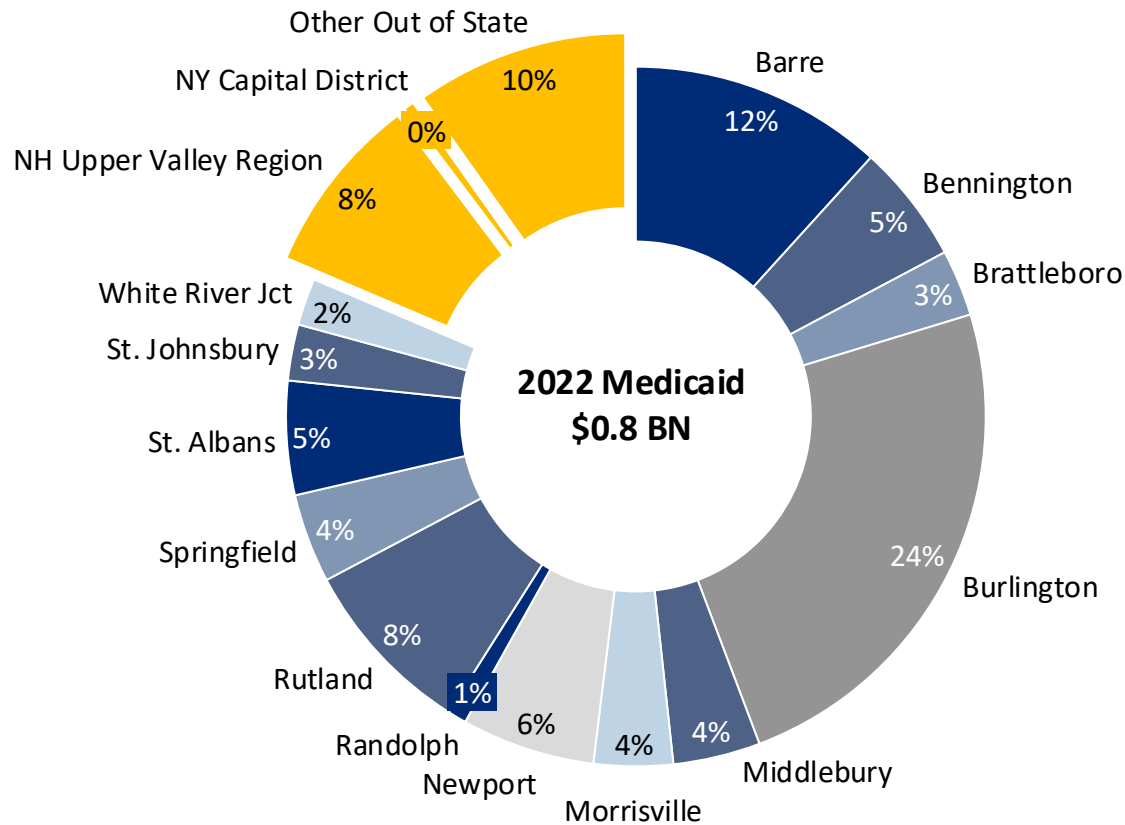
Remarks

- In 2022, \$410 MN or ~23% of Vermont's Commercial and Medicaid healthcare fund was spent out-of-state
 - Bringing a proportion of out-of-state spending back could support local hospital financial sustainability and in-state employment

1. Assuming 40% of commercial claims were missing in the VHCURES data and added back to the sum
 Source: GMCB Patient Migration Analysis Version 4 using 2022 VHCURES claims ([link](#)), Oliver Wyman Analysis

~18% OF VERMONT'S MEDICAID DOLLARS ARE SPENT OUTSIDE OF THE STATE

2022 Vermont Medicaid medical claim expenditure by HSA of Care¹



Remarks

- In 2022, \$152MN or ~18% of Vermont's Medicaid healthcare fund was spent out-of-state
 - Bringing a proportion of out-of-state spending back could support local hospital financial sustainability and in-state employment

1. Assuming 40% of commercial claims were missing in the VHCURES data and added back to the sum
 Source: GMCB Patient Migration Analysis Version 4 using 2022 VHCURES claims ([link](#)), Oliver Wyman Analysis

A02

CASE STUDIES ON SELECT RECOMMENDATIONS

INDIANA RESOURCE POOL CENTRALLY EMPLOYS AND STAFFS A STATE-WIDE NURSE POOL

Program Name:
Indiana Resource Pool

Indiana Hospital Association launched a program to match per-diem or contract nurses with shift or short-term jobs



How is this approach different?

This program utilizes a collaborative effort among many hospitals to develop a platform for flexible staffing as a more cost-effective alternate to staffing agencies and travel programs

How can this approach help VT?

This approach could help address the nursing shortage and cost of travel / agency nurses



Scope

- 170 member hospitals affiliated with the Indiana Hospital Association
- Indiana Hospital Association partners with a tech-enabled staffing platform to manage staffing pool



Program Operations

- Staffing platform screens, recruits, and markets staffing pool postings
- Staffing platform employers nurses and manages matching staff with clinics
- Provider members access the platform with tools to manage their flex workforce (e.g., reports)



Value Proposition for Hospitals


- Average savings utilizing a similar flexible staffing platform is \$200 per nurse shift
- Flexible work arrangements can appeal to a broader workforce to expand capacity
- Flexible workforce can cater to short-term fluctuations in demand

Vermont hospitals have an opportunity to reduce labor expenses related to an over-reliance on travel / agency nurses by creating a state-wide flexible staffing pool across hospitals.

Source: [Becker's Hospital Review \(accessed August 2024\)](#), [Matchwell \(accessed August 2024\)](#)

HEADWATERS HIGH NETWORK PARTNERSHIP CREATES SHARED SERVICES ACROSS RURAL MINNESOTA HOSPITALS

Program Name: Headwaters High Network | Partnership between Minnesota’s small, rural hospitals to collaborate on clinical and operational initiatives



How is this approach different?

How can this approach help VT?

This program utilizes a collaborative partnership between Minnesota hospitals to generate sufficient scale to grow population health infrastructure and gain contracting advantages

This approach could help improve the financial viability of Vermont’s hospitals and health systems by cost savings on supply purchases

Scope

- Clinically integrated network including 19 independent Minnesota hospitals and 50 clinics for 750,000 residents
- Shared services include population health platform, data analytics, and care management

Program Operations

- Cibolo Health manages the clinically integrated network
- Cibolo Health manages network development, population health infrastructure, and value-based care

Value Proposition for Hospitals

- Group purchasing building purchasing power and facilitates efficient resource utilization (e.g., supplies, pharmaceuticals)
- Shared contracting generates adequate volume for outcome-based contracts
- Shared care coordination services builds infrastructure for population health

Vermont hospitals have an opportunity to reduce hospital operating costs by utilizing group purchasing arrangements between multiple hospitals.

Source: [Cibolo Health Network \(accessed August 2024\)](#), [Beckers Hospital Review \(accessed August 2024\)](#), [Business Wire \(accessed August 2024\)](#)

NORTHERN NEW HAMPSHIRE MOBILE HEALTH CLINIC PROVIDES PREVENTATIVE CARE TO RURAL RESIDENTS

Program Name: Northern New Hampshire Mobile Health Clinic

Program that offers preventative care and community referrals to rural residents in a mobile van



How is this approach different?

This program delivers care to rural residents in a mobile van through a collaborative effort with the North Country Health Consortium including hospitals and community organization members

How can this approach help VT?

This approach could help increase capacity / availability of preventative care services while reducing resident's transportation barriers to access care

Scope

- Mobile van services 2 counties
- Program is supported by 4 hospitals, a non-profit health plan, and community organizations
- Services include: primary care, community referrals, immunizations, wellness education, telehealth service access

Program Operations

- Local community practitioners provide care
- North Country Health Consortium manages program logistics including coordinating services and selecting sites
- Program is funded by 2 foundations: the U.S. Department of Agriculture Rural Development, and 4 local hospitals

Value Proposition for Hospitals

- Mobile van expands primary care capacity as an alternative site of care

Vermont hospitals have an opportunity to expand access to preventative / primary care appointments in rural areas by offering a convenient, mobile clinics.

Source: [Littleton Regional healthcare \(accessed August 2024\)](#), [Northern New Hampshire Mobile health Clinic \(accessed August 2024\)](#)

HEALTH TRAN PROGRAM PROVIDES NON-EMERGENT TRANSPORT FOR MISSOURI'S RURAL RESIDENTS

Program Name: Health Tran | Program that offers non-emergent transport to healthcare appointments and other essential activities



How is this approach different?

How can this approach help VT?

This program provides non-emergent transportation to healthcare appointments utilizing a specialized software for ride scheduling and rural navigation

This approach alleviates transportation barriers preventing residents from attending appointments due to an inability to drive, lack of public transportation, or lack of access to reliable transportation

Scope

- Health Tran serves 1,700 residents (ineligible for Medicaid, Veteran services) in 45 counties in Missouri
- Program was originally funded through a grant from the HRSA, before entering partnerships with 44 organizations

Program Operations

- Missouri Rural Health Association administers program including member / volunteer onboarding, virtual monitoring
- Provider members partner to cover transportation costs
- Volunteer drivers provide transportation services

Value Proposition for Hospitals

- Service reduces the number of missed appointments due to lack of transportation
- Pilot program results show that providers earn \$7.50 for every \$1 spent

Vermont hospitals have an opportunity to gain lost revenue from missed appointments by sponsoring patient transportation programs.

Source: Rural Health Information Hub (accessed August 2024): [\(link\)](#), [\(link\)](#), [\(link\)](#)

COMMUNITY PARAMEDICINE DEPLOYS PARAMEDICS FOR NON-TRANSPORT NEEDS

What is community paramedicine and what is it aiming to achieve?

Approach that provides paramedics staff at healthcare and social organizations to perform patient activities aligned with their training

- 1 Treats non-emergent patients needs and avoid unnecessary emergency department transports
- 2 Provides specialized services at healthcare facilities to augment staff shortages

How can this approach help VT?

A community paramedicine program could better leverage under-utilized staff, create a funding channel for non-transport activities

Types of Partners

- Skilled nursing facilities
- Post-acute home care providers
- Social services organizations
- Senior living communities

Funding

- Government and agency grants
- Payers
- Direct contracts with partner organizations

Examples of Community Paramedicine Roles

Domains	Activities
Healthcare	Assessments, wound care, foley care, medication administration, blood draws, intravenous line administration
Social Services	Care coordination, home safety assessment
Care Transitions	Case management, post-discharge follow-up

List is not comprehensive. Activities will depend on partnership organization and working model.

Vermont can improve staff utilization and formalize funding for routine paramedic activities by implement community paramedicine programs.

Source: [Center for Health Research and Transformation \(accessed August 2024\)](#), [FMS1 \(accessed August 2024\)](#)

PRE-FABRICATED AND COMPACT DESIGNS USED FOR HEALTHCARE AND HOUSING STRUCTURES

Innovative Approaches

How can this approach help VT?

Utilization of pre-fabricated and compact construction methods to quickly and cost effectively build new structures

This approach can quickly adjust to build facilities to address community needs (housing and population health needs)

Pre-Fabricated

Pre-fabricated construction is a method that manufactures standardized components offsite to be quickly assembled onsite

- Benefits: time to build is <1 year as compared to multi-year projects
- Novel Designs: modular units, repurposed shipping containers, 3-D printing

Compact

Compact structures, often referred to as “tiny homes” are typically <500 square feet, with the basic amenities of typical housing units

- Benefits: average time to build is ~3 months, with a basic unit costing \$50,000, with pre-made kits priced at \$6,000-\$8,000

Examples

Pre-Fabricated Hospital to Support COVID-19 Surges in Montreal, Canada:

- 2 floor, 36 bed hospital was constructed in <9 months
- Electrical, mechanical, and ventilation services were built offsite
- Patient rooms included bathroom, shower, television, and HVAC system

Modular Housing Community for the Unhoused in San Matteo County:

- 240 sleeping units and 3 communal buildings were constructed in < 1 year
- Units included private bathrooms and climate control
- Campus-like design supports services including food service, laundry, counseling, and dental

Vermont’s social services agencies and hospitals can quickly expand and adapt housing and facility capacity through innovative structure designs to meet shifting population needs.

Source: [Human Ecology Interdisciplinary Journal \(published in April 2023\)](#), [American Society for Civil Engineers \(accessed August 2024\)](#), [Me cart Clean Rooms \(accessed August 2024\)](#), [Forbes \(accessed August 2024\)](#)

REFERENCE BASED PRICING HAS BEEN UTILIZED BY OTHER STATES TO MANAGE PROVIDER HEALTHCARE COSTS

About Reference Based Pricing

How does it work?

- Purchasers of healthcare establish standard reimbursement levels to manage healthcare spending

How is it structured?

- Provider rates cannot exceed set levels (as a % of Medicare) or must fall in a range

What are some successes?

- Montana’s outpatient rates decreased to 230-250% from 239-611% after passing legislation
- Washington’s public option plan tripled enrollment by reinvesting savings to expand care coverage and subsidies

Reference Based Pricing Programs in Other States

Covered Program	State	Effective Date	Covered Lives	Setting	Rates (% of Medicare)	Impact
	Montana	2014	28K	Inpatient	220-225%	\$47.8M savings in 2017-2019
				Outpatient	230-250%	
State Employees	North Carolina	2020	727K	Aggregate	196%	<i>unavailable</i>
	Oregon ¹	2017	300K	In Network	200%	\$113 M savings in 2021
				Out of Network	185%	
Public Health Plan	Washington	2021	n/a	Aggregate	160% ²	Tripled enrollment in 2023

Programs are typically catered to state employees with rates capped at 185-250% of Medicare

Vermont can manage hospital costs by capping commercial reimbursement rates through reference-based pricing approaches

1. Type A or B hospitals, Critical Access Hospitals (CAH), or Sole Community Hospitals (SCH) in county of less than 70k people with Medicare comprising over 40 percent of patient revenue were exempt2. Primary care no lower than 135% of Medicare, critical access hospitals no lower than 101% of costs

Source: [American Hospital Association Position Paper \(accessed August 2024\)](#), [Report of the Tennessee Advisory Commission on Intergovernmental Relations, RAND \(accessed August 2024\)](#)

HOSPITAL AT HOME MODELS DELIVER ACUTE CARE IN THE HOME SETTING; PILOTS ARE UNDERWAY IN RURAL SETTINGS

Innovative Approaches

How can this approach help VT?

Delivery of medium-level acute care in the home instead of a hospital, with provider support via in person visits, video visits, and biometric monitoring through remote devices

This approach can be used to increase hospital capacity, minimize long distance inter-hospital transfers, and divert patient observations to a community-based setting

How can programs vary?

Management of admissions:

- Conditions with well-defined treatment protocols e.g., pneumonia, congestive heart failure, chronic obstructive pulmonary disease, diabetes
- Admissions from emergency department
- Referrals from EMS or specialty care clinics

Services provided:

- Diagnostic studies: e.g., electrocardiograms, echocardiograms, X-rays
- Treatments: e.g., oxygen therapy, intravenous fluids, intravenous antibiotics
- Services: e.g., respiratory therapy, skilled nursing services

Rural Hospital at Home Pilots Underway



Blessing Health and Ariadne Labs has partnered for a 3-year pilot to test a rural hospital at home program, building on prior feasibility study from University of Utah Health

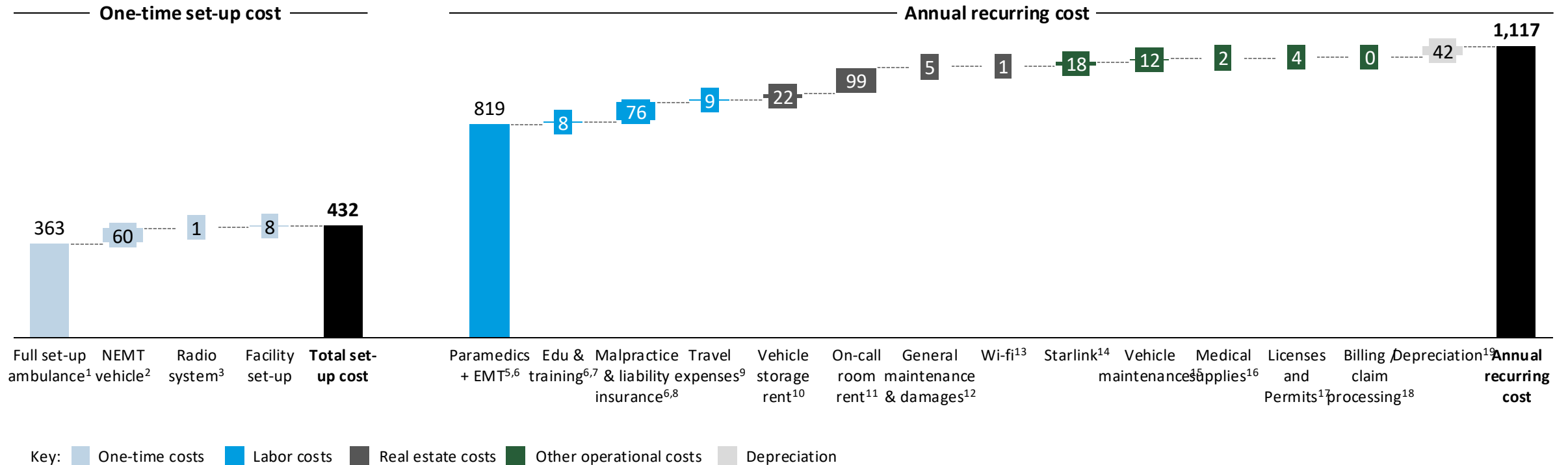
Pilot Model:

- Patient is referred to program from emergency department, transferred home with tablet for telemedicine visits and remote monitoring devices to track vital signs
- Trained nurse visits patient in person twice daily and clinician connects with patient once daily via telemedicine
- Patient vital signs collected and transmitted to the care team and patient may connect with care team at any point

Vermont hospitals can open hospital emergency room and inpatient beds by shifting appropriate care to the home setting.

EMS TEAMS COULD BE PROFESSIONALIZED. EACH PROFESSIONAL EMS TEAM COULD COST \$1.1MN TO RUN ON AN ANNUAL BASIS WITH \$0.4MN OF ONE TIME SET-UP COST

Illustrative cost of an EMS with one ambulance and one non-emergent vehicle
USD thousand



1. Assuming portable and versatile EKG, standard EKG display for monitors (Med-Bill "Understanding Ambulance Costs", Heartland Medical, [NHTSA](#)); 2. [BFACH](#); 3. Assuming standard two-way radio system with terminals ([IE](#), [FSW](#), expert interview); 4. Assuming office-level printer / photocopier ([BW](#), [TPT](#)); 5. Assuming \$110k per paramedic and \$85k per EMT including benefits, 1 paramedic and 1 EMT staffed per ambulance; 6. Assuming 4.2 FTEs required to staff each 24/7 post; 7. [BP](#), [HMP](#), [EA](#); 8. Assuming similar rates as Colorado-based expert interview ([PS](#), expert interview, [MDPLI](#), [AIHQ](#)); 9. Expert Interview, [HMP](#), [BP](#); 10. Assumes 1,000 SF per Ambulance; \$22 per SF; 11. Assumes 4,500 SF per Ambulance; \$22 per SF; 12. Assumes ~5% of rent for maintenance & related; 13. Assuming service plan that provides around 500 Mbps ([HIS](#), [STAR](#)); 14. Assuming universal roaming plan for first responder businesses ([HIS](#), [STAR](#)); 15. Oil, tire and damage repairs etc (expert Interview, [BP](#), [VGOV](#)); 16. Standard medical supplies and low-level life support devices (expert Interview, [DOJO](#)); 17. expert Interview, [WGOV](#); 18. Assuming 3% of billing of credit card payment of travel expenses by staff; 19. [HMP](#), [BP](#)
Source: Expert interview, OW analysis

A03

HOSPITAL SERVICE AREA (HSA) / HOSPITAL ANALYSES

HOSPITAL SERVICE AREA (HSA) / HOSPITAL ANALYSES

The following is a non-exhaustive list of analyses completed for the Act 167 Community Engagement to Support Hospital Transformation project. Additional reports and data were reviewed by Oliver Wyman beyond what is enumerated here. For more information about this work, please visit the project page on the Green Mountain Care Board’s website: [Community Engagement to Support Hospital Transformation | Green Mountain Care Board](#)

No.	Analysis	Input used	Remarks
1	Population projection	<ul style="list-style-type: none"> Mathematica Inc. (MPR) VT Population by Hospital Service Area (HSA) 	<ul style="list-style-type: none"> Population projections based on source data from the American Community Survey (ACS) (link) from 2015-2019 and projected from 2020 to 2040.
2	Forecasted new cancer cases	<ul style="list-style-type: none"> MPR VT Population by HSA NIH State Cancer Profiles Incidence Rate Report for VT by County in 2016-2020 (link) 	<ul style="list-style-type: none"> Projected population x cancer incidence by sex and age
3	Forecasted number of hospitalizations of 65+ yrs due to cardiovascular disease or stroke	<ul style="list-style-type: none"> MPR VT Population by HSA CDC Interactive Atlas of Heart Disease and Stroke (link), as accessed on 16 April 	<ul style="list-style-type: none"> Projected population of 65+ yrs x hospitalization rate per 1,000 Medicare beneficiaries (all races/ethnicities, all genders, ages 65+, 2019-2021)
4	Forecasted colonoscopy utilization	<ul style="list-style-type: none"> 2021 VT Health Care Uniform Reporting and Evaluation System (VHCURES, also known as “all-payer claims data” or “APCD”) for current colonoscopy procedures MPR VT Population by HSA US Preventative Services Task Force (USPSTF) recommendations: colonoscopy every 10 years for individuals aged 45 to 74 (link) 	<ul style="list-style-type: none"> For future projection, projected population x USPSTF recommended screening rates Commercial claims from VHCURES do not include claims to the Federal Employee Health Benefit Plan, TRICARE, some self-insured commercial plans, plans with a commercial insurer that covers very few VT residents, and Veteran Affairs). For Commercial estimates, OW assumed half of commercial claims are missing from VHCURES.

HOSPITAL SERVICE AREA (HSA) / HOSPITAL ANALYSES CONTINUED

No.	Analysis	Input used	Remarks
5	Forecasted mammogram utilization	<ul style="list-style-type: none"> 2021 VT Health Care Uniform Reporting and Evaluation System (VHCURES, also known as “all-payer claims data” or “APCD”) for current mammogram procedures MPR VT Population by HSA US Preventative Services Task Force (USPSTF) recommendations: breast cancer screening every 2 years for women aged 40 to 74 (link) 	<ul style="list-style-type: none"> For future projection, projected population x USPSTF recommended screening rates
6	Forecasted birth by place of birth and by patient residence	<ul style="list-style-type: none"> 2021 VT Vital Statistics Report (link) MPR VT Population by HSA 	<ul style="list-style-type: none"> Applying age-specific birth rate to population forecast, adjusting for alignment from county to HSA
7	Primary Care Provider (PCP) visits based on national health statistics	<ul style="list-style-type: none"> National health statistics on PCP visits (link) MPR VT Population by HSA 	<ul style="list-style-type: none"> Projected population x national visit rate by age band PCP visits were identified using the same provider taxonomies (that include nurse practitioners and physician assistants) and Current Procedural Terminology (CPT) codes used by GMCB in its report to the VT Legislature on primary care spending in accordance with Act 17.1.
8	PCP visits based on MPR claims analysis	<ul style="list-style-type: none"> MPR PCP visits 	<ul style="list-style-type: none"> Projected population x average PCP visit rate from 2021/22 by HSA, sex and age PCP visits were identified using the same provider taxonomies (that include nurse practitioners and physician assistants) and CPT codes used by GMCB in its report to the VT Legislature on primary care spending in accordance with Act 17.1. Note: overall level of demand is likely underestimated due to incomplete coverage of VHCURES claims data

HOSPITAL SERVICE AREA (HSA) / HOSPITAL ANALYSES CONTINUED

No.	Analysis	Input used	Remarks
9	Emergency Department (ED) visits based on MPR claims analysis	<ul style="list-style-type: none"> MPR ED visits 	<ul style="list-style-type: none"> Projected population x average ED visit rate from 2021/22 by HSA, sex and age ED visits were identified from facility claims for VT residents in the VHCURES database at an outpatient acute hospital setting with revenue center codes corresponding to ED care. Denied claims were omitted. Assuming age-specific visit or stay rates remain constant as the average of 2021 and 2022 level Note: overall level of demand is likely underestimated due to incomplete coverage of VHCURES claims data
10	Inpatient (IP) stays based on MPR claims analysis	<ul style="list-style-type: none"> MPR IP stays 	<ul style="list-style-type: none"> Projected population x average IP stays from 2021/22 by HSA, sex and age Inpatient stays were identified from facility claims for VT residents in the VHCURES database at an inpatient or acute care hospital setting. Denied claims and claims with no admission or discharge date were omitted. Assuming age-specific visit or stay rates remain constant as the average of 2021 and 2022 level Note: overall level of demand is likely underestimated due to incomplete coverage of VHCURES claims data, see citation below.

HOSPITAL SERVICE AREA (HSA) / HOSPITAL ANALYSES CONTINUED

No.	Analysis	Input used	Remarks
11	IP days based on MPR claims analysis	<ul style="list-style-type: none"> MPR IP days 	<ul style="list-style-type: none"> Projected population x average IP days from 2021/22 by HSA, sex and age IP days were identified from facility claims for VT residents in the VHCURES database at an inpatient or acute care hospital setting. Denied claims and claims with no admission or discharge date were omitted. Assuming age-specific visit or stay rates remain constant as the average of 2021 and 2022 level Note: overall level of demand is likely underestimated due to incomplete coverage of VHCURES claims data
12	OP surgery based on MPR analysis	<ul style="list-style-type: none"> MPR OP demand forecast 	<ul style="list-style-type: none"> Results of outpatient surgical demand model, based on VHCURES and VHUDDS data 2016–2019, based on demographic trends only
13	Estimated annual primary care visit capacity	<ul style="list-style-type: none"> PCP visits based on national health statistics or MPR claims analysis (see above) OW capacity assumptions Time Allocation in Primary Care Office Visits (link) Association of Primary Care Visit Length With Potentially Inappropriate Prescribing (Neprash et al., 2023, link) 2020 VT Department of Health Physician Census Statistical Report (Table 30, 32, link) 2019 VT Department of Health Advanced Practice Registered Nurses (APRNs) Census Statistical Report (link). More Tethered to the EHR: EHR Workload Trends Among Academic Primary Care Physicians, 2019-2023 (Arndt et al, 2024) Hospital provided feedback (May 2024) 	<ul style="list-style-type: none"> PCP visits based on national health statistics or MPR claims analysis ÷ annual visit capacity

HOSPITAL SERVICE AREA (HSA) / HOSPITAL ANALYSES CONTINUED

No.	Analysis	Input used	Remarks
14	Estimated nursing beds needed	<ul style="list-style-type: none"> MPR VT Population by HSA Trends in Supply of Nursing Home Beds, 2011-2019 (Miller et al., link) AHS Consumer Guide to VT Long-term Care Facilities (Jan 2020, link) 	<ul style="list-style-type: none"> Projected population for 65+ ÷ national average bed level in 2011/19 Based on population projection and US national average of nursing beds per 10,000 65+ yr population, by 2040 Long-term care homes number includes Nursing Homes (NHs), Assisted Living Residences (ALRs) and Residential Care Homes (RCHs). Together, these total # of licensed beds
15	Count of dual eligibles by 20-mile radius of a hospital	<ul style="list-style-type: none"> MPR analysis of dual eligibles using VHCURES 2022 	<ul style="list-style-type: none"> 20-mile radius does not account for geography, roadway infrastructure, or travel times
16	Hospital financial forecasts	<ul style="list-style-type: none"> 2018-2023 hospital financial records (link) 	<ul style="list-style-type: none"> Assumptions on operating revenue growth: non-340B revenue growing at 3.5% annually and 340B revenue at 3% annually
17	Hospital financial deficits	<ul style="list-style-type: none"> OW assumptions on growth rates Hospital-specific assumptions (hospital feedback) Medicare advantage proportion of all Medicare 	<ul style="list-style-type: none"> For CAH, non-340B revenue is Medicare FFS carved out and estimated as 101% of cost Assumptions on operating expense growth: 5% across expense categories for scenario 1, for scenario 2 – 5% annual growth for physician related expenses, 10% annual growth for non-MD related expenses, 7% for other operating expenses, other sub-category growth rates trend hospital's own CAGR18-23 See hospital presentations for more information.

HOSPITAL SERVICE AREA (HSA) / HOSPITAL ANALYSES CONTINUED

No.	Analysis	Input used	Remarks
18	Number of ED visits in the hospital & impact of avoidable ED visits	<ul style="list-style-type: none"> MPR analysis of hospital IP, ED, and Avoidable Use using VHCURES in 2019-2022 Hospital input on % of NPR from Emergency Dept (ED) 	<ul style="list-style-type: none"> Average reimbursement per IP stay is from MPR claims analysis from 2022 VAHHS report is sourced by the same data that sources VT Unified Hospital Discharge Data Set (VUHDDS), used elsewhere in the analyses.
19	Number of acute IP stays & impact of avoidable IP stays	<ul style="list-style-type: none"> VAHHS report (hospital discharge data in 2022) totals were used to compare % avoidable OW assumption 80% bed occupancy rate, 365 days in a year 	<ul style="list-style-type: none"> Avoidable Emergency Dept (ED): Refers to ED visits that could have been treated in a primary care setting or avoided through timely and appropriate primary and specialty care. We identified ED visits as avoidable from their principal diagnosis codes, classified using the New York University (NYU) ED algorithm (Billings et al., 2000), updated with a patch accounting for new International Classification of Diseases ICD-10 codes released since the algorithm's original publication (Johnston et al., 2017) Continued on next slide

HOSPITAL SERVICE AREA (HSA) / HOSPITAL ANALYSES CONTINUED

No.	Analysis	Input used	Remarks
18	Number of ED visits in the hospital & impact of avoidable ED visits		
19	Number of acute IP stays & impact of avoidable IP stays		<ul style="list-style-type: none"> <li data-bbox="1396 352 1860 1035">Avoidable Inpatient (IP): Avoidable hospital use refers to preventable hospitalizations and unplanned 30-day readmissions after an inpatient discharge. Preventable hospitalizations were identified using the Prevention Quality Overall Composite Indicator #90 (PQI #90), developed by the Agency for Healthcare Research and Quality. 30-day unplanned readmissions were identified using the HEDIS Plan All-Cause Readmissions (PCR) measure developed by the National Committee for Quality Assurance. The data above aggregate acute inpatient claims into stays by combining overlapping claims or claims indicating transfers to a different hospital for continuing care. Preventable hospitalizations with readmissions were combined to arrive at deduplicated counts for total avoidable hospital use. Since some preventable hospitalizations are also unplanned readmissions and vice versa, duplications were removed to avoid double-counting.

HOSPITAL SERVICE AREA (HSA) / HOSPITAL ANALYSES CONTINUED

No.	Analysis	Input used	Remarks
20	Avoidable boarders	<ul style="list-style-type: none"> VAHHS report using 2022 VUHDDS Assuming 80% bed occupancy rate, 365 days in a year 	<ul style="list-style-type: none"> Hospital discharge data divided over 80% target occupancy rate 'Boarder' analysis included ED discharges and days for visits without a same day discharge, inpatient and outpatient ED discharges and days with at least 1 SDOH Z-code, inpatient and outpatient ED discharges and days for patients with a mental health related diagnosis, and outpatient ED discharges and days by discharge status for potential long-term care discharge statuses VAHHS discharge data uses a zero-day methodology for calculating Length Of Stay (LOS), meaning a patient who arrives and leaves the same day has a LOS of zero LOS for inpatient ED visits is an estimate derived off of total hospital LOS minus reported inpatient room and board units For ED, lower bound is determined assuming average stays beyond 1 night at the ED are boarder stays that can be reduced, upper bound is determined assuming all over-night stays in the ED can be reduced Discharge values for any category that were less than 5 have been excluded

HOSPITAL SERVICE AREA (HSA) / HOSPITAL ANALYSES CONTINUED

No.	Analysis	Input used	Remarks
21	Low volume	<ul style="list-style-type: none"> • MPR analysis of low volume services using VT Unified Hospital Discharge Data Set (VUHDDS) 2021-2022 • 2020 & 2021 V TState Vital Statistics (Table B-16 in link and link) • Hospital feedback (May 2024) • OW assumptions on low volume thresholds derived from the following sources: <ul style="list-style-type: none"> ○ Leapfrog Hospital Survey-Inpatient Surgery, 2020 ○ Obstetric Volume and Severe Maternal Morbidity Among Low-risk and Higher Risk Patients Giving Birth at Rural and Urban US Hospitals, Kozhimannil KB, JAMA Health Forum. 2023;4(6):e232110. doi:10.1001/jamahealthforum.2023.2110 ○ Hospital Level Factors Associated with Anesthesia Related Adverse Events in Cesarean Deliveries, New York State 2009-2011. Guglielminotti J, Anesth. Analges. 2016; 122:1947-56 ○ Selective Referral to High Volume Hospitals- Estimating Potentially Avoidable Deaths. Dudley RA, et al. JAMA 2000; 283:1159-1166 ○ Requires certification as a Center of Excellence ○ Hospital volume and Operative Mortality for General Surgery Operations Performed Emergently in Adults. Becher RD, et al. J Trauma 1990; 272:288-303 	<ul style="list-style-type: none"> • Low volume thresholds identified by OW from evidence-based studies • Discharges for low-volume procedures were identified in inpatient and outpatient settings in VUHDDS using inpatient DRG codes, outpatient CPT codes, ICD-10 diagnosis codes, and ICD-10 procedure codes • Non-zero counts of discharges less than 6 are masked • The outpatient discharge counts include data for the Green Mountain Surgery Center, which is not included for inpatient discharges

HOSPITAL SERVICE AREA (HSA) / HOSPITAL ANALYSES CONTINUED

No.	Analysis	Input used	Remarks
22	OP service with 're-capture' potential	<ul style="list-style-type: none"> MPR Final Outpatient Return to HSA Discharges Analysis based on patient flow analysis for 2022 using VHCURES Hospital specialty list (hospital feedback) Hospital capacity numbers (hospital feedback) Median OP reimbursement per procedure based on 2022 CMS payment rates (link) 	<ul style="list-style-type: none"> Inpatient and outpatient volumes with 're-capture' potential identified by screening for resident origin, procedure complexity and specialty availability. Only qualifying discharges with $n \geq 11$ are included in calculation. OP revenue per procedure was calculated as estimated median for select operating room-based procedures and median for select procedure room based procedures from 2022 CMS payment rates 2. Inpatient revenue was calculated as the average of the calculated net average revenue per inpatient discharges 2018-2021
23	IP service with 're-capture' potential	<ul style="list-style-type: none"> MPR Final Inpatient Return to HSA Discharges Analysis based on patient flow analysis for 2022 Hospital specialty list and staffed bed capacity (hospital feedback) IP DRG to specialty mapping Current utilization: 2018-2021 IP discharges and Length of Stay from 2021 VT Hospital Report Avoidable IP days from Commercial, Medicaid and Medicare FFS inpatient claims from VHCURES, calendar years 2019-2022 Boarder information from VAHHS report using 2022 VUHDDS 	<ul style="list-style-type: none"> Average reimbursement per IP stay is from MPR analysis from VHCURES 2022.